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Mr. Ben Zimont
Michigan Department of Environmental Quality
7953 Adobe Road
Kalamazoo, Michigan 49009-5026

☒ 201 ☐ 213 County Allegan
Site Name A-1 Disposal LF
File Sect Report #11
File Subsect
Doc Type
Doc Title

Dear Mr. Zimont:

Re: May 2009 Groundwater Monitoring Summary
A-1 Disposal Landfill
Otsego, Michigan

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) has prepared this Groundwater Monitoring Summary (Summary), on behalf of A-1 Disposal Landfill Potentially Responsible Parties (PRP) Group, for the A-1 Landfill (Site) located in Otsego, Michigan (Site).

The purpose of the Summary is to provide the Michigan Department of Environmental Quality (MDEQ) with the data associated with the sixth round of groundwater monitoring that was completed in May 2009. The groundwater monitoring event was requested during a conference call on April 2, 2009 among MDEQ, the PRP Group and CRA. The sixth round of groundwater monitoring was conducted consistent with the protocols set forth in the Groundwater Sampling Round 6 – Work Plan (April 2009 Work Plan), which was submitted to the MDEQ on April 9, 2009. The April 2009 Work Plan is considered an extension of the Pre-Design Investigation (PDI) Work Plan (CRA, March 2004), which includes the Site Health and Safety Plan (HASP), Field Sampling Plan (FSP) and Quality Assurance Project Plan (QAPP). The purpose of the sixth round of groundwater monitoring was to obtain current groundwater hydraulic and quality data, and determine if the extent of groundwater impact is consistent with that presented in the PDI Report (CRA, May 2006).

2.0 GROUNDWATER MONITORING SCOPE OF WORK

The scope of work (SOW) for the groundwater monitoring conducted at the Site consisted of:

- Measurement of static groundwater levels for monitoring wells
- Collection and analysis of groundwater samples for Target Compound List (TCL) volatile organic compounds (VOCs) from monitoring wells MW-9, MW-11 through MW-14, MW-21, MW-22, MW-24 through MW-30, MW-32 through MW-36, RL-1 through RL-6, RL-8, SEG-MW-3, CRA-MW-1S, and CRA-MW-1D
- Collection and analysis of groundwater samples for iron and manganese from monitoring wells MW-13, MW-22, MW-24, MW-30, MW-32 through MW-36, RL-3, RL-6, SEG-MW-2, SEG-MW-3, CRA-MW-1S, and CRA-MW-1D

- Collection and analysis of groundwater samples for specific natural attenuation parameters from monitoring wells MW-11, MW-21, MW-26, MW-27, MW-30, MW-33, MW-36, and RL-6

The results of the implementation of the above SOW are presented in the subsections below. In addition, using the data developed by MDEQ and its consultants, in conjunction with the information collected during the PDI and the April 2006 and May 2009 groundwater monitoring events, a three-dimensional (3D) Environmental Visualization System (EVS) model of the Site was generated. This model provides a 3-D visual representation of the Site topography, geology, hydrogeology, and select contaminant distribution. The EVS model is provided on the compact disc enclosed in Attachment A and uses the May 2009 sampling round data. Instructions for installation and operation of the EVS are included in Attachment A.

2.1 HYDRAULIC MONITORING

Water level measurements were obtained from each accessible monitoring well prior to the commencement of the groundwater sampling activities. Water level measurements were obtained using a calibrated electronic water level indicator and recorded in the field book and/or water level form. Monitoring well caps were unlocked and removed, allowing the water levels in the wells to stabilize. Static water levels were measured to the northern top of each riser. A summary of the static water level measurements collected May 17, 2009 is presented in Table 1. Figure 1 presents the monitoring well locations.

2.2 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

Twelve monitoring wells (MW-9, MW-11, MW-22, MW-25, MW-26, MW-29, MW-30, MW-32, MW-33, MW-35, MW-36, and CRA-MW-1D) were sampled with a Grundfos pump utilizing low flow purging (LFP) and sampling procedures, consistent with those set forth in MDEQ guidance documents. Seventeen monitoring wells (MW-12, MW-13, MW-14, MW-21, MW-24, MW-27, MW-28, MW-34, RL-1 through RL-6, RL-8, SEG-MW-3, and CRA-MW-1S) were sampled using dedicated polyethylene bailers. Three monitoring wells, which were proposed for sample collection, could not be sampled due to obstruction in the well casing (MW-10) or were dry (RL-7 and SEG-MW-2).

Dedicated ¼-inch diameter polyethylene tubing was used in each of the wells sampled using LFP and sampling procedures. For the monitoring wells in which LFP protocols were used, the pump intake was set in the approximate middle of the screened interval. Groundwater stabilization measurements were recorded in consecutive timed intervals using a Horiba multi-meter and a HF Scientific turbidity meter through a flow-through cell. Groundwater stabilization parameters included pH, specific conductivity, temperature, and turbidity. Upon

groundwater stabilization, based on three consecutive similar readings, groundwater samples were collected.

Thirty-five groundwater samples, including quality assurance/quality control (QA/QC) samples, were collected from monitoring wells MW-9, MW-11 through MW-14, MW-21, MW-22, MW-24 through MW-30, MW-32 through MW-36, RL-1 through RL-6, RL-8, SEG-MW-3, CRA-MW-1S, and CRA-MW-1D between May 18 and May 20, 2009. As identified above, samples were not collected from RL-7 and SEG-MW-2 as a result of these wells being dry or containing insufficient volume during this sampling event and a groundwater sample was not collected from MW-10 as a result of an obstruction in the well casing.

Collected groundwater samples were placed in pre-cleaned laboratory-approved containers, labeled, packed on ice, and shipped under chain-of-custody (COC) protocol to TestAmerica Laboratories, Inc. located in North Canton, Ohio (TA-NC). Table 2 presents a sample summary.

The analytical data report from TA-NC is provided in Attachment B. The analytical data were assessed and validated by the project chemist to ensure conformance with the QAPP contained within the PDI Work Plan, the analytical methods, and industry standards. Data validation was completed utilizing the "U.S. EPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," EPA-540/R-99/008, October 1999 and "U.S. EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" EPA-540/R-94-013, February 1994 (CLP National Functional Guidelines). The specific data qualifiers used are as presented and defined in the CLP National Functional Guidelines. The results of the data quality assessment and validation are summarized in a memorandum presented in Attachment C. The data quality assessment concluded that the data were acceptable for used in this evaluation with the qualifications noted.

3.0 RESULTS

3.1 HYDRAULIC MONITORING

Groundwater contours for the upper and lower water-bearing zones were prepared and are presented on Figures 2 and 3, respectively. Examination of Figure 2 shows that groundwater flow in the upper water-bearing zone is toward the north. This groundwater flow pattern is similar to that defined in the April 2006 groundwater monitoring event and the PDI Report. The groundwater elevation at monitoring well SEG-MW-3 was not used to generate groundwater contours, as the water level was inconsistent with nearby monitoring wells, typical of this monitoring well. In general, groundwater elevations in the upper water-bearing zone are approximately 3.5 feet higher than those measured during the April 2006 groundwater monitoring event. It should be noted that MW-13 and MW-14, which were dry during

monitoring events conducted in January, April, July, and October 2005 and in April 2006, had 2.33 feet and 4.4 feet of water column, respectively, during the May 2009 monitoring event.

Examination of Figure 3 shows that groundwater flow in the lower water-bearing zone is toward the northeast, which is toward the expected ultimate discharge location at the Kalamazoo River. This flow pattern is consistent with that determined during previous investigations. Similar to the upper water-bearing zone, water levels in the lower water-bearing zone were approximately 3.5 feet higher than those measured in April 2006.

3.2 GROUNDWATER ANALYTICAL RESULTS

Analytical results for groundwater samples were evaluated against the Michigan Act 451, Part 201 (Part 201) Generic Residential and Commercial I (Residential) Drinking Water Criteria (DWC), as summarized in Table 3. Groundwater contaminant distribution from 2000 through 2009 is presented on Figures 4, 5 and 6 for the Surficial and Perched Aquifers, Upper Water-Bearing Zone and Lower Water-Bearing Zone, respectively.

3.2.1 VOLATILE ORGANIC COMPOUNDS (VOCs)

The organic chemicals of concern (COCs) were selected based on the exceedance of the Part 201 Residential DWC. The following six organic COCs were identified at the Site based on the May 2009 groundwater monitoring event, and are consistent with those identified in the PDI Report: chlorinated ethenes (trichloroethene [TCE], cis-1,2-dichloroethene [cis-1,2-DCE] and 1,1-dichloroethene [1,1-DCE]); chlorinated ethanes (1,1,1-trichloroethane [1,1,1-TCA] and 1,2-dichloroethane [1,2-DCA]; and 1,2-dichloropropane (1,2-DCP). The following COCs were detected at concentrations above the Part 201 Residential DWC at the specified locations during the May 2009 groundwater monitoring event:

- TCE in monitoring wells CRA-MW-1S, MW-11, MW-13, MW-14, MW-21, MW-22, MW-26, MW-27, MW-33, RL-2, RL-4, and SEG-MW-3
- Cis-1,2-DCE in monitoring wells MW-11, MW-14, MW-21, MW-26, and MW-27
- 1,1-DCE and 1,1,1-TCA in monitoring wells MW-11 and MW-27
- 1,2-DCA in monitoring wells MW-11, MW-22, MW-26, and MW-27
- 1,2-DCP in monitoring wells MW-11, MW-21, MW-22, MW-26, MW-33, and RL-2

In general, concentrations of COCs are consistent with those identified in the PDI report and April 2006 groundwater monitoring event (Figures 4, 5 and 6), with the following exceptions:

- Concentrations of COCs detected in CRA-MW-1S (perched aquifer) have increased from the previous rounds and TCE was detected above the Part 201 Residential DWC (Figure 4). TCE was not detected above the laboratory detection limit in CRA-MW-1D (lower water-bearing zone), which is adjacent to CRA-MW-1S.
- Concentrations of COCs detected in SEG-MW-3 have increased from those detected during sampling events in February and May 2005, and April 2006; however, the concentrations are consistent with those historically detected (Figure 5).

The concentration gradients prepared for the COCs, based on the May 2009 Site groundwater data are presented in the EVS in Attachment A.

3.2.2 GROUNDWATER TREATMENT SYSTEM SHUTDOWN

On March 1, 2004, it was discovered by MDEQ that the Interim Response Action (IRA) groundwater treatment system at the Site had experienced a mechanical failure and was inoperable. The PDI Work Plan had proposed that the IRA groundwater treatment system be shut down for one quarter prior to implementation of the PDI Work Plan, in order for the aquifer to equilibrate. Based on the fact that the system was inoperable for a period of approximately one year prior to the implementation of the quarterly groundwater sampling component of the PDI Work Plan, it was assumed that the aquifer had equilibrated.

It was agreed during the March 18, 2004 meeting between the MDEQ and the PRP Group that the MDEQ would not repair and restart the groundwater treatment system at that time, but that the PRP Group would repair the system if required.

Restart trigger levels for the IRA system were identified in a letter from CRA dated April 6, 2004, and agreed to by MDEQ. The restart trigger levels were determined by utilizing a 40 percent increase over historical high TCE concentrations in monitoring wells MW-22, MW-25, MW-30, MW-32, MW-33, MW-35, and MW-36. The restart trigger levels utilized for comparison purposes during the implementation of the PDI Work Plan and subsequent groundwater monitoring events are presented below:

Well	*Maximum Historical Concentration (µg/L)*	*Trigger (µg/L)*
MW-22	390	546
MW-25	21	29
MW-30	8.8	12
MW-32	17	24
MW-33	160	224
MW-35	12	17
MW-36	6	8

Concentrations of TCE in groundwater samples collected from in monitoring wells MW-22, MW-25, MW-30, MW-32, MW-33, MW-35 and MW-36 in May 2009 did not exceed the treatment system restart trigger levels set in CRA's letter to MDEQ dated April 6, 2004, which is consistent with the results of the PDI Report.

3.2.3 METALS AND SELECT NATURAL ATTENUATION PARAMETERS

The data collected for redox indicator parameters (i.e., dissolved iron, dissolved manganese, nitrate, methane, and sulfate) during the May 2009 groundwater monitoring report were primarily consistent with concentrations detected during the PDI implementation, with the exception of iron and manganese. Concentrations in MW-35 remained consistent with detections during the implementation of the PDI Work Plan. Total or dissolved manganese concentrations were higher in MW-32, MW-33 and RL-3 and the remainder of the locations sampled in May 2009 showed a decrease in concentration of total or dissolved iron and manganese from the concentrations detected during the PDI implementation. These data indicate that the lower water-bearing zone continues to exhibit primarily iron-reducing conditions.

The data collected for total organic carbon (TOC) during the May 2009 groundwater monitoring report were primarily consistent with concentrations detected during the PDI implementation, with the exception of the concentration in MW-27, which decreased from the May and October 2005 groundwater monitoring events, but was consistent with the February 2005 groundwater monitoring event. The TOC concentrations detected during the May 2009 groundwater monitoring event ranged from 0.7 milligrams per liter (mg/L) to 6 mg/L, which indicate limited supply of organic substrate. This was the same condition found during the PDI.

4.0 CLOSURE

The results of the sixth groundwater sampling event indicate the following:

- Groundwater flow patterns in the upper and lower water-bearing zones, as depicted in the groundwater contours, are consistent with those determined from previous groundwater level measurements.
- Concentrations of TCE in monitoring wells MW-22, MW-25, MW-30, MW-32, MW-33, MW-35 and MW-36 did not exceed the treatment system restart trigger levels set in CRA's letter to MDEQ dated April 6, 2004.
- TCE was detected in CRA-MW-1S, which is west of monitoring well RL-2 and screened in the perched aquifer, at a concentration above the Part 201 Generic Residential DWC. TCE

was not detected above the laboratory detection limit in CRA-MW-1D, which is adjacent to CRA-MW-1S and screened in the lower water-bearing zone.

- Concentrations of VOCs in SEG-MW-3 have increased from the April 2006 sampling event; however, review of historical analytical data indicates significant fluctuation in detected concentrations in this well since 2000.
- Concentrations of VOCs have increased in several monitoring wells; however, the concentrations continue to be indicative of an overall decreasing trend and are consistent with historical measured concentrations.
- Overall, the extent of the VOC plume has remained stable since the April 2006 sampling event.
- The natural attenuation parameters show that redox conditions have remained similar to those measured during the PDI.

If you have any further questions or concerns, please do not hesitate to contact the undersigned at (905) 712-0510.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

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JQ/1/Lan.
Encl.

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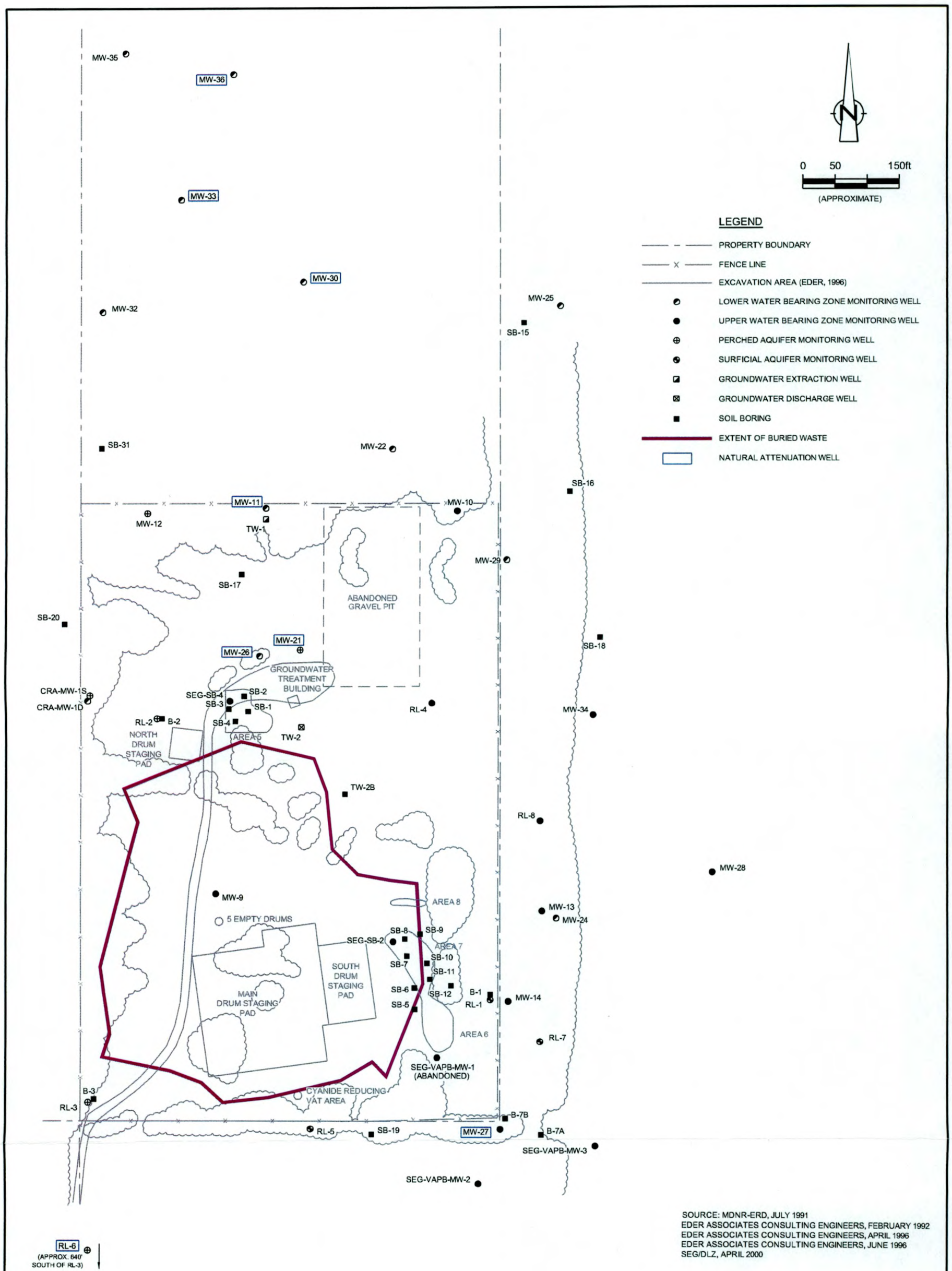
FIGURES

FIGURES

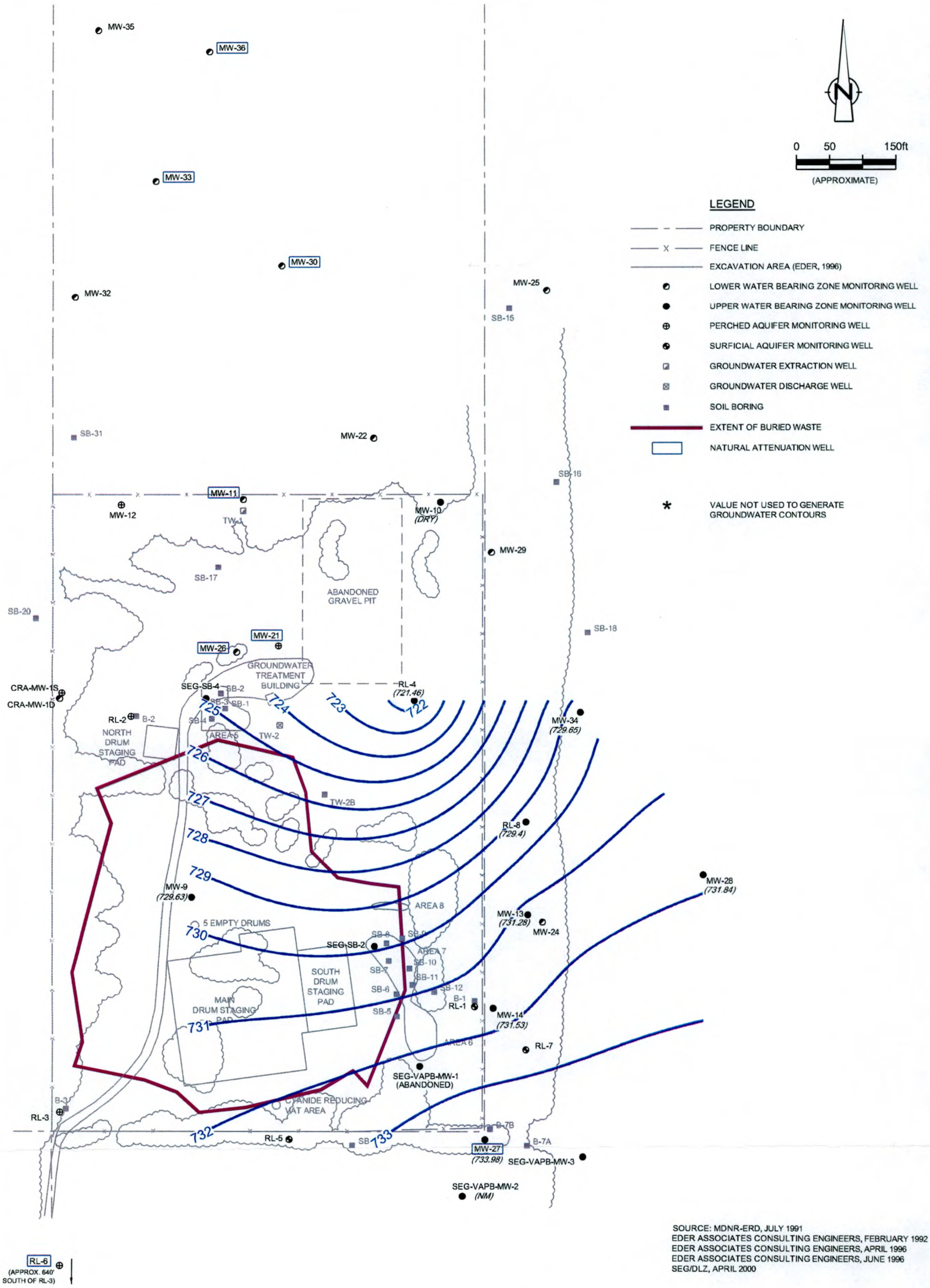


SOURCE: MDNR-ERD, JULY 1991
EDER ASSOCIATES CONSULTING ENGINEERS, FEBRUARY 1992
EDER ASSOCIATES CONSULTING ENGINEERS, APRIL 1996
EDER ASSOCIATES CONSULTING ENGINEERS, JUNE 1996
SEG/DLZ, APRIL 2000

figure 1

SITE PLAN
A-1 DISPOSAL LANDFILL
Otsego, Michigan

17178-08(ZIMO001)GN-DE001 JUN 22/2009

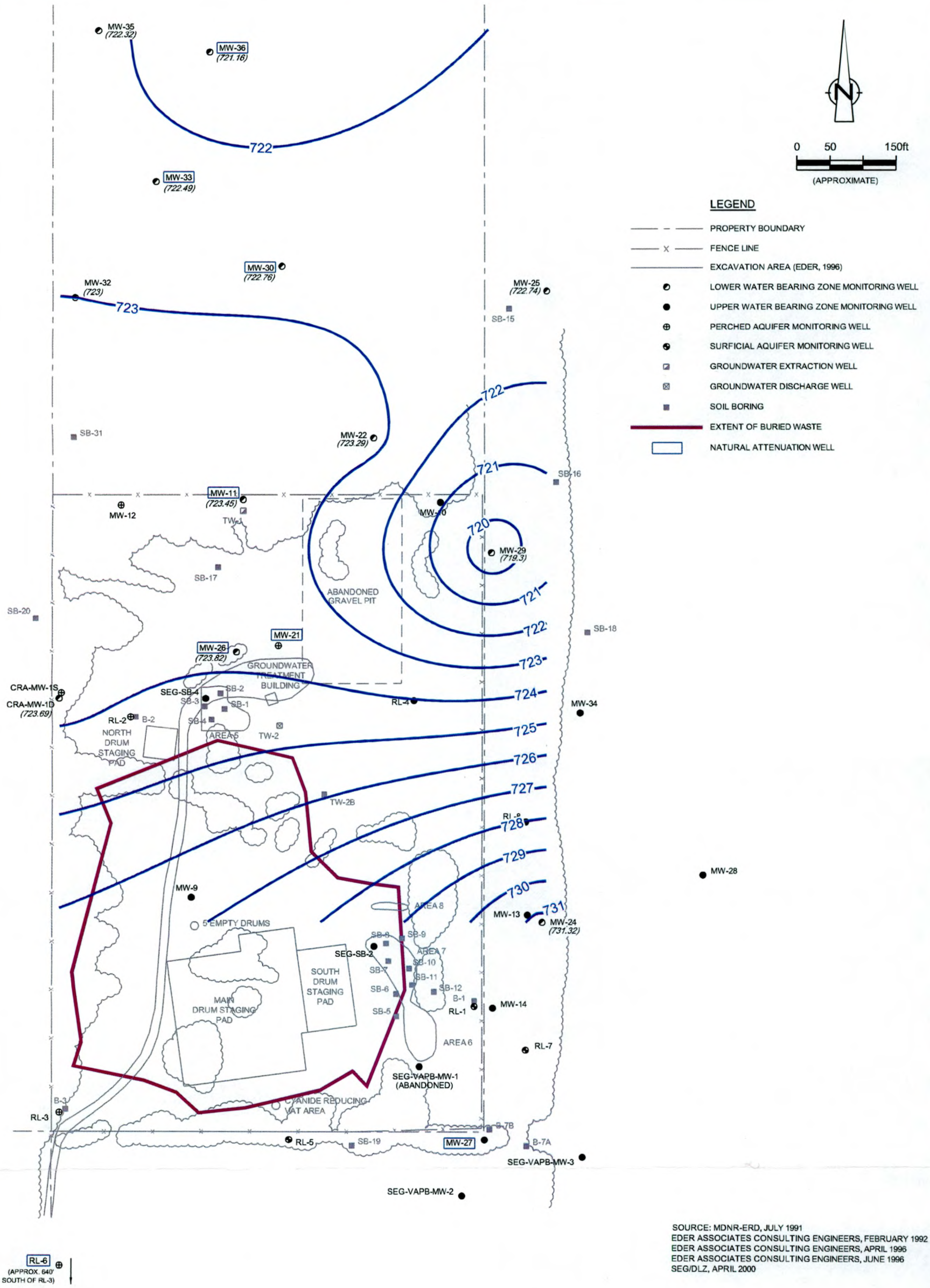


SOURCE: MDNR-ERD, JULY 1991
EDER ASSOCIATES CONSULTING ENGINEERS, FEBRUARY 1992
EDER ASSOCIATES CONSULTING ENGINEERS, APRIL 1996
EDER ASSOCIATES CONSULTING ENGINEERS, JUNE 1996
SEG/DLZ, APRIL 2000

figure 2

GROUNDWATER CONTOURS - MAY 17, 2009
UPPER WATER BEARING ZONE
A-1 DISPOSAL LANDFILL
Otsego, Michigan

17178-08(ZIMO001)GN-DE002 JUN 23/2009

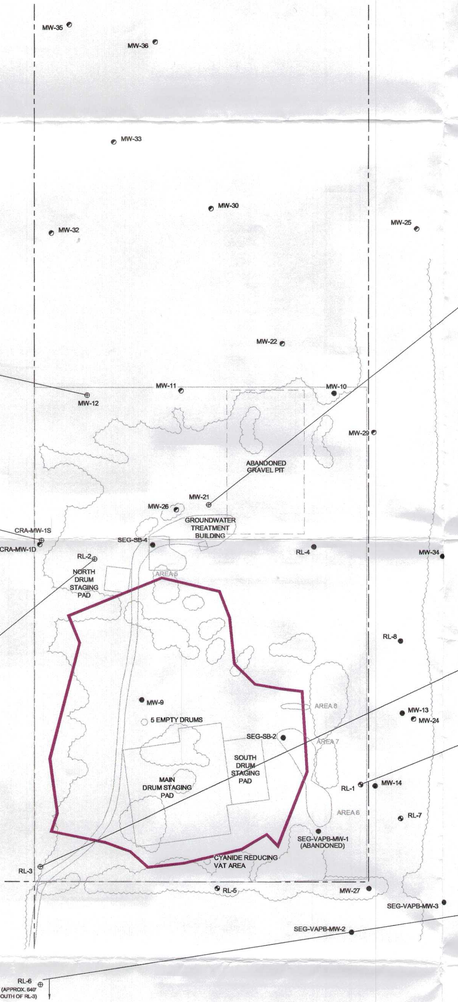


SOURCE: MDNR-ERD, JULY 1991
EDER ASSOCIATES CONSULTING ENGINEERS, FEBRUARY 1992
EDER ASSOCIATES CONSULTING ENGINEERS, APRIL 1996
EDER ASSOCIATES CONSULTING ENGINEERS, JUNE 1996
SEG/DLZ, APRIL 2000

figure 3

GROUNDWATER CONTOURS - MAY 17, 2009
LOWER WATER BEARING ZONE
A-1 DISPOSAL LANDFILL
Otsego, Michigan

17178-08(ZIMO001)GN-DE003 JUL 14/2009



MW-12	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	2/1/2005	4/28/2005	7/27/2005	10/26/2005	4/25/2006	5/18/2009
Metals											
Antimony (Dissolved)	-	-	-	-	-	0.59 J	0.46 J	0.13 J	0.43 J	-	-
Barium (Dissolved)	51	58	64	59	68	100	94 J	75 J	67 J	-	-
Cadmium (Dissolved)	0.6	1.7	1.4	ND	ND	ND (0.5)	0.3 J	ND (0.5)	2.5	-	-
Calcium (Dissolved)	-	-	-	-	-	77200	84400	84800	75200	-	-
Cobalt (Dissolved)	-	-	-	-	-	ND (7) U	1.7 J	2.5 J	2.1 J	-	-
Copper (Dissolved)	ND (1.0) K	ND	ND	82	ND	0.57 J	0.76 J	ND (7)	ND (2) U	-	-
Iron (Dissolved)	-	-	-	-	-	555	640	420	850	-	-
Lead (Dissolved)	ND (1.0) K	18	22	9.4	ND	ND (3)	ND (3)	ND (3)	ND (3)	-	-
Magnesium (Dissolved)	-	-	-	-	-	41000	40900	41500	36200	-	-
Manganese (Dissolved)	-	-	-	-	-	30	25	6 J	7.5 J	-	-
Mercury (Dissolved)	ND (0.2) K	ND	ND	ND	ND	ND (0.2) U	0.033 J	ND (0.2)	ND (0.2)	-	-
Nickel (Dissolved)	-	-	-	-	-	2.6 J	ND (25)	ND (25)	ND (25)	-	-
Potassium (Dissolved)	-	-	-	-	-	890 J	1300	ND (1000) U	1100	-	-
Selenium (Dissolved)	ND (1.0) K	ND	ND	ND	ND	ND (2)	0.79 J	ND (2)	ND (2)	-	-
Sodium (Dissolved)	-	-	-	-	-	4300	7000	ND (63000) U	5400	-	-
Thallium (Dissolved)	-	-	-	-	-	ND (1)	ND (1)	ND (1)	0.026 J	-	-
Zinc (Dissolved)	735	1700	4600	1800	860	1100	1700	590	1500	-	-
SVOAs											
bis(2-Ethylhexyl)phthalate	ND	7.2	ND	ND	ND	-	-	-	-	-	-
VOAs											
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	1.4	0.69 J	0.52 J	0.60 J	ND (1.0)ND (1.0)	12
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)ND (1.0)	0.59 J
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)ND (1.0)	0.76 J
Carbon disulfide	-	-	-	-	-	0.52 J	ND (0.5) U	ND (0.5)	ND (0.5)	ND (0.5)ND (0.5)	ND (1.0)
Cyclohexane	-	-	-	-	-	0.23 J	ND (1.0)	ND (1.0)	0.13 J	ND (1.0)ND (1.0)	0.56 J
Dichlorodifluoromethane (CFC-12)	ND	ND	ND	ND	ND	ND (1.0)	ND (1.0) K	0.30 J	ND (1.0)	ND (1.0)ND (1.0)	ND (1.0)
Ethylbenzene	-	-	-	-	-	0.20 J	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)ND (1.0)	ND (1.0)
Methyl cyclohexane	-	-	-	-	-	0.62 J	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)ND (1.0)	0.67 J
Toluene	-	-	-	-	-	0.44 J	0.18 J	ND (0.3)	0.23 J	ND (1.0)0.17 J	0.22 J
Trichloroethene	ND	ND	ND	ND	ND	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)ND (1.0)	0.52 J
Trifluorotrichloroethane (Freon 113)	-	-	-	-	-	ND (1.0)	ND (1.0)	0.32 J	ND (1.0)	ND (1.0)ND (1.0)	0.57 J

CRA-MW-1S	2/1/2005	4/28/2005	4/25/2006	5/18/2009
Metals				
Aluminum (Dissolved)	290/110	ND (50)	-	-
Antimony (Dissolved)	0.68 J/0.45 J	0.3 J	-	-
Barium (Dissolved)	85 J/85 J	130	-	-
Calcium (Dissolved)	89200/87500	158000	-	-
Cobalt (Dissolved)	8.5/ND (7) U	2.2 J	-	-
Copper (Dissolved)	1.6 J/1.3 J	1.2 J	-	-
Iron (Dissolved)	1400/1300	1150	-	ND (50.0)
Magnesium (Dissolved)	35300/34400	64900	-	-
Manganese (Dissolved)	340/415	535	-	109
Nickel (Dissolved)	4.6 J/4.4 J	2.9 J	-	-
Potassium (Dissolved)	4700/4800	3800	-	-
Selenium (Dissolved)	0.99 J/ND (2)	ND (2)	-	-
Sodium (Dissolved)	149000/160000	15000	-	-
Thallium (Dissolved)	ND (1)ND (1)	0.059 J	-	-
Zinc (Dissolved)	20/15	41	-	-
VOAs				
1,1,1-Trichloroethane	4.2/4.2	13	32	34
1,1-Dichloroethane	0.84 J/0.76 J	1.6	2.7	3.0
1,1-Dichloroethene	0.29 J/0.44 J	0.92 J	1.2	1.3
Carbon disulfide	0.41 J/ND (0.5)	ND (5.0) U	ND (5.0)	ND (1.0)
Chloroform (Trichloromethane)	1.4/1.3	ND (1.0) U	ND (1.0)	0.17 J
Chloromethane (Methyl Chloride)	ND (1.0)ND (1.0)	0.28 J	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	ND (1.0)ND (1.0)	ND (1.0)	ND (1.0)	0.58 J
Dichlorodifluoromethane (CFC-12)	ND (1.0)ND (1.0)	0.71 J	1.6	ND (1.0)
Toluene	0.19 J/0.18 J	0.26 J	ND (1.0)	ND (1.0)
Trichloroethene	0.58 J/0.54 J	0.58 J	1.4	1.3
Trichlorofluoromethane (CFC-11)	0.36 J/0.31 J	0.22 J	0.53 J	0.22 J
Trifluorotrichloroethane (Freon 113)	ND (1.0)ND (1.0)	ND (1.0)	1.2	1.1

RL-2	5/1/2000	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	2/1/2005	4/28/2005	7/27/2005	10/26/2005	4/25/2006	5/18/2009
Metals												
Aluminum (Dissolved)	-	-	-	-	-	-	ND (50)	6.1 J	ND (50)	ND (50)	-	-
Antimony (Dissolved)	-	-	-	-	-	-	0.59 J	0.27 J	0.11 J	0.38 J	-	-
Arsenic (Dissolved)	-	1.4	ND	1.3	2.0	ND	ND (10)	ND (10)	ND (10)	ND (10)	-	-
Barium (Dissolved)	-	155	160	170	170	160	180	170	180	190	-	-
Cadmium (Dissolved)	-	1.2	0.91	0.94	1.2	0.85	ND (0.5)	0.27 J	0.2 J	0.41 J	-	-
Calcium (Dissolved)	-	-	-	-	-	-	200000	195000	201000	187000	-	-
Cobalt (Dissolved)	-	-	-	-	-	-	ND (7) U	ND (7)	ND (7)	2.2 J	-	-
Copper (Dissolved)	-	1.9	ND	ND	ND	ND	0.91 J	1.2 J	0.88 J	ND (2.2) U	-	-
Iron (Dissolved)	-	-	-	-	-	-	1300	1300	520	1500	-	-
Lead (Dissolved)	-	8.3	13	19	8.9	8.0	ND (3)	ND (3)	ND (3)	ND (3)	-	-
Magnesium (Dissolved)	-	-	-	-	-	-	100000	93500	95900	92000	-	-
Manganese (Dissolved)	-	-	-	-	-	-	32	20	18	21	-	-
Nickel (Dissolved)	-	-	-	-	-	-	11 J	4.3 J	1.5 J	3.4 J	-	-
Potassium (Dissolved)	-	-	-	-	-	-	2000	2400	2500	2300	-	-
Selenium (Dissolved)	-	ND (1.0) K	ND	ND	ND	ND	1.1 J	1.4 J	ND (2)	1.0 J	-	-
Sodium (Dissolved)	-	-	-	-	-	-	12300	12800	ND (12200) U	11700	-	-
Thallium (Dissolved)	-	-	-	-	-	-	ND (1)	ND (1)	ND (1)	0.026 J	-	-
Zinc (Dissolved)	-	5260 DL	12000	7200	9400	5400	1100	2300	2600	4300	-	-
SVOAs												
bis(2-Ethylhexyl)phthalate	-	7.2	ND	ND	5.5	58	-	-	-	-	-	-
VOAs												
1,1,1-Trichloroethane	210 J	160	160	230	180	160	220	130	140	170	150	93
1,1-Dichloroethane	56	53	51	67	52	56	54	38	37	45	33	21
1,1-Dichloroethene	10	6.8	6.5	11	8.2	8.5	23	7.4 J	5.2 J	8.3 J	5.0 J	4.3 J
1,2-Dichloroethane	1.7 J	ND	1.6	3.0	14	1.9	5.1 J	ND (10)	ND (20)	ND (20)	ND (17)	ND (10)
1,2-Dichloropropane	28	29	25	35	34	33	36	31	32	35	35	33
Benzene	ND	ND	1.4	1.1	1.5	1.8	ND (1.0) U	ND (10)	ND (20)	ND (20)	ND (17)	ND (10)
Chlorobromomethane	-	-	-	-	3.0	ND	-	-	-	-	-	-
Chloroethane	ND	ND	ND	ND	1.4	1.5	ND (16)	ND (10) U	ND (20)	ND (20)	ND (17)	ND (10)
Chloroform (Trichloromethane)	3.3	2.3	2.3	3.7	ND	3.0	4.9 J	2.4 J	ND (20)	ND (20)	2.9 J	1.7 J
cis-1,2-Dichloroethene	22 J	18	14	27	28	22	51	18	19 J	27	29	13
Dichlorodifluoromethane (CFC-12)	ND	ND	2.2	3.0	1.6	2.1	ND (18)	ND (10) R	ND (20)	ND (20)	ND (17)	ND (10)
Tetrachloromethane	ND	ND	ND	ND	ND	ND	4.1 J	ND (10)	ND (20)	ND (20)	ND (17)	ND (10)
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	3.3 J	ND (10)	ND (20)	ND (20)	ND (17)	ND (10)
Trichloroethene	580	440	320	740	580	540	650	300	530	560	500	360

MW-21	5/1/2000	4/1/2002	10/1/2002	1/1/2003	4/1/2003	2/1/2005	3/3/2005	5/3/2005	7/27/2005	10/26/2005	4/25/2006	5/18/2009
Gas												
Carbon dioxide	-	-	-	-	-	-	78000	60000	78000	84000	-	-
Ethane	-	-	-	-	-	0.59	-	ND (0.5)	0.18 J	0.46 J	-	0.73
Ethene	-	-	-	-	-	ND (0.5)	-	ND (0.5)	ND (0.5)	ND (0.5)	-	0.41 J
Methane	-	-	-	-	-	1.3	-	0.16 J	0.18 J	1.3	-	ND (0.88) U
Metals												
Antimony (Dissolved)	-	-	-	-	-	0.61 J	-	0.24 J	0.1 J	0.33 J	-	-
Barium (Dissolved)	-	180	220	230	200	270	-	240	230	280	-	-
Cadmium (Dissolved)	-	ND	4.2	1.6	3.2	ND (0.5)	-	0.18 J	ND (0.5)	ND (0.5)	-	-
Calcium (Dissolved)	-	-	-	-	-	165000	-	146000	147000	158000	-	-
Chromium VI (Hexavalent) (Dissolved)	-	3.8	ND	ND	ND	-	-	-	-	-	-	-
Cobalt (Dissolved)	-	-	-	-	-	ND (7) U	-	1.4 J	ND (7)	1.4 J	-	-
Copper (Dissolved)	-	ND	ND	ND	ND	1 J	-	ND (2) U	ND (2)	ND (2) U	-	-
Iron (Dissolved)	-	-	-	-	-	1200	-	1000	890	1600	-	-
Lead (Dissolved)	-	ND	6.6	3.6	6.8	ND (3)	-	ND (3)	ND (3)	ND (3)	-	-
Magnesium (Dissolved)	-	-	-	-	-	60600	-	57400	53400	59900	-	-
Manganese (Dissolved)	-	-	-	-	-	16	-	23	18	30	-	-
Nickel (Dissolved)	-	-	-	-	-	3.9 J	-	3 J	ND (25)	1.5 J	-	-
Potassium (Dissolved)	-	-	-	-	-	1900	-	2900	2100	2400	-	-
Selenium (Dissolved)	-	ND	ND	ND	ND	2.3	-	1.2 J	ND (2) U	1.8 J	-	-
Sodium (Dissolved)	-	-	-	-	-	30100	-	32600	24800	28300	-	-
Thallium (Dissolved)	-	-	-	-	-	ND (1)	-	0.043 J	ND (1)	0.026 J	-	-
Vanadium (Dissolved)	-	-	-	-	-	2.8 J	-	ND (7)	ND (7)	ND (7)	-	-
Zinc (Dissolved)	-	2300	4900	3200	5700	1400	-	990	880	880	-	-
VOAs												
1,1,1-Trichloroethane	200 J	140	270	230	220	300	-	200	170	220	120	150
1,1-Dichloroethane	39	30	43	46	54	30	-	19 J	22 J	35	13 J	24 J
1,1-Dichloroethene	8.2	5.4	9.2	7.5	9.5	35	-	8.5 J	ND (33)	7.1 J	ND (25)	6.7 J
1,2-Dichloroethane	7.4 J	8.7	8.6	11	7.5	25 J	-	11 J	14 J	21 J	ND (25)	ND (29)
1,2-Dichloropropane	47	53	36	41	51	63	-	42	41	46	34 J	34 J
Acetone	-	-	-	-	-	ND (710)	-	18 J	ND (830)	ND (710)	ND (820)	ND (290)
Chloroform (Trichloromethane)	2.5	2.4	3.1	2.7	3.3	ND (29)	-	ND (22)	ND (33)	ND (29)	ND (25)	ND (29)
cis-1,2-Dichloroethene	146 J	91	110	140	140	130	-	56	54 J	55	55	75
Dichlorodifluoromethane (CFC-12)	ND	ND	1.1	ND	ND	ND (29)	-	ND (22) U	ND (33)	ND (29)	ND (25)	ND (29)
Tetrachloromethane	4.9	1.2	5.6	4.3	4.2	8.5 J	-	ND (22)	ND (33)	0.6 J	6.1 J	ND (29)
Trichloroethene	820	430	900	820	860	970	-	700	850	940	700	810
Wet												
Alkalinity, Total (as CaCO3)	-	-	-	-	-	-	-	590000	590000	630000	-	660000
Ammonia	-	-	-	-	-	-	-	2300	4000	ND (2000) UJ	-	1100
Chloride	-	-	-	-	-	-	-	22200	20400	23000	-	6500
Nitrate (as N)	-	-	-	-	-	-	-	340	250	83 J	-	900
Sulfate	-	-	-	-	-	-	-	49800	61000	62600	-	59700
Sulfide (Acid Soluble)	-	-	-	-	-	9000	-	ND (1000)	ND (1000)	ND (1000)	-	ND (2000)
Total Organic Carbon (TOC)	-	-	-	-	-	6000	-	7000	-	7000	-	4000

RL-3	8/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	4/28/2005	7/28/2005	10/26/2005	4/25/2006	5/18/2009
Metals										
Antimony (Dissolved)	-	-	-	-	-	1.2 J	0.8 J	0.25 J	-	-
Arsenic (Dissolved)	ND (1.0) K	ND	5.6	ND	ND	ND (10)	ND (10)	ND (10)	-	-
Barium (Dissolved)	49	87	130	46	110	140	120	130	-	-
Cadmium (Dissolved)	0.4	ND	ND	ND	ND	0.21 J	0.15 J	ND (0.5)	-	-
Calcium (Dissolved)	-	-	-	-	-	137000	103000	136000	-	-
Cobalt (Dissolved)	-	-	-	-	-	1.8 J	5.5 J	2.1 J	-	-
Copper (Dissolved)	1.1	ND	ND	ND	ND	0.98 J	ND (2)	ND (2) U	-	-
Iron (Dissolved)	-	-	-	-	-	1000	1200	1700	-	39.1 J
Lead (Dissolved)	22	7.2	18	9.1	5.7	11	11	2.9 J	-	-
Magnesium (Dissolved)	-	-	-	-	-	59200	43200	60000	-	-
Manganese (Dissolved)	-	-	-	-	-	35	37	29	-	30.5
Nickel (Dissolved)	-	-	-	-	-	2.5 J	2.5 J	2.1 J	-	-
Potassium (Dissolved)	-	-	-	-	-	2300	3400	1500	-	-
Selenium (Dissolved)	ND (1.0) K	ND	ND	ND	ND	ND (2)	0.87 J	ND (2)	-	-
Silver (Dissolved)	ND (0.5) K	ND	ND	ND	ND	0.059 J	ND (0.5)	ND (0.5)	-	-
Sodium (Dissolved)	-	-	-	-	-	5900	5000	6100	-	-
Zinc (Dissolved)	690	7400	12000	4200	5300	10000	8200	6500	-	-
VOAs										
1,1,1-Trichloroethane	ND	ND	2.5	1.7	1.7	1.8	ND (1.0)	1.2	2.4	ND (1.0)
1,1-Dichloroethane	ND	ND	ND	ND	ND	0.23 J	0.24 J	0.43 J	ND (1.0)	ND (1.0)
Benzene	ND	ND	ND	ND	ND	ND (1.0)	0.65 J	ND (1.0)	ND (1.0)	ND (1.0)
Dichlorodifluoromethane (CFC-12)	ND	ND	1.4	ND	ND	1.1 J	0.39 J	0.88 J	ND (1.0)	ND (1.0)
Toluene	-	-	-	-	-	-	0.44 J	0.22 J	ND (1.0)	ND (1.0)
Trichloroethene	ND	ND	ND	20	1.8	1.0	0.32 J	1.4	1.4	ND (1.0)

RL-1	5/29/2009
VOAs	
2-Butanone (Methyl Ethyl Ketone)	0.87 J
Carbon disulfide	0.46 J
Chloromethane (Methyl Chloride)	0.37 J

RL-6	4/1/2002	10/1/2002	1/1/2003	4/1/2003	2/2/2005	5/3/2005	7/27/2005	10/26/2005	4/25/2006	5/29/2009
Gas										
Carbon dioxide	-	-	-	-	-	11000	23000	12000	-	-
Ethane	-	-	-	-	-	ND (0.5)	ND (0.5)	ND (0.5)	-	0.54
Metals										
Aluminum (Dissolved)	-	-	-	-	96	ND (50)	ND (50)	1800	-	-
Antimony (Dissolved)	-	-	-	-	0.53 J	0.35 J	0.55 J	0.43 J	-	-
Arsenic (Dissolved)	ND	1.3	ND	ND	ND (10)	ND (10)	ND (10)	ND (10)	-	-
Barium (Dissolved)	75	92	98	82	73 J	71 J	79 J	83 J	-	-
Cadmium (Dissolved)	0.74	0.53	ND	ND	24	0.48 J	1.3	0.19 J	-	-
Calcium (Dissolved)	-	-	-	-	109000	86200	82300	82000	-	-
Cobalt (Dissolved)	-	-	-	-	ND (7)	1.4 J	3.7 J	2 J	-	-
Copper (Dissolved)	ND	ND	ND	ND	13	ND (2.4) U	11	ND (2) U	-	-
Iron (Dissolved)	-	-	-	-	1100	580	910	820	-	ND (50.0)
Lead (Dissolved)	4.4	7.0	-	ND	140	ND (3)	4.3	ND (3)	-	-
Magnesium (Dissolved)	-	-	-	-	33000	30100	34700	34400	-	-
Manganese (Dissolved)	-	-	-	-	110	4.3 J	16	22	-	7.8 J
Nickel (Dissolved)	-	-	-	-	5.8 J	2.5 J	1.9 J	1.8 J	-	-
Potassium (Dissolved)	-	-	-	-	1600	5300	14000	1700	-	-
Selenium (Dissolved)	ND	ND	ND	ND	8	18	39	6	-	-
Sodium (Dissolved)	-	-	-	-	4400	3300	ND (3800) U	3000	-	-
Thallium (Dissolved)	-	-	-	-	ND (1)	ND (1)	0.045 J	0.024 J	-	-
Zinc (Dissolved)	4100	2200	2200	1400	14900	1700	4300	820	-	-
SVOAs										
bis(2-Ethylhexyl)phthalate	16	12	ND	11	-	-	-	-	-	-
VOAs										
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	-	-	-	-	ND (50)	ND (50) UJ	1.0 J	ND (50)	ND (50)	ND (10)
Acetone	-	-	-	-	ND (25)	ND (25)	9.4 J	ND (25)	ND (25)	ND (10)
Carbon disulfide	-	-	-	-	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	0.47 J
Wet										
Alkalinity, Total (as CaCO3)	-	-	-	-	310000	290000	340000	-	330000	-
Ammonia	-	-	-	-	ND (2000)	580 J	1900 J	-	ND (200)	-
Chloride	-	-	-	-	2400	2100	2200	-	1900	-
Nitrate (as N)	-	-	-	-	1700	1600	2000	-	1300	-
Nitrite (as N)	-	-	-	-	ND (100)	110	120	-	ND (100)	-
Sulfate	-	-	-	-	20300	24200	22400	-	19900	-
Sulfide (Acid Soluble)	-	-	-	-	ND (1000)	ND (1000)	900 J	-	ND (3000)	-
Total Organic Carbon (TOC)	-	-	-	-	8000	-	3000	-	6000	-

CRA-MW-1D	2/8/05	4/27/05
VOAs		
Dichlorodifluoromethane (CFC-12)	0.39 J	0.44 J
Toluene	0.28 J	0.19 J
Metals		
Aluminum (Dissolved)	660	200
Antimony (Dissolved)	ND (2)	0.28 J
Barium (Dissolved)	71 J	71 J
Calcium (Dissolved)	106000	102000 J
Chromium Total (Dissolved)	5.9	20
Cobalt (Dissolved)	5.8 J	5.1 J
Copper (Dissolved)	2.8	1.7 J
Iron (Dissolved)	2150	2400
Magnesium (Dissolved)	42800	42000
Manganese (Dissolved)	450	460
Nickel (Dissolved)	7 J	17 J
Potassium (Dissolved)	4200	3500
Selenium (Dissolved)	0.96 J	1.6 J
Sodium (Dissolved)	63600	25900
Thallium (Dissolved)	ND (1)	0.03 J
Vanadium (Dissolved)	0.8 J	ND (7)
Zinc (Dissolved)	69	30

SAMPLE LOCATION
SAMPLE DATE
RESULT (ug/L)
PARAMETER

EXCEEDS PART 201 RESIDENTIAL/COMMERCIAL I DRINKING WATER CRITERIA

chemical_name	Part 201 Residential/ Commercial I Drinking Water
VOAs	
1,1,1-Trichloroethane	200
1,1,2-Trichloroethane	5
1,1-Dichloroethane	880
1,1-Dichloroethene	7
1,2-Dichloroethane	5
1,2-Dichloropropane	5
2-Butanone (Methyl Ethyl Ketone)	13000
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1800
Acetone	730
Benzene	5
Carbon disulfide	800
Chlorobromomethane	-
Chloroethane	430
Chloroform (Trichloromethane)	80
Chloromethane (Methyl Chloride)	260
cis-1,2-Dichloroethene	70
Cyclohexane	-
Dichlorodifluoromethane (CFC-12)	1700
Ethylbenzene	74
Methyl cyclohexane	-
Tetrachloroethene	5
Tetrahydrofuran	95
Toluene	790
trans-1,2-Dichloroethene	100
Trichloroethene	5
Trichlorofluoromethane (CFC-11)	2600
Trifluorotrichloroethane (Freon 113)	170000
Vinyl chloride	2
SVOAs	
bis(2-Ethylhexyl)phthalate	6
Diethyl phthalate	5500
Di-n-octyl phthalate	130
METALS	
Aluminum (Dissolved)	50
Antimony (Dissolved)	6
Arsenic (Dissolved)	10
Barium (Dissolved)	2000
Beryllium (Dissolved)	4
Cadmium (Dissolved)	5
Calcium (Dissolved)	-
Chromium Total (Dissolved)	100
Chromium VI (Hexavalent) (Dissolved)	100
Cobalt (Dissolved)	40
Copper (Dissolved)	1000
Iron (Dissolved)	300
Lead (Dissolved)	4
Magnesium (Dissolved)	400000
Manganese (Dissolved)	50
Mercury (Dissolved)	2
Nickel (Dissolved)	100
Potassium (Dissolved)	-
Selenium (Dissolved)	50
Silver (Dissolved)	34
Sodium (Dissolved)	120000
Thallium (Dissolved)	2
Vanadium (Dissolved)	4.5
Zinc (Dissolved)	2400
GAS	
Carbon dioxide	-
Ethane	-
Ethene	-
Methane	-
WET	
Alkalinity, Total (As CaCO3)	-
Ammonia	10000
Chloride	250000
Nitrate (as N)	10000
Nitrite (as N)	1000
Sulfate	250000
Sulfide (Acid Soluble)	-
Total Organic Carbon (TOC)	-

0 50 150ft

LEGEND

- PROPERTY BOUNDARY
- FENCE LINE
- EXCAVATION AREA (EDER, 1996)
- EXTENT OF BURIED WASTE
- LOWER WATER BEARING ZONE MONITORING WELL
- UPPER WATER BEARING ZONE MONITORING WELL
- PERCHED AQUIFER MONITORING WELL
- SURFICIAL AQUIFER MONITORING WELL

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

A-1 DISPOSAL LANDFILL
OTSEGO, MICHIGAN

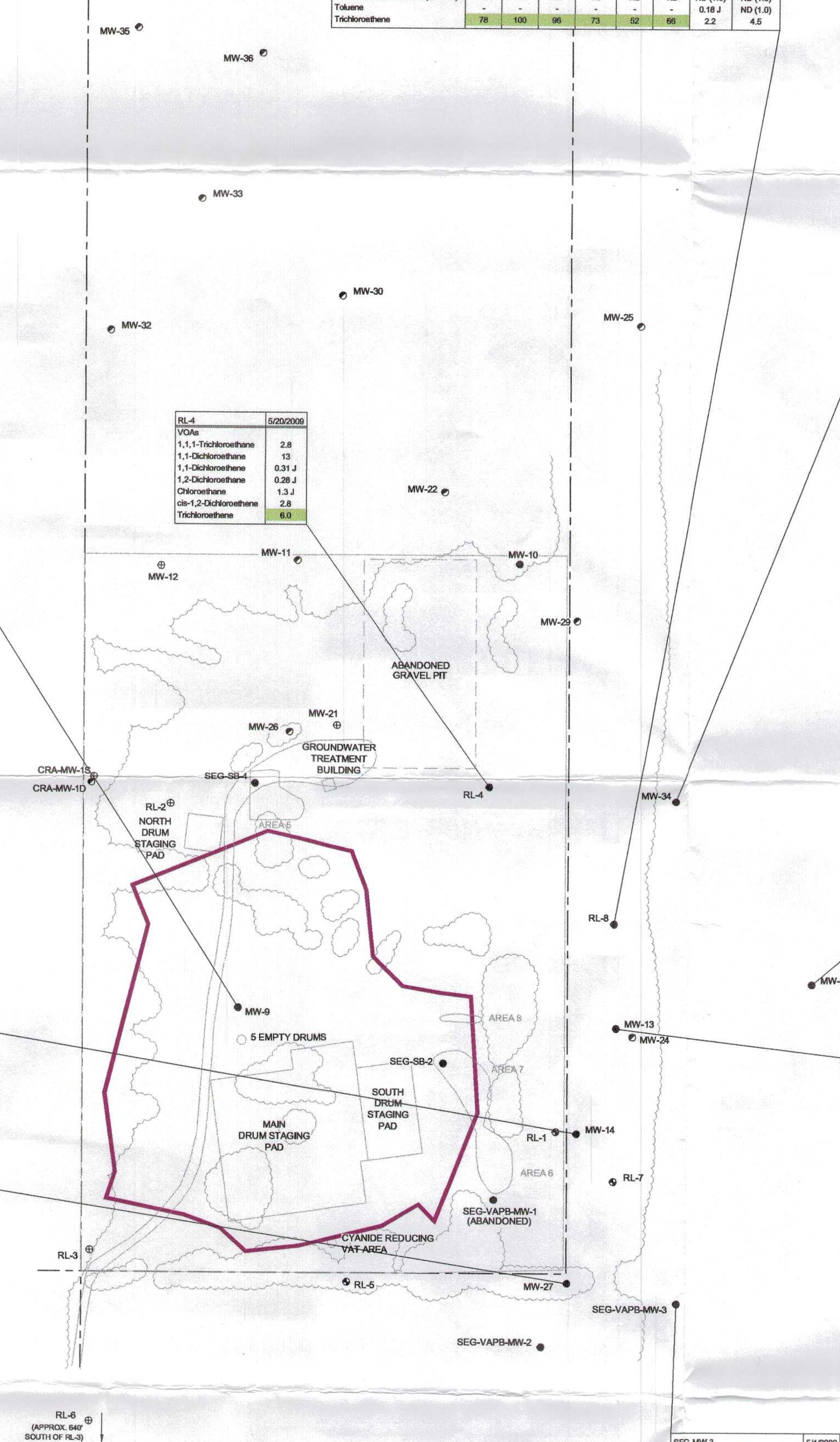
GROUNDWATER CONTAMINANT DISTRIBUTION - SURFICIAL AND PERCHED AQUIFERS

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date:	
R. PASQUALONI	J. QUIGLEY	JULY 2009	
Scale: 1"=150'	Project Nº: 017178-09	Report Nº: ZIMO001	Drawing Nº: figure 4

017178-09(ZIMO001)GN-DE001 SEP 29/2009



RL-8	5/1/2000	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	2/1/2005	5/18/2009
Metals								
Antimony (Dissolved)	-	-	-	-	-	-	0.47 J	-
Arsenic (Dissolved)	-	-	ND	1.4	ND	ND	ND (10)	-
Barium (Dissolved)	-	-	140	140	120	110	140	-
Cadmium (Dissolved)	-	-	0.78	1.2	ND	0.73	ND (0.5)	-
Calcium (Dissolved)	-	-	-	-	-	-	143000	-
Copper (Dissolved)	-	-	ND	ND	ND	ND	0.86 J	-
Iron (Dissolved)	-	-	-	-	-	-	990	-
Lead (Dissolved)	-	-	5.3	5.2	16	9.0	ND (3)	-
Magnesium (Dissolved)	-	-	-	-	-	-	59700	-
Manganese (Dissolved)	-	-	-	-	-	-	23	-
Nickel (Dissolved)	-	-	-	-	-	-	2.7 J	-
Potassium (Dissolved)	-	-	-	-	-	-	1300	-
Sodium (Dissolved)	-	-	-	-	-	-	5700	-
Zinc (Dissolved)	-	-	5300	3900	3600	2800	10100	-
VOAs								
1,1,1-Trichloroethane	100 J	63	76	69	44	61	2.1	3.8
1,1-Dichloroethane	130	110	140	130	95	140	0.39 J	11
1,1-Dichloroethene	2.5 J	1.3	1.8	1.8	1.5	2.2	0.20 J	0.20 J
Benzene	ND	ND	ND	ND	1.4	ND	ND (1.0) U	ND (1.0)
Chloroethane	12	7.8	9.1	7.9	5.8	6.9	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	23	29	35	32	31	42	ND (1.0)	4.2
Cyclohexane	-	-	-	-	-	-	0.18 J	ND (1.0) UJ
Dichlorodifluoromethane (CFC-12)	ND	ND	ND	1.6	ND	1.2	ND (1.0)	ND (1.0)
Toluene	-	-	-	-	-	-	0.18 J	ND (1.0)
Trichloroethene	78	100	96	73	52	66	2.2	4.5

MW-9	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	2/8/2005	4/29/2005	7/27/2005	10/26/2005	4/26/2006	5/20/2009
Metals											
Aluminum (Dissolved)	-	-	-	-	-	7.6 J	9.2 J	ND (50)	ND (50) U	-	-
Antimony (Dissolved)	-	-	-	-	-	ND (2)	0.2 J	0.13 J	0.13 J	-	-
Arsenic (Dissolved)	2.3	ND/ND	ND	ND	ND	ND (10)	ND (10)	ND (10)	ND (10)	-	-
Barium (Dissolved)	160	200/200	170	170	180	200	190	200	210	-	-
Cadmium (Dissolved)	ND (0.2) K	ND/ND	ND	ND	ND	0.31 J	0.26 J	0.26 J	0.75	-	-
Calcium (Dissolved)	-	-	-	-	-	213000	206000	214000	211000	-	-
Chromium Total (Dissolved)	-	-	-	-	-	3.7 J	ND (5)	ND (5)	1.7 J	-	-
Chromium VI (Hexavalent) (Dissolved)	1.2	1.4/1.1	ND	ND	ND	-	-	-	-	-	-
Copper (Dissolved)	4.3 RB	ND/ND	ND	ND	ND	2.3	2	1.2 J	ND (3.4) U	-	-
Iron (Dissolved)	-	-	-	-	-	2700	1700	1300	3300	-	-
Lead (Dissolved)	3.8	ND/ND	ND	ND	ND	5.8	2.1 J	6.3	10	-	-
Magnesium (Dissolved)	-	-	-	-	-	96300	90700	94000	96900	-	-
Manganese (Dissolved)	-	-	-	-	-	67	64	66	72	-	-
Nickel (Dissolved)	-	-	-	-	-	5.5 J	5.2 J	3.4 J	3.3 J	-	-
Potassium (Dissolved)	-	-	-	-	-	1900	2000	2000	1900	-	-
Selenium (Dissolved)	ND (1.0) K	ND/ND	ND	ND	ND	2.2	0.99 J	ND (2) U	2	-	-
Sodium (Dissolved)	-	-	-	-	-	37000	33900	34100	32400	-	-
Zinc (Dissolved)	975	140/140	1500	930	410	610	210	260	1000	-	-
VOAs											
1,1,1-Trichloroethane	ND	ND/ND	ND	3.8	ND	0.82 J	0.61 J	0.79 J	0.87 J	0.92 J	1.1
1,1-Dichloroethane	3.7	3.8/3.9	3.6	3.9	3.8	2.8	2.5 J	2.4	2.7	2.3	1.6
1,2-Dichloropropane	ND	ND/ND	ND	2.0	ND	ND (1.0)	ND (1.0) UJ	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
cis-1,2-Dichloroethene	ND	ND/ND	ND	2.4	ND	0.33 J	0.27 J	ND (1.0) UJ	0.24 J	ND (1.0)	ND (1.0)
Dichlorodifluoromethane (CFC-12)	ND	1.9/2.0	ND	1.5	2.0	1.8	1.5 J	2.7	1.4	1.4	1.5 J
Trichloroethene	ND	1.6/1.5	ND	39	3.7	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)
Trichlorofluoromethane (CFC-11)	-	-	-	-	-	0.57 J	0.43 J	ND (1.0)	0.36 J	0.56 J	0.40 J

MW-34	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	2/1/2005	4/29/2005	7/27/2005	10/26/2005	4/26/2006	5/19/2009
Metals											
Antimony (Dissolved)	-	-	-	-	-	0.51 J	1.4 J	0.55 J	0.72 J	-	-
Arsenic (Dissolved)	ND (1.0) K	ND	2.9	2.1	ND	ND (10)	ND (10)	ND (10)	ND (10)	-	-
Barium (Dissolved)	103	110	72	87	59	94 J	34 J	84 J	64 J	-	-
Cadmium (Dissolved)	2.7	ND	1.8	1.6	0.75	0.092 J	0.66	ND (0.5)	1.4	-	-
Calcium (Dissolved)	-	-	-	-	-	93000	53000	51400	68000	-	-
Cobalt (Dissolved)	-	-	-	-	-	ND (7) U	2.7 J	1.7 J	2.8 J	-	-
Copper (Dissolved)	1.2	ND	ND	ND	ND	0.97 J	2.9	ND (2) U	ND (2) U	-	-
Iron (Dissolved)	-	-	-	-	-	720	330	190	710	-	ND (50.0)
Lead (Dissolved)	4.8	12	14	14	5.9	2.9 J	10	5.2	9	-	-
Magnesium (Dissolved)	-	-	-	-	-	39400	26300	27200	43600	-	-
Manganese (Dissolved)	-	-	-	-	-	51	13 J	35	34	-	10.6 J
Nickel (Dissolved)	-	-	-	-	-	7.9 J	ND (25)	2.9 J	3 J	-	-
Potassium (Dissolved)	-	-	-	-	-	1300	10100	8800	12500	-	-
Selenium (Dissolved)	ND (1.0) K	ND	ND	ND	ND	0.97 J	25	13	7.9	-	-
Silver (Dissolved)	ND (0.5) K	ND	ND	ND	ND	ND (0.5)	0.057 J	ND (0.5)	ND (0.5)	-	-
Sodium (Dissolved)	-	-	-	-	-	4800	37200	16700	19800	-	-
Thallium (Dissolved)	-	-	-	-	-	ND (1)	0.032 J	ND (1)	0.04 J	-	-
Zinc (Dissolved)	4290 DL	2300	1900	3000	2500	3100	240	650	4600	-	-
SVOAs											
bis(2-Ethylhexyl)phthalate	ND	ND	17	15	19	-	-	-	-	-	-
Diethyl phthalate	-	-	6.5	-	-	-	-	-	-	-	-
VOAs											
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	0.41 J
Benzene	ND	ND	ND	ND	ND	ND (1.0) U	ND (1.0)	1.6	ND (1.0)	ND (1.0)	ND (1.0)
Carbon disulfide	-	-	-	-	-	ND (5.0)	ND (5.0) UJ	ND (5.0)	0.73 J	0.96 J	0.99 J
Dichlorodifluoromethane (CFC-12)	ND	ND	1.1	ND	ND	ND (1.0)	0.37 J	0.64 J	0.61 J	ND (1.0)	ND (1.0)
Trichlorofluoromethane (CFC-11)	-	-	-	-	-	0.21 J	ND (1.0) UJ	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)

RL-4	5/20/2009
VOAs	
1,1,1-Trichloroethane	2.8
1,1-Dichloroethane	13
1,1-Dichloroethene	0.31 J
1,2-Dichloroethane	0.28 J
Chloroethane	1.3 J
cis-1,2-Dichloroethene	2.8
Trichloroethene	6.0

MW-28	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	2/1/2005	4/29/2005	7/28/2005	10/27/2005	4/25/2006	5/18/2009
Metals											
Antimony (Dissolved)	-	-	-	-	-	0.27 J	0.68 J	0.54 J	0.74 J	-	-
Arsenic (Dissolved)	3.3	ND	ND	ND	ND	ND (10)	ND (10)	ND (10)	ND (10)	-	-
Barium (Dissolved)	19	24	22	25	22	30 J	19 J	33 J	29 J	-	-
Cadmium (Dissolved)	0.4	ND	0.97	ND	ND	0.14 J	0.24 J	1.4	0.4 J	-	-
Calcium (Dissolved)	-	-	-	-	-	50600	61600	57200	49900	-	-
Chromium VI (Hexavalent) (Dissolved)	1.3	ND	ND	ND	ND	-	-	-	-	-	-
Cobalt (Dissolved)	-	-	-	-	-	7.6	8.9	4.1 J	8.6	-	-
Copper (Dissolved)	5.6	ND	ND	ND	ND	1.9 J	1.3 J	ND (2.4) U	ND (2) U	-	-
Iron (Dissolved)	-	-	-	-	-	360	320	200	500	-	-
Lead (Dissolved)	38	12	19	31	5.7	ND (3)	2.7 J	45	6.9	-	-
Magnesium (Dissolved)	-	-	-	-	-	23800	27700	27100	22600	-	-
Manganese (Dissolved)	-	-	-	-	-	4.1 J	6.2 J	44	7.9 J	-	-
Nickel (Dissolved)	-	-	-	-	-	ND (25)	ND (25)	3.5 J	ND (25)	-	-
Potassium (Dissolved)	-	-	-	-	-	2000	2800	12900	2200 J	-	-
Selenium (Dissolved)	ND (1.0) K	ND	ND	ND	ND	ND (2)	ND (2)	28	ND (2)	-	-
Sodium (Dissolved)	-	-	-	-	-	8800	8400	12100	6500	-	-
Zinc (Dissolved)	82	800	1600	1400	550	350	690	1800	650	-	-
VOAs											
Benzene	ND	ND	ND	ND	ND	ND (1.0) U	ND (1.0)	12	ND (1.0)	ND (1.0)	ND (1.0)
Toluene	-	-	-	-	-	ND (1.0)	ND (1.0)	0.21 J	0.19 J	ND (1.0)	ND (1.0)

MW-14	5/1/2000	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	5/18/2009
Metals							
Barium (Dissolved)	-	133	120	86	80/77	81	-
Zinc (Dissolved)	-	843	1000	1400	620/620	930	-
VOAs							
1,1,1-Trichloroethane	270 J	74	46	64	43/44	35	100
1,1-Dichloroethane	580	440	270	270	180/190	230	210
1,1-Dichloroethene	11	2.0	1.1	2.4	2.0/1.9	1.6	5.1 J
1,2-Dichloroethane	7.8	16	12	7.2	3.9/4.3	5.7	2.1 J
1,2-Dichloropropane	1.1	1.7	2.0	1.6	1.1/1.1	1.4	ND (6.7)
Chloroethane	150	27	21	20	13/13	12	ND (6.7)
cis-1,2-Dichloroethene	110	25	23	28	25/26	24	82
Dichlorodifluoromethane (CFC-12)	6.5	ND	ND	ND	ND/ND	ND	ND (6.7)
Tetrahydrofuran	-	-	37	ND	-	ND	-
Trichloroethene	190	110	110	98	74/75	66	99
Vinyl chloride	6.5	ND	ND	ND	-	-	ND (6.7)

MW-13	5/1/2000	9/1/2001	4/1/2002	10/1/2002	5/18/2009
Metals					
Barium (Dissolved)	-	141	170	150/170	-
Cadmium (Dissolved)	-	ND (0.2) K	ND	13/10	-
Iron (Dissolved)	-	-	-	-	164
Lead (Dissolved)	-	5.8	5.8	24/24	-
Manganese (Dissolved)	-	-	-	-	16.5
Zinc (Dissolved)	-	4210 DL	2400	7400/6300	-
SVOAs					
bis(2-Ethylhexyl)phthalate	-	9.3	ND	ND/ND	-
VOAs					
1,1,1-Trichloroethane	190 J	95	180	180/170	150
1,1-Dichloroethane	480	190	270	320/310	170
1,1-Dichloroethene	6.4	2.2	4.5	5.8/5.6	4.1 J
1,2-Dichloroethane	10	ND	ND	ND/ND	ND (6.7)
Chloroethane	37	11	17	24/22	ND (6.7)
cis-1,2-Dichloroethene	58	31	37	52/49	53
Dichlorodifluoromethane (CFC-12)	ND	ND	ND	1.5/1.5	ND (6.7)
Trichloroethene	170	150	200	230/220	210

MW-27	5/1/2000	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	2/2/2005	3/2/2005	5/3/2005	7/28/2005	10/26/2005	4/25/2006	5/18/2009
Gas													
Carbon dioxide	-	-	-	-	-	-	-	46000	38000	59000/50000	62000/58000	-	-
Ethane	-	-	-	-	-	-	ND (0.5)	-	ND (0.5)	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	-	2.4
Ethene	-	-	-	-	-	-	ND (0.5)	-	ND (0.5)	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	-	0.44 J
Methane	-	-	-	-	-	-	0.16 J	-	ND (0.5)	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	-	ND (0.50) U
Metals													
Antimony (Dissolved)	-	-	-	-	-	-	0.3 J	-	0.28 J	0.2 J/0.1 J	0.4 J/0.41 J	-	-
Barium (Dissolved)	-	104	74	88	83	100/100	120	-	110	130/120	120/120	-	-
Cadmium (Dissolved)	-	1.6	6.1	5.0	7.4	2.5/2.3	4.4	-	4.5	3.2/3.4	5.6/5.8	-	-
Calcium (Dissolved)	-	-	-	-	-	-	159000	-	145000	147000/140000	148000/140000	-	-
Cobalt (Dissolved)	-	-	-	-	-	-	ND (7)	-	1.3 J	3.3 J/ND (7)	4.1 J/2.1 J	-	-
Copper (Dissolved)	-	1.8	ND	ND	ND	ND/ND	ND (2.1) U	-	ND (2.5) U	ND (2) U/ND (2.4) U	ND (5.9) U/6.7	-	-
Iron (Dissolved)	-	-	-	-	-	-	1100	-	1300	510/460	1400/1400	-	-
Lead (Dissolved)	-	15	97	63	100	23/21	9.5	-	28	12/15	21/23	-	-
Magnesium (Dissolved)	-	-	-	-	-	-	67800	-	60300	60600/57800	66500/62600	-	-
Manganese (Dissolved)	-	-	-	-	-	-	8 J	-	8.5 J	12 J/6.3 J	16/11 J	-	-
Nickel (Dissolved)	-	-	-	-	-	-	ND (25)	-	ND (25)	ND (25)/ND (25)	2.5 J/1.5 J	-	-
Potassium (Dissolved)	-	-	-	-	-	-	2800	-	6300	3300/3600	4300/3700	-	-
Selenium (Dissolved)	-	ND (1.0) K	ND	ND	ND	ND/ND	2.3	-	19	6.1/7.5	10/8.4	-	-
Sodium (Dissolved)	-	-	-	-	-	-	6100	-	5000	4400/4200	5400/4900	-	-
Thallium (Dissolved)	-	-	-	-	-	-	ND (1)	-	ND (1)	ND (1)/ND (1)	0.022 J/0.025 J	-	-
Zinc (Dissolved)	-	2920 DL	7500	8400	13000	2600/2600	5100	-	6600	3600/3500	5900/6200	-	-
SVOAs													
bis(2-Ethylhexyl)phthalate	-	6.0	ND	5.8	ND	ND/ND	-	-	-	-	-	-	-
VOAs													
1,1,1-Trichloroethane	200 J	190	330	370	ND	310/300	270	-	280	300/280	330/390	280	250
1,1-Dichloroethane	450	570	610	760	ND	800/790	740	-	760	810/770	860/1000	740	760
1,1-Dichloroethene	6.0	7.8	11	13	8.8	12/13	9.7 J	-	15 J	13 J/14 J	15 J/17 J	12 J	13 J
1,2-Dichloroethane	8.9	ND	12	12	10	11/12	9.3 J	-	ND (25)	ND (33)/10 J	10 J/11 J	7.9 J	6.4 J
1,2-Dichloropropane	ND	ND	ND	ND	2.2	3.1/3.1	ND (25)	-	ND (25)	ND (33)/ND (25)	ND (25)/ND (25)	ND (25)	ND (25)
Acetone	-	-	-	-	-	-	ND (620)	-	18 J	ND (830)/ND (620)	ND (620)/ND (620)	ND (620)	ND (250)
Benzene	7.3	2.8	1.6	1.6	3.9	1.1/ND	ND (25)	-	19 J	47/42	ND (25)/ND (25)	ND (25)	ND (25)
Chloroethane	17	13	20	26	18	24/24	16 J	-	35	ND (33)/11 J	11 J/14 J	11 J	ND (25)
Chloroform (Trichloromethane)	ND	ND	1.2	1.4	240	1.4/1.5	ND (25)	-	ND (25)	ND (33)/ND (25)	ND (25)/ND (25)	ND (25)	ND (25)
cis-1,2-Dichloroethene	120	85	120	130	120	140/150	130	-	130	110 J/110 J	140/170	120	180
Dichlorodifluoromethane (CFC-12)	ND	ND	ND	1.3	ND	1.1/1.1	ND (25)	-	ND (25) UJ	ND (33)/ND (25)	ND (25)/ND (25)	ND (25)	ND (25)
trans-1,2-Dichloroethene	2.1	ND	ND	ND	610	1.8/1.6	ND (25)	-	ND (25)	ND (33)/4.8 J	ND (25)/ND (25)	ND (25)	ND (25)
Trichloroethene	330	500	500	570	490	550/530	440	-	440	550/550	600/680	540	560
Wet													
Alkalinity, Total (as CaCO3)	-	-	-	-	-	-	620000	-	560000	580000/590000	630000/630000	-	690000
Ammonia	-	-	-	-	-	-	ND (2000)	-	570 J	ND (2000)/ND (2000)	1400 J/ND (2000) UJ	-	500
Chloride	-	-	-	-	-	-	3500	-	3500	2200/2200	1700/1600	-	2800
Nitrate (as N)	-	-	-	-	-	-	1400	-	1300	1400/1400	1500/1400	-	1100
Sulfate	-	-	-	-	-	-	22600	-	20200	24100/23800	26000/25200	-	22100
Total Organic Carbon (TOC)	-	-	-	-	-	-	4000	-	20000	-	13000/21000	-	3000

SEG-MW-3	5/1/2000	4/1/2002	10/1/2002	4/1/2003	2/2/2005	5/3/2005	4/25/2006	5/18/2009
Metals								
Antimony (Dissolved)	-	-	-	-	ND (2)	0.19 J	-	-
Arsenic (Dissolved)	-	ND	1.7	12	ND (10)	ND (10)	-	-
Barium (Dissolved)	-	63	67	70	73 J	49 J	-	-
Calcium (Dissolved)	-	-	-	-	99800	95100	-	-
Cobalt (Dissolved)	-	-	-	-	5.1 J	2.8 J	-	-
Iron (Dissolved)	-	-	-	-	730	650	-	130
Magnesium (Dissolved)	-	-	-	-	32100	38700	-	-
Manganese (Dissolved)	-	-	-	-	450	190	-	92.7
Nickel (Dissolved)	-	-	-	-	2.8 J	4.9 J	-	-
Potassium (Dissolved)	-	-	-	-	3900	3000	-	-
Selenium (Dissolved)	-	ND	ND	ND	ND (2)	3.9	-	-
Sodium (Dissolved)	-	-	-	-	4200	4500	-	-
Zinc (Dissolved)	-	3200	52	89	8.4 J	ND (35) U	-	-
SVOAs								
bis(2-Ethylhexyl)phthalate	-	7.0	ND	6.3	-	-	-	-
VOAs								
1,1,1-Trichloroethane	260 J	140	370	210	0.96 J	0.28 J	0.68 J	93
1,1-Dichloroethane	130	78	240	160	0.27 J	ND (1.0)	0.21 J	87
1,1-Dichloroethene	20	7.0	19	11	ND (1.0)	ND (1.0)	ND (1.0)	5.3
1,2-Dichloroethane	2.3	1.8	5.2	3.1	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Benzene	5.9	ND	ND	ND	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Chloroethane	6.6	4.0	10	5.4	ND (1.0)	ND (1.0)	ND (1.0)	3.3 J
cis-1,2-Dichloroethene	70	25	86	43	ND (1.0)	ND (1.0)	ND (1.0)	15
Dichlorodifluoromethane (CFC-12)	ND	ND	2.3	ND	ND (1.0)	ND (1.0) UJ	ND (1.0)	ND (5.0)
trans-1,2-Dichloroethene	ND	ND	1.2	ND	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Trichloroethene	2.6	3.0	130	110	0.68 J	ND (1.0)	0.55 J	160

chemical_name	Part 201 Residential/ Commercial I Drinking Water
VOAs	
1,1,1-Trichloroethane	200
1,1,2-Trichloroethane	5
1,1-Dichloroethane	880
1,1-Dichloroethene	7
1,2-Dichloroethane	5
1,2-Dichloropropane	5
2-Butanone (Methyl Ethyl Ketone)	13000
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	1800
Acetone	730
Benzene	5
Carbon disulfide	800
Chlorobromomethane	-
Chloroethane	430
Chloroform (Trichloromethane)	80
Chloromethane (Methyl Chloride)	260
cis-1,2-Dichloroethene	70
Cyclohexane	-
Dichlorodifluoromethane (CFC-12)	1700
Ethylbenzene	74
Methyl cyclohexane	-
Tetrachloroethene	5
Tetrahydrofuran	95
Toluene	790
trans-1,2-Dichloroethene	100
Trichloroethene	5
Trichlorofluoromethane (CFC-11)	2600
Trifluorotrichloroethane (Freon 113)	170000
Vinyl chloride	2
SVOAs	
bis(2-Ethylhexyl)phthalate	6
Diethyl phthalate	5500
Di-n-octyl phthalate	130
METALS	
Aluminum (Dissolved)	50
Antimony (Dissolved)	6
Arsenic (Dissolved)	10
Barium (Dissolved)	2000
Beryllium (Dissolved)	4
Cadmium (Dissolved)	5
Calcium (Dissolved)	-
Chromium Total (Dissolved)	100
Chromium VI (Hexavalent) (Dissolved)	100
Cobalt (Dissolved)	40
Copper (Dissolved)	1000
Iron (Dissolved)	300
Lead (Dissolved)	4
Magnesium (Dissolved)	400000
Manganese (Dissolved)	50
Mercury (Dissolved)	2
Nickel (Dissolved)	100
Potassium (Dissolved)	-
Selenium (Dissolved)	50
Silver (Dissolved)	34
Sodium (Dissolved)	120000
Thallium (Dissolved)	2
Vanadium (Dissolved)	4.5
Zinc (Dissolved)	2400
GAS	
Carbon dioxide	-
Ethane	-
Ethene	-
Methane	-
WET	
Alkalinity, Total (As CaCO3)	-
Ammonia	10000
Chloride	250000
Nitrate (as N)	10000
Nitrite (as N)	1000
Sulfate	250000
Sulfide (Acid Soluble)	-
Total Organic Carbon (TOC)	-

N

0 50 150ft

LEGEND

- PROPERTY BOUNDARY
- FENCE LINE
- EXCAVATION AREA (EDER, 1996)
- EXTENT OF BURIED WASTE
- LOWER WATER BEARING ZONE MONITORING WELL
- UPPER WATER BEARING ZONE MONITORING WELL
- PERCHED AQUIFER MONITORING WELL
- SURFACIAL AQUIFER MONITORING WELL

SAMPLE LOCATION — SAMPLE DATE — RESULT (ug/L) — PARAMETER

CRA-MW-1D	2/8/05	4/27/05
VOAs		
Dichlorodifluoromethane (CFC-12)	0.39 J	0.44 J
Toluene	0.28 J	0.19 J
Metals		
Aluminum (Dissolved)	660	200
Antimony (Dissolved)	ND (2)	0.28 J
Barium (Dissolved)	71 J	71 J
Calcium (Dissolved)	106000	102000 J
Chromium Total (Dissolved)	5.9	20
Cobalt (Dissolved)	5.6 J	5.1 J
Copper (Dissolved)	2.8	1.7 J
Iron (Dissolved)	2100	2400
Magnesium (Dissolved)	42800	42000
Manganese (Dissolved)	450	460
Nickel (Dissolved)	7 J	17 J
Potassium (Dissolved)	4200	3500
Selenium (Dissolved)	0.96 J	1.6 J
Sodium (Dissolved)	63800	25900
Thallium (Dissolved)	ND (1)	0.03 J
Vanadium (Dissolved)	0.8 J	ND (7)
Zinc (Dissolved)	59	30

EXCEEDS PART 201 RESIDENTIAL/COMMERCIAL I DRINKING WATER CRITERIA

SCALE VERIFICATION

THIS BAR MEASURES 1" ON ORIGINAL. ADJUST SCALE ACCORDINGLY.

A-1 DISPOSAL LANDFILL
OTSEGO, MICHIGAN

GROUNDWATER CONTAMINANT DISTRIBUTION - UPPER WATER-BEARING ZONE

CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date:
R. PASQUALONI	J. QUIGLEY	JULY 2009
Scale: 1"=150'	Project N°: 017178-09	Report N°: ZIMO001 / Drawing N°: figure 5

017178-09(ZIMO001)GN-DE002 SEP 29/2009

MW-20	9/1/1999	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	7/7/2005	10/26/2005	4/26/2006	5/18/2006
Gas										
Carbon dioxide	-	-	-	-	-	-	39000	18000	18000	-
Ethane	-	-	-	-	-	-	-	ND (0.5)	ND (0.5)	-
Ethene	-	-	-	-	-	-	-	ND (0.5)	ND (0.5)	-
Methane	-	-	-	-	-	-	-	ND (0.5)	ND (0.5)	-
Metals										
Aluminum (Dissolved)	-	-	-	-	-	-	200000/200000	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	-
Antimony (Dissolved)	-	-	-	-	-	-	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	-
Arsenic (Dissolved)	-	-	-	-	-	-	8.9 J/5.2 J	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	-
Barium (Dissolved)	-	-	-	-	-	-	71/71	30 J/30 J	30 J/30 J	-
Cadmium (Dissolved)	-	-	-	-	-	-	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	-
Chromium Total (Dissolved)	-	-	-	-	-	-	1.3 J/1.3 J	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	-
Cobalt (Dissolved)	-	-	-	-	-	-	5.6 J/5.1 J	5.1 J/5.1 J	5.1 J/5.1 J	-
Copper (Dissolved)	-	-	-	-	-	-	2.8/1.7 J	1.7 J/1.7 J	1.7 J/1.7 J	-
Iron (Dissolved)	-	-	-	-	-	-	2100/2600	2600/2600	2600/2600	-
Lead (Dissolved)	-	-	-	-	-	-	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	-
Magnesium (Dissolved)	-	-	-	-	-	-	42800/42000	42000/42000	42000/42000	-
Manganese (Dissolved)	-	-	-	-	-	-	450/460	460/460	460/460	-
Mercury (Dissolved)	-	-	-	-	-	-	ND (0.2)/ND (0.2)	ND (0.2)/ND (0.2)	ND (0.2)/ND (0.2)	-
Nickel (Dissolved)	-	-	-	-	-	-	7.1 J/17.1 J	17.1 J/17.1 J	17.1 J/17.1 J	-
Potassium (Dissolved)	-	-	-	-	-	-	4200/3500	3500/3500	3500/3500	-
Selenium (Dissolved)	-	-	-	-	-	-	0.96 J/1.6 J	1.6 J/1.6 J	1.6 J/1.6 J	-
Sodium (Dissolved)	-	-	-	-	-	-	63800/25900	25900/25900	25900/25900	-
Thallium (Dissolved)	-	-	-	-	-	-	ND (1)/ND (1)	ND (1)/ND (1)	ND (1)/ND (1)	-
Vanadium (Dissolved)	-	-	-	-	-	-	0.8 J/ND (7)	ND (7)/ND (7)	ND (7)/ND (7)	-
Zinc (Dissolved)	-	-	-	-	-	-	59/30	30/30	30/30	-
VOAs										
Chloromethane (CFC-12)	-	-	-	-	-	-	0.39 J/0.44 J	0.31 J/0.36 J	0.36 J/0.36 J	-
Toluene	-	-	-	-	-	-	0.28 J/0.19 J	ND (1.0)/ND (1.0)	ND (1.0)/ND (1.0)	-

MW-29	9/1/1999	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	7/7/2005	10/26/2005	4/26/2006	5/18/2006
Gas										
Carbon dioxide	-	-	-	-	-	-	31000	30000/30000	30000/30000	-
Ethane	-	-	-	-	-	-	ND (0.5)	ND (0.5)/ND (0.5)	ND (0.5)/ND (0.5)	0.51
Ethene	-	-	-	-	-	-	ND (0.5)	ND (0.5)/ND (0.5)	2.2/2.2	0.44 J
Methane	-	-	-	-	-	-	ND (0.5)	0.14 J/ND (0.5)	ND (0.5)/0.5	3.8
Metals										
Aluminum (Dissolved)	-	-	-	-	-	-	ND (50)	7.6 J/ND (50)	ND (50)/ND (50)	-
Antimony (Dissolved)	-	-	-	-	-	-	ND (2)	0.16 J/ND (2)	ND (2)/ND (2)	-
Arsenic (Dissolved)	-	1.7	1.3	4.7	1.3	ND	ND (10)	ND (10)/ND (10)	ND (10)/ND (10)	-
Barium (Dissolved)	-	87	ND	77	82	78	91 J	86 J/85 J	92 J/92 J	-
Cadmium (Dissolved)	ND (0.2)/0.2	ND	ND	ND	ND	ND	0.41 J	0.16 J/0.09 J	0.09 J/0.19 J	-
Calcium (Dissolved)	-	-	-	-	-	-	108000	103000 J/108000	108000/108000	-
Chromium Total (Dissolved)	-	-	-	-	-	-	1.3 J	1.3 J/1.3 J	1.3 J/1.3 J	-
Cobalt (Dissolved)	-	3.3/ND	ND	ND	ND	ND	4.4 J	3.8 J/3.8 J	3.8 J/3.8 J	397
Copper (Dissolved)	-	-	-	-	-	-	2.6 J	1.9 J/2.6 J	2.6 J/2.6 J	-
Iron	-	3.4	ND	ND	ND	ND	3.3	8.1	ND (20)	-
Iron (Dissolved)	-	-	-	-	-	-	1190	1300	1300/1300	-
Lead (Dissolved)	-	-	-	-	-	-	3.3	8.1	ND (2)	-
Magnesium (Dissolved)	-	-	-	-	-	-	47200	44000	44000/47400	-
Manganese	-	-	-	-	-	-	96	90	96/110	37.5
Manganese (Dissolved)	-	-	-	-	-	-	96	90	96/110	-
Nickel (Dissolved)	-	-	-	-	-	-	ND (25)	3.8 J	ND (25)	-
Potassium (Dissolved)	-	-	-	-	-	-	1300	1300	1300/1300	-
Silver (Dissolved)	-	ND (0.5)/4	ND	ND	ND	ND (0.5)	0.076 J	ND (0.5)	ND (0.5)	-
Sodium (Dissolved)	-	-	-	-	-	-	11100	10000	9000/8300	-
Zinc (Dissolved)	-	ND (10)/4	39	140	13	12	1200	1200	440/420	-
VOAs										
1,1-Dichloroethane	11	37	11	22	18	20	14	16	17	16
1,1-Dichloroethene	ND	3.4	ND	2.9	3.5	2.9	2.0 J	2.1 J	1.8 J	2.2 J
1,2-Dichloroethane	3.5	2.8	3.2	1.8	ND	1.7	1.8 J	1.7 J	1.8 J	ND (0.5)
1,2-Dichloropropane	14	32	15	21	110	31	16	16	17	19
Chlorobenzene/Benzene	-	-	-	-	17	ND	-	-	-	-
cis-1,2-Dichloroethene	2.8	15	4.3	8.5	7.2	8.5	7.7	8.7	9.8	11
Trichloroethene	5.2	1.9	36	1.5	1.7	1.6	110	120	130	110
Wet										
Alkalinity, Total (as CaCO3)	-	-	-	-	-	-	410000	420000	390000	450000
Chloride	-	-	-	-	-	-	3000	8300	7100	7100
Nitrate (as N)	-	-	-	-	-	-	ND (100)	ND (100)	ND (100)	39 J
Sulfate	-	-	-	-	-	-	39100	48100	50800	39100
Sulfide (Acid Soluble)	-	-	-	-	-	-	800 J	ND (1000)	ND (1000)	ND (1000)
Total Organic Carbon (TOC)	-	-	-	-	-	-	1000	1000	1000	1000

MW-26	9/1/1999	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	7/8/2005	10/25/2005	4/26/2006	5/18/2006
Gas										
Carbon dioxide	-	-	-	-	-	-	80000/80000	87000	86000	-
Ethane	-	-	-	-	-	-	-	ND (0.5)	ND (0.5)	0.81
Ethene	-	-	-	-	-	-	-	ND (0.5)	ND (0.5)	0.42 J
Methane	-	-	-	-	-	-	-	12	0.33 J	ND (0.5)	3.3	3.0
Metals										
Aluminum (Dissolved)	-	-	-	-	-	-	ND (50)	71	30 J	20 J
Antimony (Dissolved)	-	-	-	-	-	-	0.43 J	0.14 J	ND (2)	ND (2)/J
Arsenic (Dissolved)	-	1.8	ND	ND	ND	ND/ND	ND (10)	ND (10)	ND (10)	ND (10)
Barium (Dissolved)	-	96	83	110	130	130/130	80 J	110	130	140
Cadmium (Dissolved)	-	ND (0.2)/4	ND	ND	ND	ND/ND	ND (0.5)	0.19	0.19 J	0.15 J
Calcium (Dissolved)	-	-	-	-	-	-	120000	120000	120000	120000
Chromium Total (Dissolved)	-	-	-	-	-	-	ND (1)	1.7 J	4.3	ND (2)
Cobalt (Dissolved)	-	-	-	-	-	-	-	1.8 J	ND (7)	ND (7)
Copper (Dissolved)	-	3.5 ND	ND	ND	ND	ND/ND	ND (2)/J	1.7 J	ND (2)/J	1.1 J
Iron (Dissolved)	-	-	-	-	-	-	590	1300	660	1300
Lead (Dissolved)	-	8.7	ND	9.4	ND	ND	ND/ND	ND (2)	11	5.4
Magnesium (Dissolved)	-	-	-	-	-	-	-	35900	53400	62700
Manganese (Dissolved)	-	-	-	-	-	-	-	9.8 J	8.6 J	4.5 J
Nickel (Dissolved)	-	-	-	-	-	-	-	3.1 J	13 J	3.2 J
Potassium (Dissolved)	-	-	-	-	-	-	-	1300	1900	2100
Selenium (Dissolved)	-	ND (1.5)/4	ND	ND	ND	ND/ND	ND (2)	0.85 J	1.2	1.6 J/1.5 J
Sodium (Dissolved)	-	-	-	-	-	-	-	25000	28800	27500/28800
Zinc (Dissolved)	-	3800/16,000/12	2330	2600	2030	1200/1200	4700	-	1700	1900	1800
VOAs										
1,1,1-Trichloroethane	ND	21	34	17	12	13/13	17	39	45	46	52	39
1,1-Dichloroethane	11	34	3.1	2.3	1.1	2.0/2.0	9.2	11	6.2	12	17	17
1,1-Dichloroethene	ND	1.7 J	ND	ND	ND	ND/ND	1.9	2.6 J	4.0	2.2 J	3.1 J	5.3 J
1,2-Dichloroethane	1.3 J	23	2.4	1.1	ND	3.4/3.5	12	9.6	7.7	32	ND (13)	25
1,2-Dichloropropane	17	71	18	9.2	4.3	4.4/4.1	20	31	31	38	25	45
Benzene	5.1	ND	ND	ND	ND	ND/ND	ND (1.7)	-	ND (4.0)	ND (4.0)	ND (0.5)	ND (14)
Chloroform (Trichloromethane)	ND	1.8	ND	ND	ND	ND/ND	0.86 J	-	ND (4.0)/J	ND (0.5)	ND (0.5)	ND (14)
cis-1,2-Dichloroethene	9.8 J	36	9.4	6.1	3.1	5.7/5.7	37	-	44 J	37	40	70	86
Dichlorodifluoromethane (CFC-12)	ND	ND	ND	ND	ND	ND/ND	1.3/1.3	ND (1.7)	-	ND (4.0)/R	1.8 J	ND (0.5)	ND (0.5)	ND (14)
Tetrachloroethene	ND	1.2	1.2	ND	ND	ND/ND	0.48 J	-	0.81 J	1.1 J	ND (0.5)	ND (0.5)	ND (14)
Toluene	-	-	-	-	-	-	0.38 J	-	ND (4.0)	ND (4.0)	ND (0.5)	ND (0.5)	ND (14)
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND/ND	ND (1.7)	-	3.3 J	1.1 J	ND (0.5)	ND (0.5)	ND (14)
Trichloroethene	37	290	280	330	110	150/170	81	-	96	110	110	130	140
Wet													
Alkalinity, Total (as CaCO3)	-	-	-	-	-	-	-	360000	-	480000	520000	610000	-	670000
Chloride	-	-	-	-	-	-	-	18000	-	23600	23000	23000	-	20700
Nitrate (as N)	-	-	-	-	-	-	-	300	-	500	3600	1900	-	3800
Sulfate	-	-	-	-	-	-	-	38100	-	49000	51000	61900	-	53700
Sulfide (Acid Soluble)	-	-	-	-	-	-	-	800 J	-	ND (1000)	ND (1000)	ND (1000)	-	ND (1000)
Total Organic Carbon (TOC)	-	-	-	-	-	-	-	2000	-	2000	2000	2000	-	2000

MW-24	9/1/1999	9/1/2001	10/1/2002	1/1/2003	4/1/2003	7/8/2005	10/26/2005	10/27/2005	4/26/2006	5/18/2006
Metals										
Antimony (Dissolved)	-	-	-	-	-	0.53 J	0.37 J	0.89 J	0.44 J	-
Arsenic (Dissolved)	-	ND (1.5)/4	ND	1.1	ND	3.3 J	ND (10)	ND (10)	ND (10)	-
Barium (Dissolved)	-	ND (0.5)/4	9.9	8.9	18	30 J	81 J	30 J	32 J	-
Cadmium (Dissolved)	-	ND (0.2)/4	ND	1.2	2.8	0.091 J	0.084 J	0.087 J	0.31 J	-
Calcium (Dissolved)	-	-	-	-	-	91000	85000	58800	72000	-
Chromium VI (Hexavalent) (Dissolved)	-	1.3	ND	ND	ND	-	-	-	-	-
Cobalt (Dissolved)	-	-	-	-	-	5.8 J	1.3 J	15	2.1 J	-
Copper (Dissolved)	-	3.7	ND	ND	ND	0.61 J	0.97 J	ND (2)/J	ND (2)/J	-
Iron (Dissolved)	-	-	-	-	-	1200	1300	1300	1300	-
Lead (Dissolved)	-	31	ND	9.4	2.9	3.4	4.3	2.3 J	15	-
Magnesium (Dissolved)	-	-	-	-	-	38900	37900	22700	35000	-
Manganese (Dissolved)	-	-	-	-	-	1.6	0.75 J	14 J	46	39.7
Nickel (Dissolved)	-	-	-	-	-	100	12 J	ND (25)	4.2 J	-
Potassium (Dissolved)	-	-	-	-	-	1400	1300	2300	2000	-
Selenium (Dissolved)	-	ND (1.5)/4	ND	ND	ND	ND (2)	1.1 J	1.1 J	9.4	-
Silver (Dissolved)	-	ND (0.5)/4	ND	ND	ND	ND (0.5)	0.19 J	ND (0.5)	ND (0.5)/R	-
Sodium (Dissolved)	-	-	-	-	-	4000	3700	5700	20000	-
Zinc (Dissolved)	-	230	23	12000	3700	1000	3300	810	4000	-
VOAs										
1,1-Dichloroethane	4.1	1.5	2.2	ND	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
1,2-Dichloropropane	5.0	1.9	ND	ND	1.7	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
Methyl ethyl ketone (Butanone)	ND	-	-	-	-	ND (25)/ND (25)	ND (25)	ND (25)	ND (25)	ND (25)/ND (25)	ND (25)
Benzene	ND	ND	ND	ND	ND	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)	0.81 J	ND (1.0)/ND (1.0)	ND (1.0)
Carbon disulfide	-	-	-	-	-	ND (5.0)	0.84 J	ND (5.0)	0.74 J	0.95 J/0.91 J	0.66 J
cis-1,2-Dichloroethene	2.7	1.3	3.5	ND	2.2	ND (1.0)	ND (1.0)/J	ND (1.0)/J	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
Cyclohexane	-	-	-	-	-	0.18 J	ND (1.0)/J	ND (1.0)/J	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)
Toluene	-	-	-	-	-	0.32 J	ND (1.0)	0.39 J	ND (1.0)	0.26 J/0.36 J	ND (1.0)
Trichloroethene	46	14	39	ND	7.0	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)

MW-25	9/1/2000	9/1/2001	10/1/2002	1/1/2003	4/1/2003	3/3/2006	4/26/2006	7/28/2006	10/25/2006	4/26/2006	5/18/2006
Metals											
Aluminum (Dissolved)	-	-	-	-	-	5050	36 J	ND (50)/J	0.44 J	-	-
Antimony (Dissolved)	-	-	-	-	-	ND (2)/ND (2)	ND (2)	0.14 J	ND (2)/J	-	-
Arsenic (Dissolved)	-	59	54	48	49	57 J/54 J	54 J	57 J	57 J	-	-
Barium (Dissolved)	-	ND	ND	ND	ND	0.44 J/0.36 J	0.17 J	0.39 J	ND (0.5)	-	-
Cadmium (Dissolved)	-	-	-	-	-	79700/79300	8300	78800 J	8300 J	-	-
Chromium Total (Dissolved)	-	-	-	-	-	4.8 J/4.3 J	17	7.1	ND (5)	-	-
Cobalt (Dissolved)	-	-	-	-	-	ND (2)/ND (7)	ND (7)	3.1 J	ND (2)	-	-
Copper (Dissolved)	-	ND	ND	ND	ND	31 J/8 J	1.3 J	ND (2)	0.73 J	-	-
Iron (Dissolved)	-	-	-	-	-	7800	79	20	3.4	-	-
Lead (Dissolved)	-	ND	7.3	5.3	4.4	2	ND (2)	ND (2)	ND (2)	-	-
Magnesium (Dissolved)	-	-	-	-	-	39900/39000	30800	31000	32000	-	-
Manganese (Dissolved)	-	-	-	-	-	5.8 J/4.7 J	4.4 J	7.2	4.1 J	-	-
Mercury (Dissolved)	-	ND	ND	ND	ND	ND (0.2)/ND (0.2)	0.081 J	ND (0.2)	ND (0.2)	-	-
Nickel (Dissolved)	-	-	-	-	-	ND (25)/ND (25)	13 J	5.8 J	ND (25)	-	-
Potassium (Dissolved)	-	-	-	-	-	1400/1300	1800	1800	1800	-	-
Selenium (Dissolved)	-	ND	ND	ND	ND	ND (2)/ND (2)	0.95 J	ND (2)/J	ND (2)/J	-	-
Silver (Dissolved)	-	ND	ND	ND	ND	ND (0.5)/ND (0.5)	0.088 J	ND (0.5)	ND (0.5)	-	-
Sodium (Dissolved)	-	-	-	-	-	23000/21000	3100	2800	2200	-	-
Zinc (Dissolved)	-	1000	1800	1000	670	750/5600	2400	4100	610	-	-
VOAs											
Trichloroethene	8.3	4.9	21	5.3	1.8	ND (1.5)/ND (1.5)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)

MW-29	9/1/1999	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	3/3/2006	4/26/2006	7/27/2006	10/26/2006	4/26/2006	5/18/2006
Metals												
Aluminum (Dissolved)	-	-	-	-	-	-	38 J	17 J	ND (50)	130/15	-	-
Antimony (Dissolved)	-	-	-	-	-	-	ND (2)	ND (2)	0.19 J	0.47 J/0.49 J	-	-
Arsenic (Dissolved)	-	6.4	ND	3.5	3.3	ND	2.8 J	ND (10)	ND (10)	ND (10)/ND (10)	-	-
Barium (Dissolved)	-	138	18	170	140	130	180	170	180	180/170	-	-
Calcium (Dissolved)	-	ND (0.2)/4	ND	ND	ND	ND	2.8	0.58	ND (0.5)	3.3/3.2	-	-
Calcium (Dissolved)	-	-	-	-	-	-	70000	72000 J	68600	70100/68600	-	-
Chromium Total (Dissolved)	-	-	-	-	-	-	7.3	4.1	ND (5)	5.6/5.9	-	-
Cobalt (Dissolved)	-	-	-	-	-	-	ND (7)	ND (7)	3.3 J	ND (7)/ND (7)	-	-
Copper (Dissolved)	-	3.1 ND	ND	ND	ND	ND	1.3 J	0.69 J	ND (2)	ND (3.8)/ND (3.8)/J	-	-
Iron (Dissolved)	-	-	-	-	-	-	2100	1300	2800	1600/1700	-	-
Lead (Dissolved)	-	1.6	30	ND	ND	3.3	2.8	ND (2)	ND (2)	ND (2)	-	-
Magnesium (Dissolved)	-	-	-	-	-	-	28600	28600	47 J	29700/29000	-	-
Manganese (Dissolved)	-	-	-	-	-	-	36	36	47	28/27	-	-
Nickel (Dissolved)	-	-	-	-	-	-	4.8 J	3.8 J	8.2 J	3.4 J/3.2 J	-	-
Potassium (Dissolved)	-	-	-	-	-	-	1100	1300	1400	1500 J/1500	-	-
Sodium (Dissolved)	-	-	-	-	-	-	4500	4600	ND (8000)/J	8800/8200	-	-
Zinc (Dissolved)	-	1880 DL	179	2200	1900	3000	4300	1300	3900	4600/4400	-	-
VOAs												
bis(2-Ethylhexyl)phthalate	-	ND	ND	ND	ND	12	-	-	-	-	-	-
VOAs												
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	1.4	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)
1,1-Dichloroethane	1.1	ND	ND	ND	ND	ND	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)
1,2-Dichloropropane	1.8	ND	1.1	ND	ND	ND	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)
Carbon disulfide	-	-	-	-	-	-	ND (5.0)	ND (5.0)/J	0.38 J	0.33 J/0.32 J	ND (5.0)	0.39 J
Methyl ethyl ketone (Butanone)	-	-	-	-	-	-	ND (25)	ND (25)/J	ND (25)	ND (25)/ND (25)	ND (25)	ND (25)
cis-1,2-Dichloroethene	ND	ND	ND	ND	1.2	ND	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	ND (1.0)	ND (1.0)
Trichloroethene	12	5.1	6.1	5.2	1.2	26	3.3 J	ND (1.0)	ND (1.0)	ND (1.0)/ND (1.0)	0.47 J	0.37 J

CRA-MW-1D	2/8/06	4/27/06
VOAs		
Dichlorodifluoromethane (CFC-12)	0.39 J	0.44 J
Toluene	0.28 J	0.19 J
Metals		
Aluminum (Dissolved)	660	200
Antimony (Dissolved)	ND (2)	0.28 J
Barium (Dissolved)	71 J	71 J
Calcium (Dissolved)	106000	102000 J
Chromium Total (Dissolved)	5.9	20
Cobalt (Dissolved)	5.6 J	5.1 J
Copper (Dissolved)	2.8	1.7 J
Iron (Dissolved)	2100	2600
Magnesium (Dissolved)	42800	42000
Manganese (Dissolved)	450	460
Nickel (Dissolved)	7.1	17.1
Potassium (Dissolved)	4200	3500
Selenium (Dissolved)	0.96 J	1.6 J
Sodium (Dissolved)	63800	25900
Thallium (Dissolved)	ND (1)	0.03 J
Vanadium (Dissolved)	0.8 J	ND (7)
Zinc (Dissolved)	59	30

SAMPLE LOCATION
SAMPLE DATE
RESULT (ug/L)
PARAMETER

EXCEEDS PART 201 RESIDENTIAL/COMMERCIAL I DRINKING WATER CRITERIA

MW-11	5/1/2000	9/1/2001	4/1/2002	10/1/2002	1/1/2003	4/1/2003	2/7/2005	3/2/2006	4/26/2006	7/28/2006	10/25/2005	4/26/2006	5/18/2006
Gas													
Carbon dioxide	-	-	-	-	-	-	130000/130000	-	140000	120000	110000	-	-
Ethane	-	-	-	-	-	-	-	ND (0.5)	0.35 J	ND (0.5)	6.8	-	2.31.6
Ethene	-	-	-	-	-	-	-	ND (0.5)	ND (0.5)	ND (0.5)	7.4	-	0.62/0.88
Methane	-	-	-	-	-	-	-	0.1 J	0.15 J	ND (0.5)	3.1	-	1.9 J/ND (0.5)/J
Metals													
Aluminum (Dissolved)	-	-	-	-	-	-	-	-	-	-	-	-	-
Antimony (Dissolved)	-	-	-	-	-	-	-	0.2 J/7.5 J	-	-	-	-	-
Arsenic (Dissolved)	-	1.8	ND	ND	ND	ND	ND	ND (2)/ND (2)	-	0.33 J	ND (2)/J	-	-
Barium (Dissolved)	-	96	83	110	130	130/130	80 J	ND (10)/ND (10)	-	110	130	-	-
Cadmium (Dissolved)	-	ND (0.2)/4	ND	ND	ND	ND/ND	ND (0.5)	0.19	-	0.19	0.19 J	-	-
Calcium (Dissolved)	-	-	-	-	-	-	120000	120000	-	120000	120000	-	-
Chromium Total (Dissolved)	-	-	-	-	-	-	ND (1)	1.7 J	-	4.3	ND (2)	-	-
Cobalt (Dissolved)	-	-	-	-	-	-	-	1.8 J	-	ND (7)	ND (7)	-	-
Copper (Dissolved)	-	3.5 ND	ND	ND	ND	ND/ND	ND (2)/J	1.7 J	-	ND (2)/J	1.1 J	-	-
Iron (Dissolved)	-	-	-	-	-	-	590	1300	-	660	1300	-	-
Lead (Dissolved)	-	8.7	ND	9.4	ND	ND/ND	ND (2)	11	-	5.4	2.2 J	-	-
Magnesium (Dissolved)	-	-	-	-	-	-	-	35900	-	53400	62700	83300	-
Manganese (Dissolved)	-	-	-	-	-	-	-	9.8 J	-	8.6 J	4.5 J	-	-
Nickel (Dissolved)	-	-	-	-	-	-	-	3.1 J	-	13 J	3.2 J	1.8 J	-
Potassium (Dissolved)	-	-	-	-	-	-	-	1300	-	1900	2100	2100	-
Selenium (Dissolved)	-	ND (1.5)/4	ND	ND	ND	ND/ND	ND (2)	-	-	0.85 J	1.2 J	ND (2)/J	-
Sodium (Dissolved)	-	-	-	-	-	-	34400	-	-	28600	28700	27500/28800	-
Zinc (Dissolved)	-	3700/16,000/12	2330	2600	2030	1200/1200	4700	-	-	1700	1900	1800	-
VOAs													
1,1,1-Trichloroethane	ND	21	34	17	12	13/13	17	-	39	45	46	52	39
1,1-Dichloroethane	11	34	3.1	2.3	1.1	2.0/2.0	9.2	-	11	6.2	12	17	17
1,1-Dichloroethene	ND	1.7 J	ND	ND	ND	ND/ND	1.9	-	2.6 J	4.0	2.2 J	3.1 J	5.3 J
1,2-Dichloroethane	1.3 J	23	2.4	1.1	ND	3.4/3.5	12	-	9.6	7.7	32	ND (13)	25
1,2-Dichloropropane	17	71	18	9.2	4.3	4.4/4.1	20	-	31	31	38	25	45
Benzene	5.1	ND	ND	ND	ND	ND/ND	ND (1.7)	-	ND (4.0)	ND (4.0)	ND (0.5)	ND (15)	ND (14)
Chloroform (Trichloromethane)	ND	1.8	ND	ND	ND	ND/ND	0.86 J	-	ND (4.0)/J	ND (0.5)	ND (0.5)	ND (15)	ND (14)
cis-1,2-Dichloroethene	9.8 J	36	9.4	6.1	3.1	5.7/5.7	37	-	44 J	37	40	70	86
Dichlorodifluoromethane (CFC-12)	ND	ND	ND	ND	ND	ND/ND	1.3/1.3	ND (1.7)	-	ND (4.0)/R	1.8 J	ND (0.5)	ND (0.5)	ND (14)
Tetrachloroethene	ND	1.2	1.2	ND	ND	ND/ND	0.48 J	-	0.81 J	1.1 J	ND (0.5)	ND (0.5)	ND (14)
Toluene	-	-	-	-	-	-	0.38 J	-	ND (4.0)	ND (4.0)	ND (0.5)	ND (0.5)	ND (14)
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND/ND	ND (1.7)	-	3.3 J	1.1 J	ND (0.5)	ND (0.5)	ND (14)
Trichloroethene	37	290	280	330	110	150/170	81	-	96	110	110	130	140
Wet													
Alkalinity, Total (as CaCO3)	-	-	-	-	-	-	-	360000	-	480000	520000	610000	-	670000
Chloride	-	-	-	-	-	-	-	18000	-	23600	23000	23000	-	20700
Nitrate (as N)	-	-	-	-	-	-	-	300	-	500	3600	1900	-	3800
Sulfate	-	-	-	-	-	-	-	38100	-	49000	51000	61900	-	53700
Sulfide (Acid Soluble)	-	-	-	-	-	-	-	800 J	-	ND (1000)	ND (1000)	ND (1000)	-	ND (1000)
Total Organic Carbon (TOC)	-	-	-	-	-	-	-	2000	-	2000	2000	2000	-	2000

CRA-MW-1S	7/8/2006	10/12/2006	4/26/2006	5/18/2006

TABLES

TABLES

TABLE 1

GROUNDWATER LEVELS
MAY 2009 GROUNDWATER MONITORING ACTIVITIES
A-1 LANDFILL
OTSEGO, MICHIGAN

Monitoring Well Identification	*Reference Elevation (feet AMSL)*	*Depth to Water (feet BTOR)*	*Total Depth (feet BTOR)*	*Groundwater Elevation (feet*
MW-9	913.74	184.11	204.50	729.63
MW-10	903.49	Obstruction	--	--
MW-11	896.20	172.75	207.00	723.45
MW-12	888.20	140.00	149.92	748.20
MW-13	915.68	184.40	186.77	731.28
MW-14	913.88	182.35	186.75	731.53
MW-21	907.83	168.10	172.45	739.73
MW-22	895.04	171.75	234.00	723.29
MW-24	917.02	185.70	225.10	731.32
MW-25	894.24	171.50	205.00	722.74
MW-26	905.12	181.30	216.40	723.82
MW-27	917.21	183.23	194.00	733.98
MW-28	913.53	181.69	191.40	731.84
MW-29	909.84	190.54	242.00	719.30
MW-30	890.98	168.22	235.50	722.76
MW-32	889.82	166.82	222.50	723.00
MW-33	879.67	157.18	244.00	722.49
MW-34	911.86	182.21	192.00	729.65
MW-35	865.52	143.20	235.00	722.32
MW-36	867.22	146.06	250.90	721.16
RL-1	915.10	11.50	11.72	903.60
RL-2	903.80	157.85	165.30	745.95
RL-3	914.40	134.04	152.60	780.36
RL-4	910.98	189.52	192.08	721.46
RL-5	912.28	6.03	11.00	906.25
RL-6	914.31	125.35	134.90	788.96
RL-7	913.92	Dry	11.50	--
RL-8	912.70	183.30	187.20	729.40
SEG-MW-2	922.36	Dry	190.35	--
SEG-MW-3	920.40	190.20	207.00	730.20
CRA-MW1-S	905.08	152.10	165.25	752.98
CRA-MW-1-D	904.90	181.21	202.00	723.69

Notes:
feet AMSL - feet Above Mean Sea Level
feet BTOR - feet Below Top of Riser
-- Not Available

TABLE 2

SAMPLE SUMMARY
MAY 2009 GROUNDWATER MONITORING ACTIVITIES
A-1 LANDFILL
OTSEGO, MICHIGAN

Sample Identification	*Sample Location*	*Matrix*	*QA/QC*	*Analysis*
GW-17178-051809-BW-001	CRA-MW1-S	Groundwater		VOCs, Select Metals (F.F.)
GW-17178-051809-BW-002	CRA-MW1-D	Groundwater		VOCs, Select Metals
GW-17178-051809-BW-003	RL-2	Groundwater		VOCs
GW-17178-051809-BW-004	MW-21	Groundwater		VOCs, Dissolved Gases, NAP
GW-17178-051809-BW-005	MW-26	Groundwater		VOCs, Dissolved Gases, NAP
GW-17178-051809-BW-006	MW-11	Groundwater		VOCs, Dissolved Gases, NAP
GW-17178-051809-BW-007	MW-11	Groundwater	Duplicate (-006)	VOCs, Dissolved Gases, NAP
GW-17178-051809-BW-008	MW-12	Groundwater		VOCs
GW-17178-051809-BW-009	RL-5	Groundwater		VOCs
GW-17178-051809-BW-010	SEG-MW-3	Groundwater		VOCs, Select Metals (F.F.)
GW-17178-051809-BW-011	RL-3	Groundwater		VOCs, Select Metals (F.F.)
GW-17178-051809-BW-012	MW-27	Groundwater		VOCs, Dissolved Gases, NAP
GW-17178-051809-BW-013	MW-13	Groundwater		VOCs, Select Metals (F.F.)
GW-17178-051809-BW-014	MW-24	Groundwater		VOCs, Select Metals (F.F.)
TB-17178-015	Trip Blank	Water	Trip Blank	VOCs
GW-17178-051809-BW-016	RL-8	Groundwater		VOCs
GW-17178-051809-BW-017	MW-14	Groundwater		VOCs
GW-17178-051809-BW-018	MW-28	Groundwater		VOCs
GW-17178-051909-BW-019	MW-29	Groundwater		VOCs
GW-17178-051909-BW-020	MW-25	Groundwater		VOCs
GW-17178-051909-BW-021	MW-25	Groundwater	Duplicate (-020)	VOCs
GW-17178-051909-BW-022	MW-34	Groundwater		VOCs, Select Metals (F.F.)
GW-17178-051909-BW-023	MW-22	Groundwater		VOCs, Select Metals
GW-17178-051909-BW-024	MW-22	Groundwater	Duplicate (-024)	VOCs, Select Metals
GW-17178-051909-BW-025	MW-30	Groundwater		VOCs, Select Metals, Dissolved Gases, NAP
GW-17178-051909-BW-026	MW-32	Groundwater	MS/MSD	VOCs, Select Metals
GW-17178-051909-BW-027	MW-33	Groundwater		VOCs, Select Metals, Dissolved Gases, NAP
GW-17178-051909-BW-028	MW-35	Groundwater		VOCs, Select Metals
GW-17178-051909-BW-029	MW-36	Groundwater	MS/MSD	VOCs, Select Metals, Dissolved Gases, NAP
TB-17178-030	Trip Blank	Water	Trip Blank	VOCs
GW-17178-052009-BW-031	MW-9	Groundwater		VOCs
GW-17178-052009-BW-032	RL-1	Groundwater		VOCs
GW-17178-052009-BW-033	RL-6	Groundwater		VOCs, Select Metals (F.F.), Dissolved Gases, NAP
GW-17178-052009-BW-034	RL-4	Groundwater		VOCs
TB-17178-035	Trip Blank	Water	Trip Blank	VOCs

Notes:
QA/QC - Quality Assurance/ Quality Control
VOCs - Volatile Organic Compounds
Select Metals - iron and manganese
F.F. - Field-filtered
NAP - Natural attenuation parameters - alkalinity, chloride, ammonia, nitrate, nitrite, sulfate, sulfide, and total organic carbon
Dissolved Gases - ethane, ethene and methane
MS/MSD - Matrix Spike/ Matrix Spike Duplicate

TABLE 3

ANALYTICAL RESULTS SUMMARY
MAY 2009 GROUNDWATER MONITORING ACTIVITIES
A-1 LANDFILL
OTSEGO, MICHIGAN

Sample Location:		*Residential and Commercial I Drinking Water Criteria* [1]	*CRA-MW-1D*	*CRA-MW-1S*	*MW-9*	*MW-11*	*MW-11*	*MW-12*	*MW-13*	*MW-14*	*MW-21*	*MW-22*	*MW-22*	*MW-24*	*MW-25*	*MW-25*	*MW-26*	*MW-27*
Sample ID: (GW-17178-)			*051809-BW-002*	*051809-BW-001*	*052009-BW-031*	*051809-BW-006*	*051809-BW-007*	*051809-BW-008*	*051809-BW-013*	*051809-BW-017*	*051809-BW-004*	*051909-BW-023*	*051909-BW-024*	*051809-BW-014*	*051909-BW-020*	*051909-BW-021*	*051809-BW-005*	*051809-BW-012*
Sample Date:			*5/18/2009*	*5/18/2009*	*5/20/2009*	*5/18/2009*	*5/18/2009*	*5/18/2009*	*5/18/2009*	*5/18/2009*	*5/18/2009*	*5/19/2009*	*5/19/2009*	*5/18/2009*	*5/19/2009*	*5/19/2009*	*5/18/2009*	*5/18/2009*
							(Duplicate)						*(Duplicate)*					
Parameters:	*Units*																	
Volatile Organic Compounds																		
1,1,1-Trichloroethane	ug/L	200	ND (1.0)	34	1.1	**310**	**310**	12	150	100	150	22	21	ND (1.0)	ND (1.0)	ND (1.0)	99	**250**
1,1,2,2-Tetrachloroethane	ug/L	8.5	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
1,1,2-Trichloroethane	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
1,1-Dichloroethane	ug/L	880	ND (1.0)	3.0	1.6	110	100	0.59 J	170	210	24 J	6.9	6.5	ND (1.0)	ND (1.0)	ND (1.0)	17	760
1,1-Dichloroethene	ug/L	7	ND (1.0)	1.3	ND (1.0)	**23 J**	**26 J**	0.76 J	4.1 J	5.1 J	6.7 J	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	5.3 J	**13 J**
1,2,4-Trichlorobenzene	ug/L	70	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	0.2	ND (2.0)	ND (2.0)	ND (2.0)	ND (150)	ND (140)	ND (2.0)	ND (13)	ND (13)	ND (57)	ND (10)	ND (10)	ND (2.0)	ND (2.0)	ND (2.0)	ND (29)	ND (50)
1,2-Dibromoethane (Ethylene Dibromide)	ug/L	0.05	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
1,2-Dichlorobenzene	ug/L	600	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
1,2-Dichloroethane	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	**170**	**170**	ND (1.0)	ND (6.7)	2.1 J	ND (29)	**15**	**14**	ND (1.0)	ND (1.0)	ND (1.0)	**25**	**6.4 J**
1,2-Dichloropropane	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	**320**	**320**	ND (1.0)	ND (6.7)	ND (6.7)	**24 J**	**11**	**10**	ND (1.0)	ND (1.0)	ND (1.0)	**42**	ND (25)
1,3-Dichlorobenzene	ug/L	6.6	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
1,4-Dichlorobenzene	ug/L	75	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
2-Butanone (Methyl Ethyl Ketone)	ug/L	13000	ND (10)	ND (10)	ND (10)	ND (770)	ND (710)	ND (10)	ND (67)	ND (67)	ND (290)	ND (50)	ND (50)	1.6 J	ND (10)	ND (10)	ND (140)	ND (250)
2-Hexanone	ug/L	1000	ND (10)	ND (10)	ND (10)	ND (770)	ND (710)	ND (10)	ND (67)	ND (67)	ND (290)	ND (50)	ND (50)	ND (10)	ND (10)	ND (10)	ND (140)	ND (250)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ug/L	1800	ND (10)	ND (10)	ND (10)	ND (770)	ND (710)	ND (10)	ND (67)	ND (67)	ND (290)	ND (50)	ND (50)	ND (10)	ND (10)	ND (10)	ND (140)	ND (250)
Acetone	ug/L	730	ND (10)	ND (10)	ND (10)	ND (770)	ND (710)	ND (10)	ND (67)	ND (67)	ND (290)	ND (50)	ND (50)	ND (10)	ND (10)	ND (10)	ND (140)	ND (250)
Benzene	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Bromodichloromethane	ug/L	80	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Bromoform	ug/L	80	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Bromomethane (Methyl Bromide)	ug/L	10	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Carbon disulfide	ug/L	800	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	0.60 J	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Carbon tetrachloride	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Chlorobenzene	ug/L	100	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Chloroethane	ug/L	430	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Chloroform (Trichloromethane)	ug/L	80	ND (1.0)	0.17 J	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Chloromethane (Methyl Chloride)	ug/L	260	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
cis-1,2-Dichloroethene	ug/L	70	ND (1.0)	0.56 J	ND (1.0)	**430**	**440**	ND (1.0)	53	**82**	**75**	17	16	ND (1.0)	ND (1.0)	ND (1.0)	**86**	**180**
cis-1,3-Dichloropropene	ug/L	-	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (77) UJ	ND (71) UJ	ND (1.0) UJ	ND (6.7) UJ	ND (6.7) UJ	ND (29) UJ	ND (5.0) UJ	ND (5.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (14) UJ	ND (25) UJ
Cyclohexane	ug/L	-	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (77) UJ	ND (71) UJ	0.56 J	ND (6.7) UJ	ND (6.7) UJ	ND (29) UJ	ND (5.0) UJ	ND (5.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (14) UJ	ND (25) UJ
Dibromochloromethane	ug/L	80	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Dichlorodifluoromethane (CFC-12)	ug/L	1700	0.36 J	ND (1.0)	1.5 J	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Ethylbenzene	ug/L	74	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Isopropylbenzene	ug/L	800	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Methyl acetate	ug/L	-	ND (10)	ND (10)	ND (10)	ND (770)	ND (710)	ND (10)	ND (67)	ND (67)	ND (290)	ND (50)	ND (50)	ND (10)	ND (10)	ND (10)	ND (140)	ND (250)
Methyl cyclohexane	ug/L	-	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (77) UJ	ND (71) UJ	0.67 J	ND (6.7) UJ	ND (6.7) UJ	ND (29) UJ	ND (5.0) UJ	ND (5.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (14) UJ	ND (25) UJ
Methyl Tert Butyl Ether	ug/L	40	ND (5.0)	ND (5.0)	ND (5.0)	ND (380)	ND (360)	ND (5.0)	ND (33)	ND (33)	ND (140)	ND (25)	ND (25)	ND (5.0)	ND (5.0)	ND (5.0)	ND (71)	ND (120)
Methylene chloride	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (77) U	ND (71) U	ND (1.0)	ND (6.7) U	ND (6.7) U	ND (29) U	ND (5.0) U	ND (5.0) U	ND (1.0)	ND (1.0)	ND (1.0)	ND (14) U	ND (25) U
Styrene	ug/L	100	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Tetrachloroethene	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Toluene	ug/L	790	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	0.22 J	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
trans-1,2-Dichloroethene	ug/L	100	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
trans-1,3-Dichloropropene	ug/L	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Trichloroethene	ug/L	5	ND (1.0)	**13**	ND (1.0)	**2500**	**2600**	0.52 J	**210**	**99**	**810**	**170**	**170**	ND (1.0)	ND (1.0)	ND (1.0)	**560**	**560**
Trichlorofluoromethane (CFC-11)	ug/L	2600	ND (1.0)	0.22 J	0.40 J	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Trifluorotrichloroethane (Freon 113)	ug/L	170000	ND (1.0)	1.1	ND (1.0)	ND (77)	ND (71)	0.57 J	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Vinyl chloride	ug/L	2	ND (1.0)	ND (1.0)	ND (1.0)	ND (77)	ND (71)	ND (1.0)	ND (6.7)	ND (6.7)	ND (29)	ND (5.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (14)	ND (25)
Xylene (total)	ug/L	280	ND (2.0)	ND (2.0)	ND (2.0)	ND (150)	ND (140)	ND (2.0)	ND (13)	ND (13)	ND (57)	ND (10)	ND (10)	ND (2.0)	ND (2.0)	ND (2.0)	ND (29)	ND (50)

TABLE 3

ANALYTICAL RESULTS SUMMARY
MAY 2009 GROUNDWATER MONITORING ACTIVITIES
A-1 LANDFILL
OTSEGO, MICHIGAN

Sample Location:		*Residential and*	*CRA-MW-1D*	*CRA-MW-1S*	*MW-9*	*MW-11*	*MW-11*	*MW-12*	*MW-13*	*MW-14*	*MW-21*	*MW-22*	*MW-22*	*MW-24*	*MW-25*	*MW-25*	*MW-26*	*MW-27*
Sample ID: (GW-17178-)		*Commercial I Drinking*	*051809-BW-002*	*051809-BW-001*	*052009-BW-031*	*051809-BW-006*	*051809-BW-007*	*051809-BW-008*	*051809-BW-013*	*051809-BW-017*	*051809-BW-004*	*051909-BW-023*	*051909-BW-024*	*051809-BW-014*	*051909-BW-020*	*051909-BW-021*	*051809-BW-005*	*051809-BW-012*
Sample Date:		*Water Criteria* [1]	*5/18/2009*	*5/18/2009*	*5/20/2009*	*5/18/2009*	*5/18/2009*	*5/18/2009*	*5/18/2009*	*5/18/2009*	*5/18/2009*	*5/19/2009*	*5/19/2009*	*5/18/2009*	*5/19/2009*	*5/19/2009*	*5/18/2009*	*5/18/2009*
							(Duplicate)						*(Duplicate)*					
Parameters:	*Units*																	
Metals																		
Iron	ug/L	300	300	-	-	-	-	-	-	-	-	374	424	-	-	-	-	-
Iron (Dissolved)	ug/L	300	-	ND (50.0)	-	-	-	-	164	-	-	-	-	66.9	-	-	-	-
Manganese	ug/L	50	119	-	-	-	-	-	-	-	-	ND (15.0) U	ND (15.0) U	-	-	-	-	-
Manganese (Dissolved)	ug/L	50	-	109	-	-	-	-	16.5	-	-	-	-	39.7	-	-	-	-
Gas																		
Ethane	ug/L	-	-	-	-	2.2	1.6	-	-	-	0.73	-	-	-	-	-	0.81	2.4
Ethene	ug/L	-	-	-	-	0.82	0.69	-	-	-	0.41 J	-	-	-	-	-	0.42 J	0.44 J
Methane	ug/L	-	-	-	-	1.9 J	ND (0.69) UJ	-	-	-	ND (0.88) U	-	-	-	-	-	3.0	ND (0.50) U
General Chemistry																		
Alkalinity, Total (as CaCO3)	ug/L	-	-	-	-	750000	740000	-	-	-	660000	-	-	-	-	-	670000	690000
Ammonia	ug/L	10000	-	-	-	ND (200)	ND (200)	-	-	-	1100	-	-	-	-	-	ND (200)	500
Chloride	ug/L	250000	-	-	-	17100	17000	-	-	-	6500	-	-	-	-	-	20700	2800
Nitrate (as N)	ug/L	10000	-	-	-	2100	2100	-	-	-	900	-	-	-	-	-	3800	1100
Nitrite (as N)	ug/L	1000	-	-	-	ND (100)	ND (100)	-	-	-	ND (100)	-	-	-	-	-	ND (100)	ND (100)
Sulfate	ug/L	250000	-	-	-	36200	36100	-	-	-	59700	-	-	-	-	-	53700	22100
Sulfide (Acid Soluble)	ug/L	-	-	-	-	ND (3000)	ND (3000)	-	-	-	ND (3000)	-	-	-	-	-	ND (3000)	ND (3000)
Total Organic Carbon (TOC)	ug/L	-	-	-	-	2000	2000	-	-	-	4000	-	-	-	-	-	2000	3000

Notes:
[1] - Michigan Department of Environmental Quality - Remediation and Redevelopment Division Operational Memorandum #1, Attachment A, Table 2: Updated December 10, 2004 (tables revised January 23, 2006).
[ ] Boxed value exceeds Drinking Water Criteria
J - Estimated concentration.
ND - Non-detect at associated value.

U - Not present at or above the associated value.
UJ - Estimated reporting limit.
- - Not analyzed.

TABLE 3

ANALYTICAL RESULTS SUMMARY
MAY 2009 GROUNDWATER MONITORING ACTIVITIES
A-1 LANDFILL
OTSEGO, MICHIGAN

Sample Location:		*Residential and*	*MW-28*	*MW-29*	*MW-30*	*MW-32*	*MW-33*	*MW-34*	*MW-35*	*MW-36*	*RL-1*	*RL-2*	*RL-3*	*RL-4*	*RL-5*	*RL-6*	*RL-8*	*SEG-MW-3*
Sample ID: (GW-17178-)		*Commercial I Drinking*	*051809-BW-018*	*051909-BW-019*	*051909-BW-025*	*051909-BW-026*	*051909-BW-027*	*051909-BW-022*	*051909-BW-028*	*051909-BW-029*	*052009-BW-032*	*051809-BW-003*	*051809-BW-011*	*052009-BW-034*	*051809-BW-009*	*052009-BW-033*	*051809-BW-016*	*051809-BW-010*
Sample Date:		*Water Criteria* [1]	*5/18/2009*	*5/19/2009*	*5/19/2009*	*5/19/2009*	*5/19/2009*	*5/19/2009*	*5/19/2009*	*5/19/2009*	*5/20/2009*	*5/18/2009*	*5/18/2009*	*5/20/2009*	*5/18/2009*	*5/20/2009*	*5/18/2009*	*5/18/2009*
Parameters:	*Units*																	
Volatile Organic Compounds																		
1,1,1-Trichloroethane	ug/L	200	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	0.41 J	ND (1.0)	ND (1.0)	ND (1.0)	93	ND (1.0)	2.8	ND (1.0)	ND (1.0)	3.8	93
1,1,2,2-Tetrachloroethane	ug/L	8.5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
1,1,2-Trichloroethane	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
1,1-Dichloroethane	ug/L	880	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	21	ND (1.0)	ND (1.0)	1.5	ND (1.0)	21	ND (1.0)	13	ND (1.0)	ND (1.0)	11	87
1,1-Dichloroethene	ug/L	7	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	2.2 J	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	4.3 J	ND (1.0)	0.31 J	ND (1.0)	ND (1.0)	0.20 J	5.3
1,2,4-Trichlorobenzene	ug/L	70	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
1,2-Dibromo-3-chloropropane (DBCP)	ug/L	0.2	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (10)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (20)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (10)
1,2-Dibromoethane (Ethylene Dibromide)	ug/L	0.05	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
1,2-Dichlorobenzene	ug/L	600	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
1,2-Dichloroethane	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	2.8 J	ND (1.0)	ND (1.0)	0.67 J	ND (1.0)	ND (10)	ND (1.0)	0.28 J	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
1,2-Dichloropropane	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	**19**	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	**10**	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
1,3-Dichlorobenzene	ug/L	6.6	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
1,4-Dichlorobenzene	ug/L	75	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
2-Butanone (Methyl Ethyl Ketone)	ug/L	13000	ND (10)	ND (10)	ND (10)	ND (10)	ND (50)	ND (10)	ND (10)	ND (10)	0.67 J	ND (100)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (50)
2-Hexanone	ug/L	1000	ND (10)	ND (10)	ND (10)	ND (10)	ND (50)	ND (10)	ND (10)	ND (10) UJ	ND (10)	ND (100)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (50)
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	ug/L	1800	ND (10)	ND (10)	ND (10)	ND (10) UJ	ND (50)	ND (10)	ND (10)	ND (10) UJ	ND (10)	ND (100)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (50)
Acetone	ug/L	730	ND (10)	ND (10)	ND (10)	ND (10)	ND (50)	ND (10)	ND (10)	ND (10)	ND (10) U	ND (100)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (50)
Benzene	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Bromodichloromethane	ug/L	80	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Bromoform	ug/L	80	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Bromomethane (Methyl Bromide)	ug/L	10	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Carbon disulfide	ug/L	800	ND (1.0)	0.59 J	ND (1.0)	ND (1.0)	ND (5.0)	0.99 J	ND (1.0)	0.51 J	0.46 J	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	0.47 J	ND (1.0)	ND (5.0)
Carbon tetrachloride	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Chlorobenzene	ug/L	100	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Chloroethane	ug/L	430	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	1.3 J	ND (1.0)	ND (1.0)	ND (1.0)	3.3 J
Chloroform (Trichloromethane)	ug/L	80	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	1.7 J	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Chloromethane (Methyl Chloride)	ug/L	260	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	0.37 J	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
cis-1,2-Dichloroethene	ug/L	70	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	14	ND (1.0)	ND (1.0)	0.75 J	ND (1.0)	13	ND (1.0)	2.8	ND (1.0)	ND (1.0)	4.2	15
cis-1,3-Dichloropropene	ug/L	-	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (5.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (10) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (5.0) UJ
Cyclohexane	ug/L	-	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (5.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (10) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (5.0) UJ
Dibromochloromethane	ug/L	80	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Dichlorodifluoromethane (CFC-12)	ug/L	1700	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0) UJ	ND (10)	ND (1.0)	ND (1.0) UJ	ND (1.0)	ND (1.0) UJ	ND (1.0)	ND (5.0)
Ethylbenzene	ug/L	74	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Isopropylbenzene	ug/L	800	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Methyl acetate	ug/L	-	ND (10)	ND (10)	ND (10)	ND (10) UJ	ND (50)	ND (10)	ND (10)	ND (10) UJ	ND (10)	ND (100)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (50)
Methyl cyclohexane	ug/L	-	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (5.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (10) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (1.0) UJ	ND (5.0) UJ
Methyl Tert Butyl Ether	ug/L	40	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (25)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (50)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (5.0)	ND (25)
Methylene chloride	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0) U	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10) U	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0) U
Styrene	ug/L	100	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Tetrachloroethene	ug/L	5	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Toluene	ug/L	790	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
trans-1,2-Dichloroethene	ug/L	100	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
trans-1,3-Dichloropropene	ug/L	-	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0) UJ	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0) UJ	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Trichloroethene	ug/L	5	ND (1.0)	0.37 J	ND (1.0)	1.8	**170**	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	**350**	ND (1.0)	**6.0**	ND (1.0)	ND (1.0)	4.5	**160**
Trichlorofluoromethane (CFC-11)	ug/L	2600	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Trifluorotrichloroethane (Freon 113)	ug/L	170000	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Vinyl chloride	ug/L	2	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0) UJ	ND (5.0)	ND (1.0)	ND (1.0)	ND (1.0) UJ	ND (1.0)	ND (10)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (1.0)	ND (5.0)
Xylene (total)	ug/L	280	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (10)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (20)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (2.0)	ND (10)

TABLE 3

ANALYTICAL RESULTS SUMMARY
MAY 2009 GROUNDWATER MONITORING ACTIVITIES
A-1 LANDFILL
OTSEGO, MICHIGAN

Sample Location:		*Residential and*	*MW-28*	*MW-29*	*MW-30*	*MW-32*	*MW-33*	*MW-34*	*MW-35*	*MW-36*	*RL-1*	*RL-2*	*RL-3*	*RL-4*	*RL-5*	*RL-6*	*RL-8*	*SEG-MW-3*
Sample ID: (GW-17178-)		*Commercial I Drinking*	*051809-BW-018*	*051909-BW-019*	*051909-BW-025*	*051909-BW-026*	*051909-BW-027*	*051909-BW-022*	*051909-BW-028*	*051909-BW-029*	*052009-BW-032*	*051809-BW-003*	*051809-BW-011*	*052009-BW-034*	*051809-BW-009*	*052009-BW-033*	*051809-BW-016*	*051809-BW-010*
Sample Date:		*Water Criteria* [1]	*5/18/2009*	*5/19/2009*	*5/19/2009*	*5/19/2009*	*5/19/2009*	*5/19/2009*	*5/19/2009*	*5/19/2009*	*5/20/2009*	*5/18/2009*	*5/18/2009*	*5/20/2009*	*5/18/2009*	*5/20/2009*	*5/18/2009*	*5/18/2009*
Parameters:	*Units*																	
Metals																		
Iron	ug/L	300	-	-	526	90.6	397	-	1120	1110	-	-	-	-	-	-	-	-
Iron (Dissolved)	ug/L	300	-	-	-	-	-	ND (50.0)	-	-	-	-	39.1 J	-	-	ND (50.0)	-	130
Manganese	ug/L	50	-	-	24.6	99.8	97.8	-	37.2	44.5	-	-	-	-	-	-	-	-
Manganese (Dissolved)	ug/L	50	-	-	-	-	-	10.6 J	-	-	-	-	30.5	-	-	7.8 J	-	92.7
Gas																		
Ethane	ug/L	-	-	-	ND (0.50)	-	0.51	-	-	0.50 J	-	-	-	-	-	0.54	-	-
Ethene	ug/L	-	-	-	ND (0.50)	-	0.44 J	-	-	0.39 J	-	-	-	-	-	ND (0.50)	-	-
Methane	ug/L	-	-	-	0.99	-	3.6	-	-	20 J	-	-	-	-	-	ND (0.50) U	-	-
General Chemistry																		
Alkalinity, Total (as CaCO3)	ug/L	-	-	-	310000	-	440000	-	-	360000	-	-	-	-	-	330000	-	-
Ammonia	ug/L	10000	-	-	ND (200)	-	ND (200)	-	-	ND (200)	-	-	-	-	-	ND (200)	-	-
Chloride	ug/L	250000	-	-	3200	-	6800	-	-	6900	-	-	-	-	-	1900	-	-
Nitrate (as N)	ug/L	10000	-	-	ND (100)	-	ND (100)	-	-	ND (100)	-	-	-	-	-	1300	-	-
Nitrite (as N)	ug/L	1000	-	-	ND (100)	-	ND (100)	-	-	ND (100)	-	-	-	-	-	ND (100)	-	-
Sulfate	ug/L	250000	-	-	49500	-	49600	-	-	55800	-	-	-	-	-	19900	-	-
Sulfide (Acid Soluble)	ug/L	-	-	-	ND (3000)	-	ND (3000)	-	-	ND (3000)	-	-	-	-	-	ND (3000)	-	-
Total Organic Carbon (TOC)	ug/L	-	-	-	800 J	-	900 J	-	-	700 J	-	-	-	-	-	6000	-	-

Notes:
[1] - Michigan Department of Environmental Quality - Remediation and Redevelopment Division Operational Memorandum #1, Attachment A, Table 2: Updated December 10, 2004 (tables revised January 23, 2006).
[ ] Boxed value exceeds Drinking Water Criteria
J - Estimated concentration.
ND - Non-detect at associated value.

U - Not present at or above the associated value.
UJ - Estimated reporting limit.
- - Not analyzed.

ATTACHMENTS

A

ATTACHMENT A

ENVIRONMENTAL VISUALIZATION SYSTEM (EVS) MODEL

B

ATTACHMENT B

LABORATORY ANALYTICAL DATA REPORT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

PROJECT NO. 17178

A-1 LANDFILL
SDG #: 9E19164

Paul Wiseman

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TESTAMERICA LABORATORIES, INC.

Denise D Heckler

Approved for release.
Denise D. Heckler
Project Manager
6/9/2009 1:17 PM

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Project Manager
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June 9, 2009

CASE NARRATIVE

9E19164

The following report contains the analytical results for thirty-two water samples and three quality control samples submitted to TestAmerica North Canton by Conestoga-Rovers & Associates, Inc. from the A-1 Landfill Site, project number 17178. The samples were received May 19, 2009, May 20, 2009 and May 21, 2009, according to documented sample acceptance procedures. A revised chain of custody was received on May 20, 2009.
This SDG consists of (3) laboratory ID's: A9E190164, A9E200123, and A9E210121.

TestAmerica utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. A summary of QC data for these analyses is included at the back of the report.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the applicable methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Please refer to the Quality Control Elements Narrative following this case narrative for additional quality control information.

If you have any questions, please call the Project Manager, Denise D. Heckler, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT."

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The coolers were received at temperatures ranging from 2.2 to 2.9°C.

See TestAmerica's Cooler Receipt Form for additional information.

CASE NARRATIVE (continued)

GC/MS VOLATILES

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for GW-17178-051909-BW-026 and GW-17178-051909-BW-029 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The matrix spike/matrix spike duplicate(s) for batch(es) 9148318 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

DISSOLVED GASES/RSK

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "B". All target analytes in the Method Blank must be below the reporting limit (RL) or the associated sample(s) must be ND with the exception of common laboratory contaminants.

The sample(s) that contain results between the MDL and the RL were flagged with "J". There is a possibility of false positive or mis-identification at these quantitation levels. In analytical methods requiring confirmation of the analyte reported, confirmation was performed only down to the standard reporting limit (SRL). The acceptance criteria for QC samples may not be met at these quantitation levels.

The matrix spike/matrix spike duplicate(s) for GW-17178-051909-BW-029 had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The matrix spike/matrix spike duplicate(s) for batch(es) 9142109 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

CASE NARRATIVE (continued)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J". Refer to the sample report pages for the affected analyte(s).

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes for batch(es) 9140016 due to the sample concentration reading greater than four times the spike amount. See the Matrix Spike Report for the affected analytes which will be flagged with "NC, MSB".

GENERAL CHEMISTRY

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive or mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J". Refer to the sample report pages for the affected analytes(s).

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes for batch(es) 9146128 and 9146130 due to the sample concentration reading greater than four times the spike amount. See the Matrix Spike Report for the affected analytes which will be flagged with "NC, MSB".

The matrix spike/matrix spike duplicate(s) for batch(es) 9146129 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

QUALITY CONTROL ELEMENTS NARRATIVE

TestAmerica conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data. Program or agency specific requirements take precedence over the requirements listed in this narrative.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. TestAmerica North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples.

For SW846/RCRA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

For 600 series/CWA methods, QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE (MS). An MS is prepared and analyzed at a 10% frequency for GC Methods and at a 5% frequency for GC/MS methods.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. Multi peak responders may not be included in the target spike list due to co-elution. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. Comparison of only the failed parameters from the first batch are evaluated. The only exception to the rework requirement is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed in the table.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

For certain methods (600 series methods/CWA), a Matrix Spike is required in place of a Matrix Spike/Matrix Spike Duplicate (MS/MSD) or Matrix Spike/Sample Duplicate (MS/DU).

The acceptance criteria do not apply to samples that are diluted.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepared and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepared and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

The acceptance criteria do not apply to samples that are diluted. All other surrogate recoveries will be reported.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide and PCB methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria. The second surrogate must have a recovery of 10% or greater.

EXECUTIVE SUMMARY - Detection Highlights

9E19164 : A9E190164

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GW-17178-051809-BW-001 05/18/09 09:50 001				
Manganese - DISSOLVED	109	15.0	ug/L	SW846 6020
Chloroform	0.17 J	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	3.0	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	1.3	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	0.56 J	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	34	1.0	ug/L	SW846 8260B
Trichloroethene	13	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	0.22 J	1.0	ug/L	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	1.1	1.0	ug/L	SW846 8260B
GW-17178-051809-BW-002 05/18/09 10:25 002				
Iron	300	50.0	ug/L	SW846 6020
Manganese	119	15.0	ug/L	SW846 6020
Dichlorodifluoromethane	0.36 J	1.0	ug/L	SW846 8260B
GW-17178-051809-BW-003 05/18/09 10:40 003				
Chloroform	1.7 J	10	ug/L	SW846 8260B
1,1-Dichloroethane	21	10	ug/L	SW846 8260B
1,1-Dichloroethene	4.3 J	10	ug/L	SW846 8260B
cis-1,2-Dichloroethene	13	10	ug/L	SW846 8260B
1,2-Dichloropropane	10	10	ug/L	SW846 8260B
Methylene chloride	4.3 J,B	10	ug/L	SW846 8260B
1,1,1-Trichloroethane	93	10	ug/L	SW846 8260B
Trichloroethene	350	10	ug/L	SW846 8260B
GW-17178-051809-BW-004 05/18/09 11:10 004				
Ethane	0.73	0.50	ug/L	RSK SOP-175
Ethene	0.41 J	0.50	ug/L	RSK SOP-175
Methane	0.88 B	0.50	ug/L	RSK SOP-175
1,1-Dichloroethane	24 J	29	ug/L	SW846 8260B
1,1-Dichloroethene	6.7 J	29	ug/L	SW846 8260B
cis-1,2-Dichloroethene	75	29	ug/L	SW846 8260B
1,2-Dichloropropane	24 J	29	ug/L	SW846 8260B
Methylene chloride	13 J,B	29	ug/L	SW846 8260B
1,1,1-Trichloroethane	150	29	ug/L	SW846 8260B
Trichloroethene	810	29	ug/L	SW846 8260B
Total Organic Carbon	4	1	mg/L	SW846 9060
Nitrogen, as Ammonia	1.1	0.2	mg/L	MCAWW 350.3

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EXECUTIVE SUMMARY - Detection Highlights

9E19164 : A9E190164

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GW-17178-051809-BW-004 05/18/09 11:10 004				
Total Alkalinity	660 J	5.0	mg/L	MCAWW 310.1
Chloride	6.5	1.0	mg/L	SW846 9056A
Nitrate as N	0.90	0.10	mg/L	SW846 9056A
Sulfate	59.7	1.0	mg/L	SW846 9056A
GW-17178-051809-BW-005 05/18/09 11:31 005				
Ethane	0.81	0.50	ug/L	RSK SOP-175
Ethene	0.42 J	0.50	ug/L	RSK SOP-175
Methane	3.0 B	0.50	ug/L	RSK SOP-175
1,1-Dichloroethane	17	14	ug/L	SW846 8260B
1,2-Dichloroethane	25	14	ug/L	SW846 8260B
1,1-Dichloroethene	5.3 J	14	ug/L	SW846 8260B
cis-1,2-Dichloroethene	86	14	ug/L	SW846 8260B
1,2-Dichloropropane	42	14	ug/L	SW846 8260B
Methylene chloride	6.0 J,B	14	ug/L	SW846 8260B
1,1,1-Trichloroethane	99	14	ug/L	SW846 8260B
Trichloroethene	560	14	ug/L	SW846 8260B
Total Organic Carbon	2	1	mg/L	SW846 9060
Total Alkalinity	670 J	5.0	mg/L	MCAWW 310.1
Chloride	20.7	1.0	mg/L	SW846 9056A
Nitrate as N	3.8	0.10	mg/L	SW846 9056A
Sulfate	53.7	1.0	mg/L	SW846 9056A
GW-17178-051809-BW-006 05/18/09 12:30 006				
Ethane	2.2	0.50	ug/L	RSK SOP-175
Ethene	0.82	0.50	ug/L	RSK SOP-175
Methane	1.9 B	0.50	ug/L	RSK SOP-175
1,1-Dichloroethane	110	77	ug/L	SW846 8260B
1,2-Dichloroethane	170	77	ug/L	SW846 8260B
1,1-Dichloroethene	23 J	77	ug/L	SW846 8260B
cis-1,2-Dichloroethene	430	77	ug/L	SW846 8260B
1,2-Dichloropropane	320	77	ug/L	SW846 8260B
Methylene chloride	34 J,B	77	ug/L	SW846 8260B
1,1,1-Trichloroethane	310	77	ug/L	SW846 8260B
Trichloroethene	2500	77	ug/L	SW846 8260B
Total Organic Carbon	2	1	mg/L	SW846 9060
Total Alkalinity	750 J	5.0	mg/L	MCAWW 310.1
Chloride	17.1	1.0	mg/L	SW846 9056A
Nitrate as N	2.1	0.10	mg/L	SW846 9056A

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EXECUTIVE SUMMARY - Detection Highlights

9E19164 : A9E190164

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GW-17178-051809-BW-006 05/18/09 12:30 006				
Sulfate	36.2	1.0	mg/L	SW846 9056A
GW-17178-051809-BW-007 05/18/09 12:40 007				
Ethane	1.6	0.50	ug/L	RSK SOP-175
Ethene	0.69	0.50	ug/L	RSK SOP-175
Methane	0.69 B	0.50	ug/L	RSK SOP-175
1,1-Dichloroethane	100	71	ug/L	SW846 8260B
1,2-Dichloroethane	170	71	ug/L	SW846 8260B
1,1-Dichloroethene	26 J	71	ug/L	SW846 8260B
cis-1,2-Dichloroethene	440	71	ug/L	SW846 8260B
1,2-Dichloropropane	320	71	ug/L	SW846 8260B
Methylene chloride	33 J,B	71	ug/L	SW846 8260B
1,1,1-Trichloroethane	310	71	ug/L	SW846 8260B
Trichloroethene	2600	71	ug/L	SW846 8260B
Total Organic Carbon	2	1	mg/L	SW846 9060
Total Alkalinity	740 J	5.0	mg/L	MCAWW 310.1
Chloride	17.0	1.0	mg/L	SW846 9056A
Nitrate as N	2.1	0.10	mg/L	SW846 9056A
Sulfate	36.1	1.0	mg/L	SW846 9056A
GW-17178-051809-BW-008 05/18/09 13:20 008				
Cyclohexane	0.56 J	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	0.59 J	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	0.76 J	1.0	ug/L	SW846 8260B
Methylcyclohexane	0.67 J	1.0	ug/L	SW846 8260B
Toluene	0.22 J	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	12	1.0	ug/L	SW846 8260B
Trichloroethene	0.52 J	1.0	ug/L	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	0.57 J	1.0	ug/L	SW846 8260B
GW-17178-051809-BW-010 05/18/09 14:10 010				
Iron - DISSOLVED	130	50.0	ug/L	SW846 6020
Manganese - DISSOLVED	92.7	15.0	ug/L	SW846 6020
Chloroethane	3.3 J	5.0	ug/L	SW846 8260B
1,1-Dichloroethane	87	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	5.3	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	15	5.0	ug/L	SW846 8260B
Methylene chloride	2.2 J,B	5.0	ug/L	SW846 8260B

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EXECUTIVE SUMMARY - Detection Highlights

9E19164 : A9E190164

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GW-17178-051809-BW-010 05/18/09 14:10 010				
1,1,1-Trichloroethane	93	5.0	ug/L	SW846 8260B
Trichloroethene	160	5.0	ug/L	SW846 8260B
GW-17178-051809-BW-011 05/18/09 14:30 011				
Iron - DISSOLVED	39.1 B	50.0	ug/L	SW846 6020
Manganese - DISSOLVED	30.5	15.0	ug/L	SW846 6020
GW-17178-051809-BW-012 05/18/09 15:35 012				
Ethane	2.4	0.50	ug/L	RSK SOP-175
Ethene	0.44 J	0.50	ug/L	RSK SOP-175
Methane	0.38 J,B	0.50	ug/L	RSK SOP-175
1,1-Dichloroethane	760	25	ug/L	SW846 8260B
1,2-Dichloroethane	6.4 J	25	ug/L	SW846 8260B
1,1-Dichloroethene	13 J	25	ug/L	SW846 8260B
cis-1,2-Dichloroethene	180	25	ug/L	SW846 8260B
Methylene chloride	12 J,B	25	ug/L	SW846 8260B
1,1,1-Trichloroethane	250	25	ug/L	SW846 8260B
Trichloroethene	560	25	ug/L	SW846 8260B
Total Organic Carbon	3	1	mg/L	SW846 9060
Nitrogen, as Ammonia	0.5	0.2	mg/L	MCAWW 350.3
Total Alkalinity	690 J	5.0	mg/L	MCAWW 310.1
Chloride	2.8	1.0	mg/L	SW846 9056A
Nitrate as N	1.1	0.10	mg/L	SW846 9056A
Sulfate	22.1	1.0	mg/L	SW846 9056A
GW-17178-051809-BW-013 05/18/09 16:10 013				
Iron - DISSOLVED	164	50.0	ug/L	SW846 6020
Manganese - DISSOLVED	16.5	15.0	ug/L	SW846 6020
1,1-Dichloroethane	170	6.7	ug/L	SW846 8260B
1,1-Dichloroethene	4.1 J	6.7	ug/L	SW846 8260B
cis-1,2-Dichloroethene	53	6.7	ug/L	SW846 8260B
Methylene chloride	4.1 J,B	6.7	ug/L	SW846 8260B
1,1,1-Trichloroethane	150	6.7	ug/L	SW846 8260B
Trichloroethene	210	6.7	ug/L	SW846 8260B

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EXECUTIVE SUMMARY - Detection Highlights

9E19164 : A9E190164

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GW-17178-051809-BW-014 05/18/09 16:50 014				
Iron - DISSOLVED	66.9	50.0	ug/L	SW846 6020
Manganese - DISSOLVED	39.7	15.0	ug/L	SW846 6020
2-Butanone	1.6 J	10	ug/L	SW846 8260B
Carbon disulfide	0.60 J	1.0	ug/L	SW846 8260B

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EXECUTIVE SUMMARY - Detection Highlights

9E19164 : A9E200123

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GW-17178-051809-BW-016 05/18/09 17:00 001				
1,1-Dichloroethane	11	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	0.20 J	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	4.2	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	3.8	1.0	ug/L	SW846 8260B
Trichloroethene	4.5	1.0	ug/L	SW846 8260B
GW-17178-051809-BW-017 05/18/09 19:53 002				
1,1-Dichloroethane	210	6.7	ug/L	SW846 8260B
1,2-Dichloroethane	2.1 J	6.7	ug/L	SW846 8260B
1,1-Dichloroethene	5.1 J	6.7	ug/L	SW846 8260B
cis-1,2-Dichloroethene	82	6.7	ug/L	SW846 8260B
Methylene chloride	2.9 J,B	6.7	ug/L	SW846 8260B
1,1,1-Trichloroethane	100	6.7	ug/L	SW846 8260B
Trichloroethene	99	6.7	ug/L	SW846 8260B
GW-17178-051909-BW-019 05/19/09 07:50 004				
Carbon disulfide	0.59 J	1.0	ug/L	SW846 8260B
Trichloroethene	0.37 J	1.0	ug/L	SW846 8260B
GW-17178-051909-BW-022 05/19/09 09:40 007				
Manganese - DISSOLVED	10.6 B,J	15.0	ug/L	SW846 6020
Carbon disulfide	0.99 J	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	0.41 J	1.0	ug/L	SW846 8260B
GW-17178-051909-BW-023 05/19/09 10:25 008				
Iron	374	50.0	ug/L	SW846 6020
Manganese	4.3 B,J	15.0	ug/L	SW846 6020
1,1-Dichloroethane	6.9	5.0	ug/L	SW846 8260B
1,2-Dichloroethane	15	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	17	5.0	ug/L	SW846 8260B
1,2-Dichloropropane	11	5.0	ug/L	SW846 8260B
Methylene chloride	2.8 J,B	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	22	5.0	ug/L	SW846 8260B
Trichloroethene	170	5.0	ug/L	SW846 8260B

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EXECUTIVE SUMMARY - Detection Highlights

9E19164 : A9E200123

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GW-17178-051909-BW-024 05/19/09 10:30 009				
Iron	424	50.0	ug/L	SW846 6020
Manganese	4.4 B,J	15.0	ug/L	SW846 6020
1,1-Dichloroethane	6.5	5.0	ug/L	SW846 8260B
1,2-Dichloroethane	14	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	16	5.0	ug/L	SW846 8260B
1,2-Dichloropropane	10	5.0	ug/L	SW846 8260B
Methylene chloride	2.4 J,B	5.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	21	5.0	ug/L	SW846 8260B
Trichloroethene	170	5.0	ug/L	SW846 8260B
GW-17178-051909-BW-025 05/19/09 11:20 010				
Methane	0.99	0.50	ug/L	RSK SOP-175
Iron	526	50.0	ug/L	SW846 6020
Manganese	24.6 J	15.0	ug/L	SW846 6020
Total Organic Carbon	0.8 B	1	mg/L	SW846 9060
Total Alkalinity	310 J	5.0	mg/L	MCAWW 310.1
Chloride	3.2	1.0	mg/L	SW846 9056A
Sulfate	49.5	1.0	mg/L	SW846 9056A
GW-17178-051909-BW-026 05/19/09 13:35 011				
Iron	90.6	50.0	ug/L	SW846 6020
Manganese	99.8 J	15.0	ug/L	SW846 6020
Trichloroethene	1.8	1.0	ug/L	SW846 8260B
GW-17178-051909-BW-027 05/19/09 14:25 012				
Ethane	0.51	0.50	ug/L	RSK SOP-175
Ethene	0.44 J	0.50	ug/L	RSK SOP-175
Methane	3.6	0.50	ug/L	RSK SOP-175
Iron	397	50.0	ug/L	SW846 6020
Manganese	97.8 J	15.0	ug/L	SW846 6020
1,1-Dichloroethane	21	5.0	ug/L	SW846 8260B
1,2-Dichloroethane	2.8 J	5.0	ug/L	SW846 8260B
1,1-Dichloroethene	2.2 J	5.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	14	5.0	ug/L	SW846 8260B
1,2-Dichloropropane	19	5.0	ug/L	SW846 8260B
Methylene chloride	2.2 J,B	5.0	ug/L	SW846 8260B
Trichloroethene	170	5.0	ug/L	SW846 8260B
Total Organic Carbon	0.9 B	1	mg/L	SW846 9060

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EXECUTIVE SUMMARY - Detection Highlights

9E19164 : A9E200123

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GW-17178-051909-BW-027 05/19/09 14:25 012				
Total Alkalinity	440 J	5.0	mg/L	MCAWW 310.1
Chloride	6.8	1.0	mg/L	SW846 9056A
Sulfate	49.6	1.0	mg/L	SW846 9056A
GW-17178-051909-BW-028 05/19/09 15:25 013				
Iron	1120	50.0	ug/L	SW846 6020
Manganese	37.2 J	15.0	ug/L	SW846 6020
GW-17178-051909-BW-029 05/19/09 16:20 014				
Ethane	0.50	0.50	ug/L	RSK SOP-175
Ethene	0.39 J	0.50	ug/L	RSK SOP-175
Methane	20	0.50	ug/L	RSK SOP-175
Iron	1110	50.0	ug/L	SW846 6020
Manganese	44.5 J	15.0	ug/L	SW846 6020
Carbon disulfide	0.51 J	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	1.5	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	0.67 J	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	0.75 J	1.0	ug/L	SW846 8260B
Total Organic Carbon	0.7 B	1	mg/L	SW846 9060
Total Alkalinity	360 J	5.0	mg/L	MCAWW 310.1
Chloride	6.9	1.0	mg/L	SW846 9056A
Sulfate	55.8	1.0	mg/L	SW846 9056A

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EXECUTIVE SUMMARY - Detection Highlights

9E19164 : A9E210121

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GW-17178-052009-BW-031 05/20/09 08:15 001				
Dichlorodifluoromethane	1.5	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	1.6	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	1.1	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	0.40 J	1.0	ug/L	SW846 8260B
GW-17178-052009-BW-032 05/20/09 09:00 002				
Acetone	4.5 J	10	ug/L	SW846 8260B
2-Butanone	0.67 J	10	ug/L	SW846 8260B
Carbon disulfide	0.46 J	1.0	ug/L	SW846 8260B
Chloromethane	0.37 J	1.0	ug/L	SW846 8260B
GW-17178-052009-BW-033 05/20/09 10:30 003				
Ethane	0.54	0.50	ug/L	RSK SOP-175
Methane	0.42 J,B	0.50	ug/L	RSK SOP-175
Manganese - DISSOLVED	7.8 B	15.0	ug/L	SW846 6020
Carbon disulfide	0.47 J	1.0	ug/L	SW846 8260B
Total Organic Carbon	6	1	mg/L	SW846 9060
Total Alkalinity	330 J	5.0	mg/L	MCAWW 310.1
Chloride	1.9	1.0	mg/L	SW846 9056A
Nitrate as N	1.3	0.10	mg/L	SW846 9056A
Sulfate	19.9	1.0	mg/L	SW846 9056A
GW-17178-052009-BW-034 05/20/09 11:20 004				
Chloroethane	1.3	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	13	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	0.28 J	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	0.31 J	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	2.8	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	2.8	1.0	ug/L	SW846 8260B
Trichloroethene	6.0	1.0	ug/L	SW846 8260B
TB-17178-035 05/20/09 005				
Acetone	1.6 J	10	ug/L	SW846 8260B

ANALYTICAL METHODS SUMMARY

9E19164

PARAMETER	ANALYTICAL METHOD
Alkalinity	MCAWW 310.1
Ammonia Nitrogen	MCAWW 350.3
Chloride	SW846 9056A
Dissolved Gases in Water	RSK SOP-175
ICP-MS (6020)	SW846 6020
Nitrate as N	SW846 9056A
Nitrite as N	SW846 9056A
Sulfate	SW846 9056A
Sulfides, Total 9030B/9034	SW846 9030B/9034
Total Organic Carbon	SW846 9060
Volatile Organics by GC/MS	SW846 8260B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

RSK Sample Prep and Calculations for Dissolved Gas Analysis in Water Samples Using a GC Headspace Equilibration Technique, RSKSOP-175, REV. 0, 8/11/94, USEPA Research Lab

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

9E19164 : A9E190164

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LDAT3	001	GW-17178-051809-BW-001	05/18/09	09:50
LDAVL	002	GW-17178-051809-BW-002	05/18/09	10:25
LDAVN	003	GW-17178-051809-BW-003	05/18/09	10:40
LDAVV	004	GW-17178-051809-BW-004	05/18/09	11:10
LDAV4	005	GW-17178-051809-BW-005	05/18/09	11:31
LDAV5	006	GW-17178-051809-BW-006	05/18/09	12:30
LDAV9	007	GW-17178-051809-BW-007	05/18/09	12:40
LDAWC	008	GW-17178-051809-BW-008	05/18/09	13:20
LDAWE	009	GW-17178-051809-BW-009	05/18/09	13:40
LDAWG	010	GW-17178-051809-BW-010	05/18/09	14:10
LDAWJ	011	GW-17178-051809-BW-011	05/18/09	14:30
LDAWM	012	GW-17178-051809-BW-012	05/18/09	15:35
LDAWV	013	GW-17178-051809-BW-013	05/18/09	16:10
LDAW5	014	GW-17178-051809-BW-014	05/18/09	16:50
LDAXA	015	TB-17178-015	05/18/09	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

(Continued on next page)

SAMPLE SUMMARY

9E19164 : A9E200123

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LDDR5	001	GW-17178-051809-BW-016	05/18/09	17:00
LDDR7	002	GW-17178-051809-BW-017	05/18/09	19:53
LDDR8	003	GW-17178-051809-BW-018	05/18/09	20:25
LDDR9	004	GW-17178-051909-BW-019	05/19/09	07:50
LDDTA	005	GW-17178-051909-BW-020	05/19/09	08:30
LDDTC	006	GW-17178-051909-BW-021	05/19/09	08:35
LDDTD	007	GW-17178-051909-BW-022	05/19/09	09:40
LDDTG	008	GW-17178-051909-BW-023	05/19/09	10:25
LDDTM	009	GW-17178-051909-BW-024	05/19/09	10:30
LDDTQ	010	GW-17178-051909-BW-025	05/19/09	11:20
LDDTR	011	GW-17178-051909-BW-026	05/19/09	13:35
LDDTT	012	GW-17178-051909-BW-027	05/19/09	14:25
LDDTV	013	GW-17178-051909-BW-028	05/19/09	15:25
LDDTX	014	GW-17178-051909-BW-029	05/19/09	16:20
LDDT0	015	TB-17178-030	05/19/09	

NOTE(S):

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SAMPLE SUMMARY

9E19164 : A9E210121

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LDF7D	001	GW-17178-052009-BW-031	05/20/09	08:15
LDF7T	002	GW-17178-052009-BW-032	05/20/09	09:00
LDF7V	003	GW-17178-052009-BW-033	05/20/09	10:30
LDF70	004	GW-17178-052009-BW-034	05/20/09	11:20
LDF74	005	TB-17178-035	05/20/09	

NOTE(S):

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- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-001

GC/MS Volatiles

Lot-Sample #...: A9E190164-001 **Work Order #...:** LDAT31AA **Matrix.....:** WG
Date Sampled...: 05/18/09 09:50 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	**0.17 J**	**1.0**	**ug/L**	**0.16**
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	**3.0**	**1.0**	**ug/L**	**0.15**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	**1.3**	**1.0**	**ug/L**	**0.19**
cis-1,2-Dichloroethene	**0.56 J**	**1.0**	**ug/L**	**0.17**
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-001

GC/MS Volatiles

Lot-Sample #...: A9E190164-001 **Work Order #...:** LDAT31AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	**34**	**1.0**	**ug/L**	**0.22**
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	**13**	**1.0**	**ug/L**	**0.17**
Trichlorofluoromethane	**0.22 J**	**1.0**	**ug/L**	**0.21**
1,1,2-Trichloro-1,2,2-trifluoroethane	**1.1**	**1.0**	**ug/L**	**0.28**
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(73 - 122)
1,2-Dichloroethane-d4	94	(61 - 128)
Toluene-d8	96	(76 - 110)
4-Bromofluorobenzene	85	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-002

GC/MS Volatiles

Lot-Sample #...: A9E190164-002 **Work Order #...:** LDAVL1AA **Matrix.....:** WG
Date Sampled...: 05/18/09 10:25 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	**0.36 J**	**1.0**	**ug/L**	**0.31**
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-002

GC/MS Volatiles

Lot-Sample #...: A9E190164-002 **Work Order #...:** LDAVL1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(73 - 122)
1,2-Dichloroethane-d4	96	(61 - 128)
Toluene-d8	93	(76 - 110)
4-Bromofluorobenzene	80	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-003

GC/MS Volatiles

Lot-Sample #...: A9E190164-003 **Work Order #...:** LDAVN1AA **Matrix.....:** WG
Date Sampled...: 05/18/09 10:40 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 10 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	100	ug/L	11
Benzene	ND	10	ug/L	1.3
Bromodichloromethane	ND	10	ug/L	1.5
Bromoform	ND	10	ug/L	6.4
Bromomethane	ND	10	ug/L	4.1
2-Butanone	ND	100	ug/L	5.7
Carbon disulfide	ND	10	ug/L	1.3
Carbon tetrachloride	ND	10	ug/L	1.3
Chlorobenzene	ND	10	ug/L	1.5
Chloroethane	ND	10	ug/L	2.9
Chloroform	**1.7 J**	**10**	**ug/L**	**1.6**
Chloromethane	ND	10	ug/L	3.0
Cyclohexane	ND	10	ug/L	1.2
Dibromochloromethane	ND	10	ug/L	1.8
1,2-Dibromo-3-chloro-propane	ND	20	ug/L	6.7
1,2-Dibromoethane	ND	10	ug/L	2.4
1,2-Dichlorobenzene	ND	10	ug/L	1.3
1,3-Dichlorobenzene	ND	10	ug/L	1.4
1,4-Dichlorobenzene	ND	10	ug/L	1.3
Dichlorodifluoromethane	ND	10	ug/L	3.1
1,1-Dichloroethane	**21**	**10**	**ug/L**	**1.5**
1,2-Dichloroethane	ND	10	ug/L	2.2
1,1-Dichloroethene	**4.3 J**	**10**	**ug/L**	**1.9**
cis-1,2-Dichloroethene	**13**	**10**	**ug/L**	**1.7**
trans-1,2-Dichloroethene	ND	10	ug/L	1.9
1,2-Dichloropropane	**10**	**10**	**ug/L**	**1.8**
cis-1,3-Dichloropropene	ND	10	ug/L	1.4
trans-1,3-Dichloropropene	ND	10	ug/L	1.9
Ethylbenzene	ND	10	ug/L	1.7
2-Hexanone	ND	100	ug/L	4.1
Isopropylbenzene	ND	10	ug/L	1.3
Methyl acetate	ND	100	ug/L	3.8
Methylene chloride	**4.3 J,B**	**10**	**ug/L**	**3.3**
Methylcyclohexane	ND	10	ug/L	1.3
4-Methyl-2-pentanone	ND	100	ug/L	3.2
Methyl tert-butyl ether	ND	50	ug/L	1.7
Styrene	ND	10	ug/L	1.1
1,1,2,2-Tetrachloroethane	ND	10	ug/L	1.8

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-003

GC/MS Volatiles

Lot-Sample #...: A9E190164-003 **Work Order #...:** LDAVN1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	10	ug/L	2.9
Toluene	ND	10	ug/L	1.3
1,2,4-Trichloro-benzene	ND	10	ug/L	1.5
1,1,1-Trichloroethane	**93**	**10**	**ug/L**	**2.2**
1,1,2-Trichloroethane	ND	10	ug/L	2.7
Trichloroethene	**350**	**10**	**ug/L**	**1.7**
Trichlorofluoromethane	ND	10	ug/L	2.1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	10	ug/L	2.8
Vinyl chloride	ND	10	ug/L	2.2
Xylenes (total)	ND	20	ug/L	2.8

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(73 - 122)
1,2-Dichloroethane-d4	99	(61 - 128)
Toluene-d8	97	(76 - 110)
4-Bromofluorobenzene	81	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-004

GC/MS Volatiles

Lot-Sample #...: A9E190164-004 **Work Order #...:** LDAVV1AL **Matrix.....:** WG
Date Sampled...: 05/18/09 11:10 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 28.57 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	290	ug/L	31
Benzene	ND	29	ug/L	3.7
Bromodichloromethane	ND	29	ug/L	4.3
Bromoform	ND	29	ug/L	18
Bromomethane	ND	29	ug/L	12
2-Butanone	ND	290	ug/L	16
Carbon disulfide	ND	29	ug/L	3.7
Carbon tetrachloride	ND	29	ug/L	3.7
Chlorobenzene	ND	29	ug/L	4.3
Chloroethane	ND	29	ug/L	8.3
Chloroform	ND	29	ug/L	4.6
Chloromethane	ND	29	ug/L	8.6
Cyclohexane	ND	29	ug/L	3.4
Dibromochloromethane	ND	29	ug/L	5.1
1,2-Dibromo-3-chloro-propane	ND	57	ug/L	19
1,2-Dibromoethane	ND	29	ug/L	6.9
1,2-Dichlorobenzene	ND	29	ug/L	3.7
1,3-Dichlorobenzene	ND	29	ug/L	4.0
1,4-Dichlorobenzene	ND	29	ug/L	3.7
Dichlorodifluoromethane	ND	29	ug/L	8.9
1,1-Dichloroethane	**24 J**	**29**	**ug/L**	**4.3**
1,2-Dichloroethane	ND	29	ug/L	6.3
1,1-Dichloroethene	**6.7 J**	**29**	**ug/L**	**5.4**
cis-1,2-Dichloroethene	**75**	**29**	**ug/L**	**4.9**
trans-1,2-Dichloroethene	ND	29	ug/L	5.4
1,2-Dichloropropane	**24 J**	**29**	**ug/L**	**5.1**
cis-1,3-Dichloropropene	ND	29	ug/L	4.0
trans-1,3-Dichloropropene	ND	29	ug/L	5.4
Ethylbenzene	ND	29	ug/L	4.9
2-Hexanone	ND	290	ug/L	12
Isopropylbenzene	ND	29	ug/L	3.7
Methyl acetate	ND	290	ug/L	11
Methylene chloride	**13 J,B**	**29**	**ug/L**	**9.4**
Methylcyclohexane	ND	29	ug/L	3.7
4-Methyl-2-pentanone	ND	290	ug/L	9.1
Methyl tert-butyl ether	ND	140	ug/L	4.9
Styrene	ND	29	ug/L	3.1
1,1,2,2-Tetrachloroethane	ND	29	ug/L	5.1

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-004

GC/MS Volatiles

Lot-Sample #...: A9E190164-004 **Work Order #...:** LDAVV1AL **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	29	ug/L	8.3
Toluene	ND	29	ug/L	3.7
1,2,4-Trichloro-benzene	ND	29	ug/L	4.3
1,1,1-Trichloroethane	**150**	**29**	**ug/L**	**6.3**
1,1,2-Trichloroethane	ND	29	ug/L	7.7
Trichloroethene	**810**	**29**	**ug/L**	**4.9**
Trichlorofluoromethane	ND	29	ug/L	6.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	29	ug/L	8.0
Vinyl chloride	ND	29	ug/L	6.3
Xylenes (total)	ND	57	ug/L	8.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(73 - 122)
1,2-Dichloroethane-d4	96	(61 - 128)
Toluene-d8	97	(76 - 110)
4-Bromofluorobenzene	82	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-005

GC/MS Volatiles

Lot-Sample #...: A9E190164-005 **Work Order #...:** LDAV41AL **Matrix.....:** WG
Date Sampled...: 05/18/09 11:31 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 14.29 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	140	ug/L	16
Benzene	ND	14	ug/L	1.9
Bromodichloromethane	ND	14	ug/L	2.1
Bromoform	ND	14	ug/L	9.1
Bromomethane	ND	14	ug/L	5.9
2-Butanone	ND	140	ug/L	8.1
Carbon disulfide	ND	14	ug/L	1.9
Carbon tetrachloride	ND	14	ug/L	1.9
Chlorobenzene	ND	14	ug/L	2.1
Chloroethane	ND	14	ug/L	4.1
Chloroform	ND	14	ug/L	2.3
Chloromethane	ND	14	ug/L	4.3
Cyclohexane	ND	14	ug/L	1.7
Dibromochloromethane	ND	14	ug/L	2.6
1,2-Dibromo-3-chloro-propane	ND	29	ug/L	9.6
1,2-Dibromoethane	ND	14	ug/L	3.4
1,2-Dichlorobenzene	ND	14	ug/L	1.9
1,3-Dichlorobenzene	ND	14	ug/L	2.0
1,4-Dichlorobenzene	ND	14	ug/L	1.9
Dichlorodifluoromethane	ND	14	ug/L	4.4
1,1-Dichloroethane	**17**	**14**	**ug/L**	**2.1**
1,2-Dichloroethane	**25**	**14**	**ug/L**	**3.1**
1,1-Dichloroethene	**5.3 J**	**14**	**ug/L**	**2.7**
cis-1,2-Dichloroethene	**86**	**14**	**ug/L**	**2.4**
trans-1,2-Dichloroethene	ND	14	ug/L	2.7
1,2-Dichloropropane	**42**	**14**	**ug/L**	**2.6**
cis-1,3-Dichloropropene	ND	14	ug/L	2.0
trans-1,3-Dichloropropene	ND	14	ug/L	2.7
Ethylbenzene	ND	14	ug/L	2.4
2-Hexanone	ND	140	ug/L	5.9
Isopropylbenzene	ND	14	ug/L	1.9
Methyl acetate	ND	140	ug/L	5.4
Methylene chloride	**6.0 J,B**	**14**	**ug/L**	**4.7**
Methylcyclohexane	ND	14	ug/L	1.9
4-Methyl-2-pentanone	ND	140	ug/L	4.6
Methyl tert-butyl ether	ND	71	ug/L	2.4
Styrene	ND	14	ug/L	1.6
1,1,2,2-Tetrachloroethane	ND	14	ug/L	2.6

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-005

GC/MS Volatiles

Lot-Sample #...: A9E190164-005 **Work Order #...:** LDAV41AL **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	14	ug/L	4.1
Toluene	ND	14	ug/L	1.9
1,2,4-Trichloro-benzene	ND	14	ug/L	2.1
1,1,1-Trichloroethane	**99**	**14**	**ug/L**	**3.1**
1,1,2-Trichloroethane	ND	14	ug/L	3.9
Trichloroethene	**560**	**14**	**ug/L**	**2.4**
Trichlorofluoromethane	ND	14	ug/L	3.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	14	ug/L	4.0
Vinyl chloride	ND	14	ug/L	3.1
Xylenes (total)	ND	29	ug/L	4.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(73 - 122)
1,2-Dichloroethane-d4	97	(61 - 128)
Toluene-d8	98	(76 - 110)
4-Bromofluorobenzene	81	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-006

GC/MS Volatiles

Lot-Sample #...: A9E190164-006 **Work Order #...:** LDAV51AL **Matrix.....:** WG
Date Sampled...: 05/18/09 12:30 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 76.92 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	770	ug/L	85
Benzene	ND	77	ug/L	10
Bromodichloromethane	ND	77	ug/L	12
Bromoform	ND	77	ug/L	49
Bromomethane	ND	77	ug/L	32
2-Butanone	ND	770	ug/L	44
Carbon disulfide	ND	77	ug/L	10
Carbon tetrachloride	ND	77	ug/L	10
Chlorobenzene	ND	77	ug/L	12
Chloroethane	ND	77	ug/L	22
Chloroform	ND	77	ug/L	12
Chloromethane	ND	77	ug/L	23
Cyclohexane	ND	77	ug/L	9.2
Dibromochloromethane	ND	77	ug/L	14
1,2-Dibromo-3-chloro-propane	ND	150	ug/L	52
1,2-Dibromoethane	ND	77	ug/L	18
1,2-Dichlorobenzene	ND	77	ug/L	10
1,3-Dichlorobenzene	ND	77	ug/L	11
1,4-Dichlorobenzene	ND	77	ug/L	10
Dichlorodifluoromethane	ND	77	ug/L	24
1,1-Dichloroethane	**110**	**77**	**ug/L**	**12**
1,2-Dichloroethane	**170**	**77**	**ug/L**	**17**
1,1-Dichloroethene	**23 J**	**77**	**ug/L**	**15**
cis-1,2-Dichloroethene	**430**	**77**	**ug/L**	**13**
trans-1,2-Dichloroethene	ND	77	ug/L	15
1,2-Dichloropropane	**320**	**77**	**ug/L**	**14**
cis-1,3-Dichloropropene	ND	77	ug/L	11
trans-1,3-Dichloropropene	ND	77	ug/L	15
Ethylbenzene	ND	77	ug/L	13
2-Hexanone	ND	770	ug/L	32
Isopropylbenzene	ND	77	ug/L	10
Methyl acetate	ND	770	ug/L	29
Methylene chloride	**34 J,B**	**77**	**ug/L**	**25**
Methylcyclohexane	ND	77	ug/L	10
4-Methyl-2-pentanone	ND	770	ug/L	25
Methyl tert-butyl ether	ND	380	ug/L	13
Styrene	ND	77	ug/L	8.5
1,1,2,2-Tetrachloroethane	ND	77	ug/L	14

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-006

GC/MS Volatiles

Lot-Sample #...: A9E190164-006 **Work Order #...:** LDAV51AL **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	77	ug/L	22
Toluene	ND	77	ug/L	10
1,2,4-Trichloro-benzene	ND	77	ug/L	12
1,1,1-Trichloroethane	**310**	**77**	**ug/L**	**17**
1,1,2-Trichloroethane	ND	77	ug/L	21
Trichloroethene	**2500**	**77**	**ug/L**	**13**
Trichlorofluoromethane	ND	77	ug/L	16
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	77	ug/L	22
Vinyl chloride	ND	77	ug/L	17
Xylenes (total)	ND	150	ug/L	22

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(73 - 122)
1,2-Dichloroethane-d4	96	(61 - 128)
Toluene-d8	97	(76 - 110)
4-Bromofluorobenzene	79	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-007

GC/MS Volatiles

Lot-Sample #...: A9E190164-007 **Work Order #...:** LDAV91AL **Matrix.....:** WG
Date Sampled...: 05/18/09 12:40 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 71.43 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	710	ug/L	79
Benzene	ND	71	ug/L	9.3
Bromodichloromethane	ND	71	ug/L	11
Bromoform	ND	71	ug/L	46
Bromomethane	ND	71	ug/L	29
2-Butanone	ND	710	ug/L	41
Carbon disulfide	ND	71	ug/L	9.3
Carbon tetrachloride	ND	71	ug/L	9.3
Chlorobenzene	ND	71	ug/L	11
Chloroethane	ND	71	ug/L	21
Chloroform	ND	71	ug/L	11
Chloromethane	ND	71	ug/L	21
Cyclohexane	ND	71	ug/L	8.6
Dibromochloromethane	ND	71	ug/L	13
1,2-Dibromo-3-chloro-propane	ND	140	ug/L	48
1,2-Dibromoethane	ND	71	ug/L	17
1,2-Dichlorobenzene	ND	71	ug/L	9.3
1,3-Dichlorobenzene	ND	71	ug/L	10
1,4-Dichlorobenzene	ND	71	ug/L	9.3
Dichlorodifluoromethane	ND	71	ug/L	22
1,1-Dichloroethane	**100**	**71**	**ug/L**	**11**
1,2-Dichloroethane	**170**	**71**	**ug/L**	**16**
1,1-Dichloroethene	**26 J**	**71**	**ug/L**	**14**
cis-1,2-Dichloroethene	**440**	**71**	**ug/L**	**12**
trans-1,2-Dichloroethene	ND	71	ug/L	14
1,2-Dichloropropane	**320**	**71**	**ug/L**	**13**
cis-1,3-Dichloropropene	ND	71	ug/L	10
trans-1,3-Dichloropropene	ND	71	ug/L	14
Ethylbenzene	ND	71	ug/L	12
2-Hexanone	ND	710	ug/L	29
Isopropylbenzene	ND	71	ug/L	9.3
Methyl acetate	ND	710	ug/L	27
Methylene chloride	**33 J,B**	**71**	**ug/L**	**24**
Methylcyclohexane	ND	71	ug/L	9.3
4-Methyl-2-pentanone	ND	710	ug/L	23
Methyl tert-butyl ether	ND	360	ug/L	12
Styrene	ND	71	ug/L	7.9
1,1,2,2-Tetrachloroethane	ND	71	ug/L	13

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-007

GC/MS Volatiles

Lot-Sample #...: A9E190164-007 **Work Order #...:** LDAV91AL **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	71	ug/L	21
Toluene	ND	71	ug/L	9.3
1,2,4-Trichloro-benzene	ND	71	ug/L	11
1,1,1-Trichloroethane	**310**	**71**	**ug/L**	**16**
1,1,2-Trichloroethane	ND	71	ug/L	19
Trichloroethene	**2600**	**71**	**ug/L**	**12**
Trichlorofluoromethane	ND	71	ug/L	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	71	ug/L	20
Vinyl chloride	ND	71	ug/L	16
Xylenes (total)	ND	140	ug/L	20

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(73 - 122)
1,2-Dichloroethane-d4	97	(61 - 128)
Toluene-d8	97	(76 - 110)
4-Bromofluorobenzene	81	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-008

GC/MS Volatiles

Lot-Sample #...: A9E190164-008 **Work Order #...:** LDAWC1AA **Matrix.....:** WG
Date Sampled...: 05/18/09 13:20 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	**0.56 J**	**1.0**	**ug/L**	**0.12**
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	**0.59 J**	**1.0**	**ug/L**	**0.15**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	**0.76 J**	**1.0**	**ug/L**	**0.19**
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	**0.67 J**	**1.0**	**ug/L**	**0.13**
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-008

GC/MS Volatiles

Lot-Sample #...: A9E190164-008 **Work Order #...:** LDAWC1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	**0.22 J**	**1.0**	**ug/L**	**0.13**
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	**12**	**1.0**	**ug/L**	**0.22**
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	**0.52 J**	**1.0**	**ug/L**	**0.17**
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.57 J**	**1.0**	**ug/L**	**0.28**
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(73 - 122)
1,2-Dichloroethane-d4	96	(61 - 128)
Toluene-d8	95	(76 - 110)
4-Bromofluorobenzene	83	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-009

GC/MS Volatiles

Lot-Sample #...: A9E190164-009 **Work Order #...:** LDAWE1AA **Matrix.....:** WG
Date Sampled...: 05/18/09 13:40 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-009

GC/MS Volatiles

Lot-Sample #...: A9E190164-009 **Work Order #...:** LDAWE1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(73 - 122)
1,2-Dichloroethane-d4	97	(61 - 128)
Toluene-d8	96	(76 - 110)
4-Bromofluorobenzene	82	(74 - 116)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-010

GC/MS Volatiles

Lot-Sample #...: A9E190164-010 **Work Order #...:** LDAWG1AA **Matrix.....:** WG
Date Sampled...: 05/18/09 14:10 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 5 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	50	ug/L	5.5
Benzene	ND	5.0	ug/L	0.65
Bromodichloromethane	ND	5.0	ug/L	0.75
Bromoform	ND	5.0	ug/L	3.2
Bromomethane	ND	5.0	ug/L	2.0
2-Butanone	ND	50	ug/L	2.8
Carbon disulfide	ND	5.0	ug/L	0.65
Carbon tetrachloride	ND	5.0	ug/L	0.65
Chlorobenzene	ND	5.0	ug/L	0.75
Chloroethane	**3.3 J**	**5.0**	**ug/L**	**1.4**
Chloroform	ND	5.0	ug/L	0.80
Chloromethane	ND	5.0	ug/L	1.5
Cyclohexane	ND	5.0	ug/L	0.60
Dibromochloromethane	ND	5.0	ug/L	0.90
1,2-Dibromo-3-chloro-propane	ND	10	ug/L	3.4
1,2-Dibromoethane	ND	5.0	ug/L	1.2
1,2-Dichlorobenzene	ND	5.0	ug/L	0.65
1,3-Dichlorobenzene	ND	5.0	ug/L	0.70
1,4-Dichlorobenzene	ND	5.0	ug/L	0.65
Dichlorodifluoromethane	ND	5.0	ug/L	1.6
1,1-Dichloroethane	**87**	**5.0**	**ug/L**	**0.75**
1,2-Dichloroethane	ND	5.0	ug/L	1.1
1,1-Dichloroethene	**5.3**	**5.0**	**ug/L**	**0.95**
cis-1,2-Dichloroethene	**15**	**5.0**	**ug/L**	**0.85**
trans-1,2-Dichloroethene	ND	5.0	ug/L	0.95
1,2-Dichloropropane	ND	5.0	ug/L	0.90
cis-1,3-Dichloropropene	ND	5.0	ug/L	0.70
trans-1,3-Dichloropropene	ND	5.0	ug/L	0.95
Ethylbenzene	ND	5.0	ug/L	0.85
2-Hexanone	ND	50	ug/L	2.0
Isopropylbenzene	ND	5.0	ug/L	0.65
Methyl acetate	ND	50	ug/L	1.9
Methylene chloride	**2.2 J,B**	**5.0**	**ug/L**	**1.6**
Methylcyclohexane	ND	5.0	ug/L	0.65
4-Methyl-2-pentanone	ND	50	ug/L	1.6
Methyl tert-butyl ether	ND	25	ug/L	0.85
Styrene	ND	5.0	ug/L	0.55
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	0.90

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-010

GC/MS Volatiles

Lot-Sample #...: A9E190164-010 **Work Order #...:** LDAWG1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	5.0	ug/L	1.4
Toluene	ND	5.0	ug/L	0.65
1,2,4-Trichloro-benzene	ND	5.0	ug/L	0.75
1,1,1-Trichloroethane	**93**	**5.0**	**ug/L**	**1.1**
1,1,2-Trichloroethane	ND	5.0	ug/L	1.4
Trichloroethene	**160**	**5.0**	**ug/L**	**0.85**
Trichlorofluoromethane	ND	5.0	ug/L	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	ug/L	1.4
Vinyl chloride	ND	5.0	ug/L	1.1
Xylenes (total)	ND	10	ug/L	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(73 - 122)
1,2-Dichloroethane-d4	98	(61 - 128)
Toluene-d8	96	(76 - 110)
4-Bromofluorobenzene	78	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-011

GC/MS Volatiles

Lot-Sample #...: A9E190164-011 **Work Order #...:** LDAWJ1AA **Matrix.....:** WG
Date Sampled...: 05/18/09 14:30 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-011

GC/MS Volatiles

Lot-Sample #...: A9E190164-011 **Work Order #...:** LDAWJ1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(73 - 122)
1,2-Dichloroethane-d4	97	(61 - 128)
Toluene-d8	95	(76 - 110)
4-Bromofluorobenzene	83	(74 - 116)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-012

GC/MS Volatiles

Lot-Sample #...: A9E190164-012 **Work Order #...:** LDAWM1AL **Matrix.....:** WG
Date Sampled...: 05/18/09 15:35 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 25 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	250	ug/L	28
Benzene	ND	25	ug/L	3.2
Bromodichloromethane	ND	25	ug/L	3.8
Bromoform	ND	25	ug/L	16
Bromomethane	ND	25	ug/L	10
2-Butanone	ND	250	ug/L	14
Carbon disulfide	ND	25	ug/L	3.2
Carbon tetrachloride	ND	25	ug/L	3.2
Chlorobenzene	ND	25	ug/L	3.8
Chloroethane	ND	25	ug/L	7.2
Chloroform	ND	25	ug/L	4.0
Chloromethane	ND	25	ug/L	7.5
Cyclohexane	ND	25	ug/L	3.0
Dibromochloromethane	ND	25	ug/L	4.5
1,2-Dibromo-3-chloro-propane	ND	50	ug/L	17
1,2-Dibromoethane	ND	25	ug/L	6.0
1,2-Dichlorobenzene	ND	25	ug/L	3.2
1,3-Dichlorobenzene	ND	25	ug/L	3.5
1,4-Dichlorobenzene	ND	25	ug/L	3.2
Dichlorodifluoromethane	ND	25	ug/L	7.8
1,1-Dichloroethane	**760**	**25**	**ug/L**	**3.8**
1,2-Dichloroethane	**6.4 J**	**25**	**ug/L**	**5.5**
1,1-Dichloroethene	**13 J**	**25**	**ug/L**	**4.8**
cis-1,2-Dichloroethene	**180**	**25**	**ug/L**	**4.2**
trans-1,2-Dichloroethene	ND	25	ug/L	4.8
1,2-Dichloropropane	ND	25	ug/L	4.5
cis-1,3-Dichloropropene	ND	25	ug/L	3.5
trans-1,3-Dichloropropene	ND	25	ug/L	4.8
Ethylbenzene	ND	25	ug/L	4.2
2-Hexanone	ND	250	ug/L	10
Isopropylbenzene	ND	25	ug/L	3.2
Methyl acetate	ND	250	ug/L	9.5
Methylene chloride	**12 J,B**	**25**	**ug/L**	**8.2**
Methylcyclohexane	ND	25	ug/L	3.2
4-Methyl-2-pentanone	ND	250	ug/L	8.0
Methyl tert-butyl ether	ND	120	ug/L	4.2
Styrene	ND	25	ug/L	2.8
1,1,2,2-Tetrachloroethane	ND	25	ug/L	4.5

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-012

GC/MS Volatiles

Lot-Sample #...: A9E190164-012 **Work Order #...:** LDAWM1AL **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	25	ug/L	7.2
Toluene	ND	25	ug/L	3.2
1,2,4-Trichloro-benzene	ND	25	ug/L	3.8
1,1,1-Trichloroethane	**250**	**25**	**ug/L**	**5.5**
1,1,2-Trichloroethane	ND	25	ug/L	6.8
Trichloroethene	**560**	**25**	**ug/L**	**4.2**
Trichlorofluoromethane	ND	25	ug/L	5.2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	25	ug/L	7.0
Vinyl chloride	ND	25	ug/L	5.5
Xylenes (total)	ND	50	ug/L	7.0

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(73 - 122)
1,2-Dichloroethane-d4	96	(61 - 128)
Toluene-d8	96	(76 - 110)
4-Bromofluorobenzene	79	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-013

GC/MS Volatiles

Lot-Sample #...: A9E190164-013 **Work Order #...:** LDAWV1AA **Matrix.....:** WG
Date Sampled...: 05/18/09 16:10 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 6.67 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	67	ug/L	7.3
Benzene	ND	6.7	ug/L	0.87
Bromodichloromethane	ND	6.7	ug/L	1.0
Bromoform	ND	6.7	ug/L	4.3
Bromomethane	ND	6.7	ug/L	2.7
2-Butanone	ND	67	ug/L	3.8
Carbon disulfide	ND	6.7	ug/L	0.87
Carbon tetrachloride	ND	6.7	ug/L	0.87
Chlorobenzene	ND	6.7	ug/L	1.0
Chloroethane	ND	6.7	ug/L	1.9
Chloroform	ND	6.7	ug/L	1.1
Chloromethane	ND	6.7	ug/L	2.0
Cyclohexane	ND	6.7	ug/L	0.80
Dibromochloromethane	ND	6.7	ug/L	1.2
1,2-Dibromo-3-chloro-propane	ND	13	ug/L	4.5
1,2-Dibromoethane	ND	6.7	ug/L	1.6
1,2-Dichlorobenzene	ND	6.7	ug/L	0.87
1,3-Dichlorobenzene	ND	6.7	ug/L	0.93
1,4-Dichlorobenzene	ND	6.7	ug/L	0.87
Dichlorodifluoromethane	ND	6.7	ug/L	2.1
1,1-Dichloroethane	**170**	**6.7**	**ug/L**	**1.0**
1,2-Dichloroethane	ND	6.7	ug/L	1.5
1,1-Dichloroethene	**4.1 J**	**6.7**	**ug/L**	**1.3**
cis-1,2-Dichloroethene	**53**	**6.7**	**ug/L**	**1.1**
trans-1,2-Dichloroethene	ND	6.7	ug/L	1.3
1,2-Dichloropropane	ND	6.7	ug/L	1.2
cis-1,3-Dichloropropene	ND	6.7	ug/L	0.93
trans-1,3-Dichloropropene	ND	6.7	ug/L	1.3
Ethylbenzene	ND	6.7	ug/L	1.1
2-Hexanone	ND	67	ug/L	2.7
Isopropylbenzene	ND	6.7	ug/L	0.87
Methyl acetate	ND	67	ug/L	2.5
Methylene chloride	**4.1 J,B**	**6.7**	**ug/L**	**2.2**
Methylcyclohexane	ND	6.7	ug/L	0.87
4-Methyl-2-pentanone	ND	67	ug/L	2.1
Methyl tert-butyl ether	ND	33	ug/L	1.1
Styrene	ND	6.7	ug/L	0.73
1,1,2,2-Tetrachloroethane	ND	6.7	ug/L	1.2

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-013

GC/MS Volatiles

Lot-Sample #...: A9E190164-013 **Work Order #...:** LDAWV1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	6.7	ug/L	1.9
Toluene	ND	6.7	ug/L	0.87
1,2,4-Trichloro-benzene	ND	6.7	ug/L	1.0
1,1,1-Trichloroethane	**150**	**6.7**	**ug/L**	**1.5**
1,1,2-Trichloroethane	ND	6.7	ug/L	1.8
Trichloroethene	**210**	**6.7**	**ug/L**	**1.1**
Trichlorofluoromethane	ND	6.7	ug/L	1.4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	6.7	ug/L	1.9
Vinyl chloride	ND	6.7	ug/L	1.5
Xylenes (total)	ND	13	ug/L	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(73 - 122)
1,2-Dichloroethane-d4	96	(61 - 128)
Toluene-d8	97	(76 - 110)
4-Bromofluorobenzene	80	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-014

GC/MS Volatiles

Lot-Sample #...: A9E190164-014 **Work Order #...:** LDAW51AA **Matrix.....:** WG
Date Sampled...: 05/18/09 16:50 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	**1.6 J**	**10**	**ug/L**	**0.57**
Carbon disulfide	**0.60 J**	**1.0**	**ug/L**	**0.13**
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-014

GC/MS Volatiles

Lot-Sample #...: A9E190164-014 **Work Order #...:** LDAW51AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	100	(73 - 122)
1,2-Dichloroethane-d4	97	(61 - 128)
Toluene-d8	93	(76 - 110)
4-Bromofluorobenzene	83	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: TB-17178-015

GC/MS Volatiles

Lot-Sample #...: A9E190164-015 **Work Order #...:** LDAXA1AA **Matrix.....:** WQ
Date Sampled...: 05/18/09 **Date Received..:** 05/19/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: TB-17178-015

GC/MS Volatiles

Lot-Sample #...: A9E190164-015 **Work Order #...:** LDAXA1AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	106	(73 - 122)
1,2-Dichloroethane-d4	100	(61 - 128)
Toluene-d8	96	(76 - 110)
4-Bromofluorobenzene	82	(74 - 116)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-016

GC/MS Volatiles

Lot-Sample #...: A9E200123-001 **Work Order #...:** LDDR51AA **Matrix.....:** WG
Date Sampled...: 05/18/09 17:00 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	**11**	**1.0**	**ug/L**	**0.15**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	**0.20 J**	**1.0**	**ug/L**	**0.19**
cis-1,2-Dichloroethene	**4.2**	**1.0**	**ug/L**	**0.17**
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-016

GC/MS Volatiles

Lot-Sample #...: A9E200123-001 **Work Order #...:** LDDR51AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	**3.8**	**1.0**	**ug/L**	**0.22**
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	**4.5**	**1.0**	**ug/L**	**0.17**
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(73 - 122)
1,2-Dichloroethane-d4	97	(61 - 128)
Toluene-d8	94	(76 - 110)
4-Bromofluorobenzene	85	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-017

GC/MS Volatiles

Lot-Sample #...: A9E200123-002 **Work Order #...:** LDDR71AA **Matrix.....:** WG
Date Sampled...: 05/18/09 19:53 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 6.67 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	67	ug/L	7.3
Benzene	ND	6.7	ug/L	0.87
Bromodichloromethane	ND	6.7	ug/L	1.0
Bromoform	ND	6.7	ug/L	4.3
Bromomethane	ND	6.7	ug/L	2.7
2-Butanone	ND	67	ug/L	3.8
Carbon disulfide	ND	6.7	ug/L	0.87
Carbon tetrachloride	ND	6.7	ug/L	0.87
Chlorobenzene	ND	6.7	ug/L	1.0
Chloroethane	ND	6.7	ug/L	1.9
Chloroform	ND	6.7	ug/L	1.1
Chloromethane	ND	6.7	ug/L	2.0
Cyclohexane	ND	6.7	ug/L	0.80
Dibromochloromethane	ND	6.7	ug/L	1.2
1,2-Dibromo-3-chloro-propane	ND	13	ug/L	4.5
1,2-Dibromoethane	ND	6.7	ug/L	1.6
1,2-Dichlorobenzene	ND	6.7	ug/L	0.87
1,3-Dichlorobenzene	ND	6.7	ug/L	0.93
1,4-Dichlorobenzene	ND	6.7	ug/L	0.87
Dichlorodifluoromethane	ND	6.7	ug/L	2.1
1,1-Dichloroethane	**210**	**6.7**	**ug/L**	**1.0**
1,2-Dichloroethane	**2.1 J**	**6.7**	**ug/L**	**1.5**
1,1-Dichloroethene	**5.1 J**	**6.7**	**ug/L**	**1.3**
cis-1,2-Dichloroethene	**82**	**6.7**	**ug/L**	**1.1**
trans-1,2-Dichloroethene	ND	6.7	ug/L	1.3
1,2-Dichloropropane	ND	6.7	ug/L	1.2
cis-1,3-Dichloropropene	ND	6.7	ug/L	0.93
trans-1,3-Dichloropropene	ND	6.7	ug/L	1.3
Ethylbenzene	ND	6.7	ug/L	1.1
2-Hexanone	ND	67	ug/L	2.7
Isopropylbenzene	ND	6.7	ug/L	0.87
Methyl acetate	ND	67	ug/L	2.5
Methylene chloride	**2.9 J,B**	**6.7**	**ug/L**	**2.2**
Methylcyclohexane	ND	6.7	ug/L	0.87
4-Methyl-2-pentanone	ND	67	ug/L	2.1
Methyl tert-butyl ether	ND	33	ug/L	1.1
Styrene	ND	6.7	ug/L	0.73
1,1,2,2-Tetrachloroethane	ND	6.7	ug/L	1.2

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-017

GC/MS Volatiles

Lot-Sample #...: A9E200123-002 **Work Order #...:** LDDR71AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	6.7	ug/L	1.9
Toluene	ND	6.7	ug/L	0.87
1,2,4-Trichloro-benzene	ND	6.7	ug/L	1.0
1,1,1-Trichloroethane	**100**	**6.7**	**ug/L**	**1.5**
1,1,2-Trichloroethane	ND	6.7	ug/L	1.8
Trichloroethene	**99**	**6.7**	**ug/L**	**1.1**
Trichlorofluoromethane	ND	6.7	ug/L	1.4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	6.7	ug/L	1.9
Vinyl chloride	ND	6.7	ug/L	1.5
Xylenes (total)	ND	13	ug/L	1.9

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(73 - 122)
1,2-Dichloroethane-d4	96	(61 - 128)
Toluene-d8	96	(76 - 110)
4-Bromofluorobenzene	81	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-018

GC/MS Volatiles

Lot-Sample #...: A9E200123-003 **Work Order #...:** LDDR81AA **Matrix.....:** WG
Date Sampled...: 05/18/09 20:25 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-018

GC/MS Volatiles

Lot-Sample #...: A9E200123-003 **Work Order #...:** LDDR81AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(73 - 122)
1,2-Dichloroethane-d4	97	(61 - 128)
Toluene-d8	94	(76 - 110)
4-Bromofluorobenzene	76	(74 - 116)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-019

GC/MS Volatiles

Lot-Sample #...: A9E200123-004 **Work Order #...:** LDDR91AA **Matrix.....:** WG
Date Sampled...: 05/19/09 07:50 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	**0.59 J**	**1.0**	**ug/L**	**0.13**
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-019

GC/MS Volatiles

Lot-Sample #...: A9E200123-004 **Work Order #...:** LDDR91AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	**0.37 J**	**1.0**	**ug/L**	**0.17**
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(73 - 122)
1,2-Dichloroethane-d4	99	(61 - 128)
Toluene-d8	94	(76 - 110)
4-Bromofluorobenzene	79	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-020

GC/MS Volatiles

Lot-Sample #...: A9E200123-005 **Work Order #...:** LDDTA1AA **Matrix.....:** WG
Date Sampled...: 05/19/09 08:30 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-020

GC/MS Volatiles

Lot-Sample #...: A9E200123-005 **Work Order #...:** LDDTA1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	105	(73 - 122)
1,2-Dichloroethane-d4	100	(61 - 128)
Toluene-d8	94	(76 - 110)
4-Bromofluorobenzene	81	(74 - 116)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-021

GC/MS Volatiles

Lot-Sample #...: A9E200123-006 **Work Order #...:** LDDTC1AA **Matrix.....:** WG
Date Sampled...: 05/19/09 08:35 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-021

GC/MS Volatiles

Lot-Sample #...: A9E200123-006 **Work Order #...:** LDDTC1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(73 - 122)
1,2-Dichloroethane-d4	99	(61 - 128)
Toluene-d8	95	(76 - 110)
4-Bromofluorobenzene	79	(74 - 116)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-022

GC/MS Volatiles

Lot-Sample #...: A9E200123-007 **Work Order #...:** LDDTD1AA **Matrix.....:** WG
Date Sampled...: 05/19/09 09:40 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	**0.99 J**	**1.0**	**ug/L**	**0.13**
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-022

GC/MS Volatiles

Lot-Sample #...: A9E200123-007 **Work Order #...:** LDDTD1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	**0.41 J**	**1.0**	**ug/L**	**0.22**
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	105	(73 - 122)
1,2-Dichloroethane-d4	99	(61 - 128)
Toluene-d8	93	(76 - 110)
4-Bromofluorobenzene	82	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-023

GC/MS Volatiles

Lot-Sample #...: A9E200123-008 **Work Order #...:** LDDTG1AA **Matrix.....:** WG
Date Sampled...: 05/19/09 10:25 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 5 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	50	ug/L	5.5
Benzene	ND	5.0	ug/L	0.65
Bromodichloromethane	ND	5.0	ug/L	0.75
Bromoform	ND	5.0	ug/L	3.2
Bromomethane	ND	5.0	ug/L	2.0
2-Butanone	ND	50	ug/L	2.8
Carbon disulfide	ND	5.0	ug/L	0.65
Carbon tetrachloride	ND	5.0	ug/L	0.65
Chlorobenzene	ND	5.0	ug/L	0.75
Chloroethane	ND	5.0	ug/L	1.4
Chloroform	ND	5.0	ug/L	0.80
Chloromethane	ND	5.0	ug/L	1.5
Cyclohexane	ND	5.0	ug/L	0.60
Dibromochloromethane	ND	5.0	ug/L	0.90
1,2-Dibromo-3-chloro-propane	ND	10	ug/L	3.4
1,2-Dibromoethane	ND	5.0	ug/L	1.2
1,2-Dichlorobenzene	ND	5.0	ug/L	0.65
1,3-Dichlorobenzene	ND	5.0	ug/L	0.70
1,4-Dichlorobenzene	ND	5.0	ug/L	0.65
Dichlorodifluoromethane	ND	5.0	ug/L	1.6
1,1-Dichloroethane	**6.9**	**5.0**	**ug/L**	**0.75**
1,2-Dichloroethane	**15**	**5.0**	**ug/L**	**1.1**
1,1-Dichloroethene	ND	5.0	ug/L	0.95
cis-1,2-Dichloroethene	**17**	**5.0**	**ug/L**	**0.85**
trans-1,2-Dichloroethene	ND	5.0	ug/L	0.95
1,2-Dichloropropane	**11**	**5.0**	**ug/L**	**0.90**
cis-1,3-Dichloropropene	ND	5.0	ug/L	0.70
trans-1,3-Dichloropropene	ND	5.0	ug/L	0.95
Ethylbenzene	ND	5.0	ug/L	0.85
2-Hexanone	ND	50	ug/L	2.0
Isopropylbenzene	ND	5.0	ug/L	0.65
Methyl acetate	ND	50	ug/L	1.9
Methylene chloride	**2.8 J,B**	**5.0**	**ug/L**	**1.6**
Methylcyclohexane	ND	5.0	ug/L	0.65
4-Methyl-2-pentanone	ND	50	ug/L	1.6
Methyl tert-butyl ether	ND	25	ug/L	0.85
Styrene	ND	5.0	ug/L	0.55
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	0.90

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-023

GC/MS Volatiles

Lot-Sample #...: A9E200123-008 **Work Order #...:** LDDTG1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	5.0	ug/L	1.4
Toluene	ND	5.0	ug/L	0.65
1,2,4-Trichloro-benzene	ND	5.0	ug/L	0.75
1,1,1-Trichloroethane	**22**	**5.0**	**ug/L**	**1.1**
1,1,2-Trichloroethane	ND	5.0	ug/L	1.4
Trichloroethene	**170**	**5.0**	**ug/L**	**0.85**
Trichlorofluoromethane	ND	5.0	ug/L	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	ug/L	1.4
Vinyl chloride	ND	5.0	ug/L	1.1
Xylenes (total)	ND	10	ug/L	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	105	(73 - 122)
1,2-Dichloroethane-d4	97	(61 - 128)
Toluene-d8	97	(76 - 110)
4-Bromofluorobenzene	79	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-024

GC/MS Volatiles

Lot-Sample #...: A9E200123-009 **Work Order #...:** LDDTM1AA **Matrix.....:** WG
Date Sampled...: 05/19/09 10:30 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 5 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	50	ug/L	5.5
Benzene	ND	5.0	ug/L	0.65
Bromodichloromethane	ND	5.0	ug/L	0.75
Bromoform	ND	5.0	ug/L	3.2
Bromomethane	ND	5.0	ug/L	2.0
2-Butanone	ND	50	ug/L	2.8
Carbon disulfide	ND	5.0	ug/L	0.65
Carbon tetrachloride	ND	5.0	ug/L	0.65
Chlorobenzene	ND	5.0	ug/L	0.75
Chloroethane	ND	5.0	ug/L	1.4
Chloroform	ND	5.0	ug/L	0.80
Chloromethane	ND	5.0	ug/L	1.5
Cyclohexane	ND	5.0	ug/L	0.60
Dibromochloromethane	ND	5.0	ug/L	0.90
1,2-Dibromo-3-chloro-propane	ND	10	ug/L	3.4
1,2-Dibromoethane	ND	5.0	ug/L	1.2
1,2-Dichlorobenzene	ND	5.0	ug/L	0.65
1,3-Dichlorobenzene	ND	5.0	ug/L	0.70
1,4-Dichlorobenzene	ND	5.0	ug/L	0.65
Dichlorodifluoromethane	ND	5.0	ug/L	1.6
1,1-Dichloroethane	**6.5**	**5.0**	**ug/L**	**0.75**
1,2-Dichloroethane	**14**	**5.0**	**ug/L**	**1.1**
1,1-Dichloroethene	ND	5.0	ug/L	0.95
cis-1,2-Dichloroethene	**16**	**5.0**	**ug/L**	**0.85**
trans-1,2-Dichloroethene	ND	5.0	ug/L	0.95
1,2-Dichloropropane	**10**	**5.0**	**ug/L**	**0.90**
cis-1,3-Dichloropropene	ND	5.0	ug/L	0.70
trans-1,3-Dichloropropene	ND	5.0	ug/L	0.95
Ethylbenzene	ND	5.0	ug/L	0.85
2-Hexanone	ND	50	ug/L	2.0
Isopropylbenzene	ND	5.0	ug/L	0.65
Methyl acetate	ND	50	ug/L	1.9
Methylene chloride	**2.4 J,B**	**5.0**	**ug/L**	**1.6**
Methylcyclohexane	ND	5.0	ug/L	0.65
4-Methyl-2-pentanone	ND	50	ug/L	1.6
Methyl tert-butyl ether	ND	25	ug/L	0.85
Styrene	ND	5.0	ug/L	0.55
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	0.90

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-024

GC/MS Volatiles

Lot-Sample #...: A9E200123-009 **Work Order #...:** LDDTM1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	5.0	ug/L	1.4
Toluene	ND	5.0	ug/L	0.65
1,2,4-Trichloro-benzene	ND	5.0	ug/L	0.75
1,1,1-Trichloroethane	**21**	**5.0**	**ug/L**	**1.1**
1,1,2-Trichloroethane	ND	5.0	ug/L	1.4
Trichloroethene	**170**	**5.0**	**ug/L**	**0.85**
Trichlorofluoromethane	ND	5.0	ug/L	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	ug/L	1.4
Vinyl chloride	ND	5.0	ug/L	1.1
Xylenes (total)	ND	10	ug/L	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(73 - 122)
1,2-Dichloroethane-d4	95	(61 - 128)
Toluene-d8	98	(76 - 110)
4-Bromofluorobenzene	79	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-025

GC/MS Volatiles

Lot-Sample #...: A9E200123-010 **Work Order #...:** LDDTQ1AL **Matrix.....:** WG
Date Sampled...: 05/19/09 11:20 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-025

GC/MS Volatiles

Lot-Sample #...: A9E200123-010 **Work Order #...:** LDDTQ1AL **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	102	(73 - 122)
1,2-Dichloroethane-d4	97	(61 - 128)
Toluene-d8	95	(76 - 110)
4-Bromofluorobenzene	81	(74 - 116)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-026

GC/MS Volatiles

Lot-Sample #...: A9E200123-011 **Work Order #...:** LDDTR1AA **Matrix.....:** WG
Date Sampled...: 05/19/09 13:35 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-026

GC/MS Volatiles

Lot-Sample #...: A9E200123-011 **Work Order #...:** LDDTR1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	**1.8**	**1.0**	**ug/L**	**0.17**
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	105	(73 - 122)
1,2-Dichloroethane-d4	97	(61 - 128)
Toluene-d8	94	(76 - 110)
4-Bromofluorobenzene	79	(74 - 116)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-027

GC/MS Volatiles

Lot-Sample #...: A9E200123-012 **Work Order #...:** LDDTT1AL **Matrix.....:** WG
Date Sampled...: 05/19/09 14:25 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 5 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	50	ug/L	5.5
Benzene	ND	5.0	ug/L	0.65
Bromodichloromethane	ND	5.0	ug/L	0.75
Bromoform	ND	5.0	ug/L	3.2
Bromomethane	ND	5.0	ug/L	2.0
2-Butanone	ND	50	ug/L	2.8
Carbon disulfide	ND	5.0	ug/L	0.65
Carbon tetrachloride	ND	5.0	ug/L	0.65
Chlorobenzene	ND	5.0	ug/L	0.75
Chloroethane	ND	5.0	ug/L	1.4
Chloroform	ND	5.0	ug/L	0.80
Chloromethane	ND	5.0	ug/L	1.5
Cyclohexane	ND	5.0	ug/L	0.60
Dibromochloromethane	ND	5.0	ug/L	0.90
1,2-Dibromo-3-chloro-propane	ND	10	ug/L	3.4
1,2-Dibromoethane	ND	5.0	ug/L	1.2
1,2-Dichlorobenzene	ND	5.0	ug/L	0.65
1,3-Dichlorobenzene	ND	5.0	ug/L	0.70
1,4-Dichlorobenzene	ND	5.0	ug/L	0.65
Dichlorodifluoromethane	ND	5.0	ug/L	1.6
1,1-Dichloroethane	**21**	**5.0**	**ug/L**	**0.75**
1,2-Dichloroethane	**2.8 J**	**5.0**	**ug/L**	**1.1**
1,1-Dichloroethene	**2.2 J**	**5.0**	**ug/L**	**0.95**
cis-1,2-Dichloroethene	**14**	**5.0**	**ug/L**	**0.85**
trans-1,2-Dichloroethene	ND	5.0	ug/L	0.95
1,2-Dichloropropane	**19**	**5.0**	**ug/L**	**0.90**
cis-1,3-Dichloropropene	ND	5.0	ug/L	0.70
trans-1,3-Dichloropropene	ND	5.0	ug/L	0.95
Ethylbenzene	ND	5.0	ug/L	0.85
2-Hexanone	ND	50	ug/L	2.0
Isopropylbenzene	ND	5.0	ug/L	0.65
Methyl acetate	ND	50	ug/L	1.9
Methylene chloride	**2.2 J,B**	**5.0**	**ug/L**	**1.6**
Methylcyclohexane	ND	5.0	ug/L	0.65
4-Methyl-2-pentanone	ND	50	ug/L	1.6
Methyl tert-butyl ether	ND	25	ug/L	0.85
Styrene	ND	5.0	ug/L	0.55
1,1,2,2-Tetrachloroethane	ND	5.0	ug/L	0.90

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-027

GC/MS Volatiles

Lot-Sample #...: A9E200123-012 **Work Order #...:** LDDTT1AL **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	5.0	ug/L	1.4
Toluene	ND	5.0	ug/L	0.65
1,2,4-Trichloro-benzene	ND	5.0	ug/L	0.75
1,1,1-Trichloroethane	ND	5.0	ug/L	1.1
1,1,2-Trichloroethane	ND	5.0	ug/L	1.4
Trichloroethene	**170**	**5.0**	**ug/L**	**0.85**
Trichlorofluoromethane	ND	5.0	ug/L	1.0
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	5.0	ug/L	1.4
Vinyl chloride	ND	5.0	ug/L	1.1
Xylenes (total)	ND	10	ug/L	1.4

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(73 - 122)
1,2-Dichloroethane-d4	98	(61 - 128)
Toluene-d8	97	(76 - 110)
4-Bromofluorobenzene	79	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-028

GC/MS Volatiles

Lot-Sample #...: A9E200123-013 **Work Order #...:** LDDTV1AA **Matrix.....:** WG
Date Sampled...: 05/19/09 15:25 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-028

GC/MS Volatiles

Lot-Sample #...: A9E200123-013 **Work Order #...:** LDDTV1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	103	(73 - 122)
1,2-Dichloroethane-d4	97	(61 - 128)
Toluene-d8	93	(76 - 110)
4-Bromofluorobenzene	85	(74 - 116)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-029

GC/MS Volatiles

Lot-Sample #...: A9E200123-014 **Work Order #...:** LDDTX1A7 **Matrix.....:** WG
Date Sampled...: 05/19/09 16:20 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	**0.51 J**	**1.0**	**ug/L**	**0.13**
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	**1.5**	**1.0**	**ug/L**	**0.15**
1,2-Dichloroethane	**0.67 J**	**1.0**	**ug/L**	**0.22**
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	**0.75 J**	**1.0**	**ug/L**	**0.17**
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-029

GC/MS Volatiles

Lot-Sample #...: A9E200123-014 **Work Order #...:** LDDTX1A7 **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(73 - 122)
1,2-Dichloroethane-d4	96	(61 - 128)
Toluene-d8	94	(76 - 110)
4-Bromofluorobenzene	79	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: TB-17178-030

GC/MS Volatiles

Lot-Sample #...: A9E200123-015 **Work Order #...:** LDDT01AA **Matrix.....:** WQ
Date Sampled...: 05/19/09 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: TB-17178-030

GC/MS Volatiles

Lot-Sample #...: A9E200123-015 **Work Order #...:** LDDT01AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(73 - 122)
1,2-Dichloroethane-d4	94	(61 - 128)
Toluene-d8	95	(76 - 110)
4-Bromofluorobenzene	84	(74 - 116)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-052009-BW-031

GC/MS Volatiles

Lot-Sample #...: A9E210121-001 **Work Order #...:** LDF7D1AA **Matrix.....:** WG
Date Sampled...: 05/20/09 08:15 **Date Received..:** 05/21/09
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148318
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	**1.5**	**1.0**	**ug/L**	**0.31**
1,1-Dichloroethane	**1.6**	**1.0**	**ug/L**	**0.15**
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-052009-BW-031

GC/MS Volatiles

Lot-Sample #...: A9E210121-001 **Work Order #...:** LDF7D1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	**1.1**	**1.0**	**ug/L**	**0.22**
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	**0.40 J**	**1.0**	**ug/L**	**0.21**
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(73 - 122)
1,2-Dichloroethane-d4	98	(61 - 128)
Toluene-d8	87	(76 - 110)
4-Bromofluorobenzene	76	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-052009-BW-032

GC/MS Volatiles

Lot-Sample #...: A9E210121-002 **Work Order #...:** LDF7T1AA **Matrix.....:** WG
Date Sampled...: 05/20/09 09:00 **Date Received..:** 05/21/09
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148318
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**4.5 J**	**10**	**ug/L**	**1.1**
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	**0.67 J**	**10**	**ug/L**	**0.57**
Carbon disulfide	**0.46 J**	**1.0**	**ug/L**	**0.13**
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	**0.37 J**	**1.0**	**ug/L**	**0.30**
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-052009-BW-032

GC/MS Volatiles

Lot-Sample #...: A9E210121-002 **Work Order #...:** LDF7T1AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	99	(73 - 122)
1,2-Dichloroethane-d4	102	(61 - 128)
Toluene-d8	99	(76 - 110)
4-Bromofluorobenzene	79	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-052009-BW-033

GC/MS Volatiles

Lot-Sample #...: A9E210121-003 **Work Order #...:** LDF7V1AL **Matrix.....:** WG
Date Sampled...: 05/20/09 10:30 **Date Received..:** 05/21/09
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148318
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	**0.47 J**	**1.0**	**ug/L**	**0.13**
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-052009-BW-033

GC/MS Volatiles

Lot-Sample #...: A9E210121-003 **Work Order #...:** LDF7V1AL **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(73 - 122)
1,2-Dichloroethane-d4	101	(61 - 128)
Toluene-d8	80	(76 - 110)
4-Bromofluorobenzene	84	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-052009-BW-034

GC/MS Volatiles

Lot-Sample #...: A9E210121-004 **Work Order #...:** LDF701AA **Matrix.....:** WG
Date Sampled...: 05/20/09 11:20 **Date Received..:** 05/21/09
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148318
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.1
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	**1.3**	**1.0**	**ug/L**	**0.29**
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	**13**	**1.0**	**ug/L**	**0.15**
1,2-Dichloroethane	**0.28 J**	**1.0**	**ug/L**	**0.22**
1,1-Dichloroethene	**0.31 J**	**1.0**	**ug/L**	**0.19**
cis-1,2-Dichloroethene	**2.8**	**1.0**	**ug/L**	**0.17**
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-052009-BW-034

GC/MS Volatiles

Lot-Sample #...: A9E210121-004 **Work Order #...:** LDF701AA **Matrix.....:** WG

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	**2.8**	**1.0**	**ug/L**	**0.22**
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	**6.0**	**1.0**	**ug/L**	**0.17**
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(73 - 122)
1,2-Dichloroethane-d4	101	(61 - 128)
Toluene-d8	82	(76 - 110)
4-Bromofluorobenzene	83	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: TB-17178-035

GC/MS Volatiles

Lot-Sample #...: A9E210121-005 **Work Order #...:** LDF741AA **Matrix.....:** WQ
Date Sampled...: 05/20/09 **Date Received..:** 05/21/09
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148318
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**1.6 J**	**10**	**ug/L**	**1.1**
Benzene	ND	1.0	ug/L	0.13
Bromodichloromethane	ND	1.0	ug/L	0.15
Bromoform	ND	1.0	ug/L	0.64
Bromomethane	ND	1.0	ug/L	0.41
2-Butanone	ND	10	ug/L	0.57
Carbon disulfide	ND	1.0	ug/L	0.13
Carbon tetrachloride	ND	1.0	ug/L	0.13
Chlorobenzene	ND	1.0	ug/L	0.15
Chloroethane	ND	1.0	ug/L	0.29
Chloroform	ND	1.0	ug/L	0.16
Chloromethane	ND	1.0	ug/L	0.30
Cyclohexane	ND	1.0	ug/L	0.12
Dibromochloromethane	ND	1.0	ug/L	0.18
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.67
1,2-Dibromoethane	ND	1.0	ug/L	0.24
1,2-Dichlorobenzene	ND	1.0	ug/L	0.13
1,3-Dichlorobenzene	ND	1.0	ug/L	0.14
1,4-Dichlorobenzene	ND	1.0	ug/L	0.13
Dichlorodifluoromethane	ND	1.0	ug/L	0.31
1,1-Dichloroethane	ND	1.0	ug/L	0.15
1,2-Dichloroethane	ND	1.0	ug/L	0.22
1,1-Dichloroethene	ND	1.0	ug/L	0.19
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.17
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.19
1,2-Dichloropropane	ND	1.0	ug/L	0.18
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.14
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.19
Ethylbenzene	ND	1.0	ug/L	0.17
2-Hexanone	ND	10	ug/L	0.41
Isopropylbenzene	ND	1.0	ug/L	0.13
Methyl acetate	ND	10	ug/L	0.38
Methylene chloride	ND	1.0	ug/L	0.33
Methylcyclohexane	ND	1.0	ug/L	0.13
4-Methyl-2-pentanone	ND	10	ug/L	0.32
Methyl tert-butyl ether	ND	5.0	ug/L	0.17
Styrene	ND	1.0	ug/L	0.11
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.18

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: TB-17178-035

GC/MS Volatiles

Lot-Sample #...: A9E210121-005 **Work Order #...:** LDF741AA **Matrix.....:** WQ

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Tetrachloroethene	ND	1.0	ug/L	0.29
Toluene	ND	1.0	ug/L	0.13
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.22
1,1,2-Trichloroethane	ND	1.0	ug/L	0.27
Trichloroethene	ND	1.0	ug/L	0.17
Trichlorofluoromethane	ND	1.0	ug/L	0.21
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.28
Vinyl chloride	ND	1.0	ug/L	0.22
Xylenes (total)	ND	2.0	ug/L	0.28

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	101	(73 - 122)
1,2-Dichloroethane-d4	102	(61 - 128)
Toluene-d8	83	(76 - 110)
4-Bromofluorobenzene	75	(74 - 116)

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-004

GC Volatiles

Lot-Sample #...: A9E190164-004 **Work Order #...:** LDAVV1AK **Matrix.....:** WG
Date Sampled...: 05/18/09 11:10 **Date Received..:** 05/19/09
Prep Date.....: 05/22/09 **Analysis Date..:** 05/22/09
Prep Batch #...: 9142109
Dilution Factor: 1 **Method.....:** RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Ethane	**0.73**	**0.50**	**ug/L**	**0.27**
Ethene	**0.41 J**	**0.50**	**ug/L**	**0.24**
Methane	**0.88 B**	**0.50**	**ug/L**	**0.17**

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-005

GC Volatiles

Lot-Sample #...: A9E190164-005 **Work Order #...:** LDAV41AK **Matrix.....:** WG
Date Sampled...: 05/18/09 11:31 **Date Received..:** 05/19/09
Prep Date.....: 05/22/09 **Analysis Date..:** 05/22/09
Prep Batch #...: 9142109
Dilution Factor: 1 **Method.....:** RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Ethane	**0.81**	**0.50**	**ug/L**	**0.27**
Ethene	**0.42 J**	**0.50**	**ug/L**	**0.24**
Methane	**3.0 B**	**0.50**	**ug/L**	**0.17**

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-006

GC Volatiles

Lot-Sample #...: A9E190164-006 **Work Order #...:** LDAV51AK **Matrix.....:** WG
Date Sampled...: 05/18/09 12:30 **Date Received..:** 05/19/09
Prep Date.....: 05/22/09 **Analysis Date..:** 05/22/09
Prep Batch #...: 9142109
Dilution Factor: 1 **Method.....:** RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Ethane	**2.2**	**0.50**	**ug/L**	**0.27**
Ethene	**0.82**	**0.50**	**ug/L**	**0.24**
Methane	**1.9 B**	**0.50**	**ug/L**	**0.17**

NOTE(S):

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-007

GC Volatiles

Lot-Sample #...: A9E190164-007 **Work Order #...:** LDAV91AK **Matrix.....:** WG
Date Sampled...: 05/18/09 12:40 **Date Received..:** 05/19/09
Prep Date.....: 05/22/09 **Analysis Date..:** 05/22/09
Prep Batch #...: 9142109
Dilution Factor: 1 **Method.....:** RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Ethane	**1.6**	**0.50**	**ug/L**	**0.27**
Ethene	**0.69**	**0.50**	**ug/L**	**0.24**
Methane	**0.69 B**	**0.50**	**ug/L**	**0.17**

NOTE(S):

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-012

GC Volatiles

Lot-Sample #...: A9E190164-012 **Work Order #...:** LDAWM1AK **Matrix.....:** WG
Date Sampled...: 05/18/09 15:35 **Date Received..:** 05/19/09
Prep Date.....: 05/22/09 **Analysis Date..:** 05/22/09
Prep Batch #...: 9142109
Dilution Factor: 1 **Method.....:** RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Ethane	**2.4**	**0.50**	**ug/L**	**0.27**
Ethene	**0.44 J**	**0.50**	**ug/L**	**0.24**
Methane	**0.38 J,B**	**0.50**	**ug/L**	**0.17**

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-025

GC Volatiles

Lot-Sample #...: A9E200123-010 **Work Order #...:** LDDTQ1AK **Matrix.....:** WG
Date Sampled...: 05/19/09 11:20 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148221
Dilution Factor: 1 **Method.....:** RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Ethane	ND	0.50	ug/L	0.27
Ethene	ND	0.50	ug/L	0.24
Methane	**0.99**	**0.50**	**ug/L**	**0.17**

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-027

GC Volatiles

Lot-Sample #...: A9E200123-012 **Work Order #...:** LDDTT1AK **Matrix.....:** WG
Date Sampled...: 05/19/09 14:25 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148221
Dilution Factor: 1 **Method.....:** RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Ethane	**0.51**	**0.50**	**ug/L**	**0.27**
Ethene	**0.44 J**	**0.50**	**ug/L**	**0.24**
Methane	**3.6**	**0.50**	**ug/L**	**0.17**

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-029

GC Volatiles

Lot-Sample #...: A9E200123-014 **Work Order #...:** LDDTX1A4 **Matrix.....:** WG
Date Sampled...: 05/19/09 16:20 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148221
Dilution Factor: 1 **Method.....:** RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Ethane	**0.50**	**0.50**	**ug/L**	**0.27**
Ethene	**0.39 J**	**0.50**	**ug/L**	**0.24**
Methane	**20**	**0.50**	**ug/L**	**0.17**

NOTE(S):

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-052009-BW-033

GC Volatiles

Lot-Sample #...: A9E210121-003 **Work Order #...:** LDF7V1AK **Matrix.....:** WG
Date Sampled...: 05/20/09 10:30 **Date Received..:** 05/21/09
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148222
Dilution Factor: 1 **Method.....:** RSK SOP-175

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Ethane	**0.54**	**0.50**	**ug/L**	**0.27**
Ethene	ND	0.50	ug/L	0.24
Methane	**0.42 J,B**	**0.50**	**ug/L**	**0.17**

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-001

DISSOLVED Metals

Lot-Sample #...: A9E190164-001 **Matrix.....:** WG
Date Sampled...: 05/18/09 09:50 **Date Received..:** 05/19/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9140016						
Iron	ND	50.0	ug/L	SW846 6020	05/20/09	LDAT31AC
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	**109**	**15.0**	**ug/L**	**SW846 6020**	**05/20/09**	**LDAT31AD**
		Dilution Factor: 1		MDL.....: 0.83		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-002

TOTAL Metals

Lot-Sample #...: A9E190164-002 **Matrix.....:** WG
Date Sampled...: 05/18/09 10:25 **Date Received..:** 05/19/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9140016						
Iron	**300**	**50.0**	**ug/L**	**SW846 6020**	**05/20/09**	**LDAVL1AD**
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	**119**	**15.0**	**ug/L**	**SW846 6020**	**05/20/09**	**LDAVL1AC**
		Dilution Factor: 1		MDL.....: 0.83		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-010

DISSOLVED Metals

Lot-Sample #...: A9E190164-010 **Matrix.....:** WG
Date Sampled...: 05/18/09 14:10 **Date Received..:** 05/19/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9140016						
Iron	**130**	**50.0**	**ug/L**	**SW846 6020**	**05/20/09**	**LDAWG1AC**
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	**92.7**	**15.0**	**ug/L**	**SW846 6020**	**05/20/09**	**LDAWG1AD**
		Dilution Factor: 1		MDL.....: 0.83		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-011

DISSOLVED Metals

Lot-Sample #...: A9E190164-011 Matrix.....: WG
Date Sampled...: 05/18/09 14:30 Date Received..: 05/19/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9140016						
Iron	39.1 B	50.0	ug/L	SW846 6020	05/20/09	LDAWJ1AC
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	30.5	15.0	ug/L	SW846 6020	05/20/09	LDAWJ1AD
		Dilution Factor: 1		MDL.....: 0.83		

NOTE(S):

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-013

DISSOLVED Metals

Lot-Sample #...: A9E190164-013 **Matrix.....:** WG
Date Sampled...: 05/18/09 16:10 **Date Received..:** 05/19/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9140016						
Iron	**164**	**50.0**	**ug/L**	**SW846 6020**	**05/20/09**	**LDAWV1AC**
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	**16.5**	**15.0**	**ug/L**	**SW846 6020**	**05/20/09**	**LDAWV1AD**
		Dilution Factor: 1		MDL.....: 0.83		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-014

DISSOLVED Metals

Lot-Sample #...: A9E190164-014 **Matrix.....:** WG
Date Sampled...: 05/18/09 16:50 **Date Received..:** 05/19/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9140016						
Iron	**66.9**	**50.0**	**ug/L**	**SW846 6020**	**05/20/09**	**LDAW51AC**
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	**39.7**	**15.0**	**ug/L**	**SW846 6020**	**05/20/09**	**LDAW51AD**
		Dilution Factor: 1		MDL.....: 0.83		

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-022

DISSOLVED Metals

Lot-Sample #...: A9E200123-007 **Matrix.....:** WG
Date Sampled...: 05/19/09 09:40 **Date Received..:** 05/20/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9141023						
Iron	ND	50.0	ug/L	SW846 6020	05/21-05/27/09	LDDTD1AC
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	**10.6 B,J**	**15.0**	**ug/L**	**SW846 6020**	**05/21-05/27/09**	**LDDTD1AD**
		Dilution Factor: 1		MDL.....: 0.83		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-023

TOTAL Metals

Lot-Sample #...: A9E200123-008 Matrix.....: WG
Date Sampled...: 05/19/09 10:25 Date Received..: 05/20/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9141023						
Iron	374	50.0	ug/L	SW846 6020	05/21-05/27/09	LDDTG1AD
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	4.3 B,J	15.0	ug/L	SW846 6020	05/21-05/27/09	LDDTG1AC
		Dilution Factor: 1		MDL.....: 0.83		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-024

TOTAL Metals

Lot-Sample #...: A9E200123-009 Matrix.....: WG
Date Sampled...: 05/19/09 10:30 Date Received..: 05/20/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9141023						
Iron	424	50.0	ug/L	SW846 6020	05/21-05/27/09	LDDTM1AD
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	4.4 B,J	15.0	ug/L	SW846 6020	05/21-05/27/09	LDDTM1AC
		Dilution Factor: 1		MDL.....: 0.83		

NOTE(S):

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-025

TOTAL Metals

Lot-Sample #...: A9E200123-010 Matrix.....: WG
Date Sampled...: 05/19/09 11:20 Date Received..: 05/20/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9141023						
Iron	526	50.0	ug/L	SW846 6020	05/21-05/27/09	LDDTQ1AN
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	24.6 J	15.0	ug/L	SW846 6020	05/21-05/27/09	LDDTQ1AM
		Dilution Factor: 1		MDL.....: 0.83		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-026

TOTAL Metals

Lot-Sample #...: A9E200123-011 Matrix.....: WG
Date Sampled...: 05/19/09 13:35 Date Received..: 05/20/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9141023						
Iron	90.6	50.0	ug/L	SW846 6020	05/21-05/27/09	LDDTR1AH
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	99.8 J	15.0	ug/L	SW846 6020	05/21-05/27/09	LDDTR1AE
		Dilution Factor: 1		MDL.....: 0.83		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-027

TOTAL Metals

Lot-Sample #...: A9E200123-012 Matrix.....: WG
Date Sampled...: 05/19/09 14:25 Date Received..: 05/20/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9141023						
Iron	397	50.0	ug/L	SW846 6020	05/21-05/27/09	LDDTT1AN
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	97.8 J	15.0	ug/L	SW846 6020	05/21-05/27/09	LDDTT1AM
		Dilution Factor: 1		MDL.....: 0.83		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-028

TOTAL Metals

Lot-Sample #...: A9E200123-013 Matrix.....: WG
Date Sampled...: 05/19/09 15:25 Date Received..: 05/20/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9141023						
Iron	1120	50.0	ug/L	SW846 6020	05/21-05/27/09	LDDTV1AD
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	37.2 J	15.0	ug/L	SW846 6020	05/21-05/27/09	LDDTV1AC
		Dilution Factor: 1		MDL.....: 0.83		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-029

TOTAL Metals

Lot-Sample #...: A9E200123-014 Matrix.....: WG
Date Sampled...: 05/19/09 16:20 Date Received..: 05/20/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9141023						
Iron	1110	50.0	ug/L	SW846 6020	05/21-05/27/09	LDDTX1CE
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	44.5 J	15.0	ug/L	SW846 6020	05/21-05/27/09	LDDTX1CA
		Dilution Factor: 1		MDL.....: 0.83		

NOTE(S):

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-052009-BW-033

DISSOLVED Metals

Lot-Sample #...: A9E210121-003 **Matrix.....:** WG
Date Sampled...: 05/20/09 10:30 **Date Received..:** 05/21/09

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 9142022						
Iron	ND	50.0	ug/L	SW846 6020	05/22-05/29/09	LDF7V1AM
		Dilution Factor: 1		MDL.....: 26.0		
Manganese	**7.8 B**	**15.0**	**ug/L**	**SW846 6020**	**05/22-05/29/09**	**LDF7V1AN**
		Dilution Factor: 1		MDL.....: 0.83		

NOTE(S):

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-004

General Chemistry

Lot-Sample #...: A9E190164-004 Work Order #...: LDAVV Matrix.....: WG
Date Sampled...: 05/18/09 11:10 Date Received..: 05/19/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide	ND	3.0	mg/L	SW846 9030B/9034	05/21/09	9141466
		Dilution Factor: 1		MDL.....: 0.94		
Chloride	6.5	1.0	mg/L	SW846 9056A	05/20/09	9140367
		Dilution Factor: 1		MDL.....: 0.10		
Nitrate as N	0.90	0.10	mg/L	SW846 9056A	05/20/09	9140368
		Dilution Factor: 1		MDL.....: 0.023		
Nitrite as N	ND	0.10	mg/L	SW846 9056A	05/20/09	9140369
		Dilution Factor: 1		MDL.....: 0.012		
Nitrogen, as Ammonia	1.1	0.2	mg/L	MCAWW 350.3	06/05/09	9156434
		Dilution Factor: 1		MDL.....: 0.1		
Sulfate	59.7	1.0	mg/L	SW846 9056A	05/20/09	9140370
		Dilution Factor: 1		MDL.....: 0.12		
Total Alkalinity	660 J	5.0	mg/L	MCAWW 310.1	05/26/09	9146555
		Dilution Factor: 1		MDL.....: 1.1		
Total Organic Carbon	4	1	mg/L	SW846 9060	06/02/09	9153249
		Dilution Factor: 1		MDL.....: 0.2		

NOTE(S):

RL Reporting Limit

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-005

General Chemistry

Lot-Sample #...: A9E190164-005 **Work Order #...:** LDAV4 **Matrix.....:** WG
Date Sampled...: 05/18/09 11:31 **Date Received..:** 05/19/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide	ND	3.0	mg/L	SW846 9030B/9034	05/21/09	9141466
		Dilution Factor: 1		MDL.....: 0.94		
Chloride	**20.7**	**1.0**	**mg/L**	**SW846 9056A**	**05/20/09**	**9140367**
		Dilution Factor: 1		MDL.....: 0.10		
Nitrate as N	**3.8**	**0.10**	**mg/L**	**SW846 9056A**	**05/20/09**	**9140368**
		Dilution Factor: 1		MDL.....: 0.023		
Nitrite as N	ND	0.10	mg/L	SW846 9056A	05/20/09	9140369
		Dilution Factor: 1		MDL.....: 0.012		
Nitrogen, as Ammonia	ND	0.2	mg/L	MCAWW 350.3	06/05/09	9156434
		Dilution Factor: 1		MDL.....: 0.1		
Sulfate	**53.7**	**1.0**	**mg/L**	**SW846 9056A**	**05/20/09**	**9140370**
		Dilution Factor: 1		MDL.....: 0.12		
Total Alkalinity	**670 J**	**5.0**	**mg/L**	**MCAWW 310.1**	**05/26/09**	**9146555**
		Dilution Factor: 1		MDL.....: 1.1		
Total Organic Carbon	**2**	**1**	**mg/L**	**SW846 9060**	**06/02/09**	**9153249**
		Dilution Factor: 1		MDL.....: 0.2		

NOTE(S):

RL Reporting Limit

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-006

General Chemistry

Lot-Sample #...: A9E190164-006 **Work Order #...:** LDAV5 **Matrix.....:** WG
Date Sampled...: 05/18/09 12:30 **Date Received..:** 05/19/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide	ND	3.0	mg/L	SW846 9030B/9034	05/21/09	9141466
		Dilution Factor: 1		MDL.....: 0.94		
Chloride	**17.1**	**1.0**	**mg/L**	**SW846 9056A**	**05/20/09**	**9140367**
		Dilution Factor: 1		MDL.....: 0.10		
Nitrate as N	**2.1**	**0.10**	**mg/L**	**SW846 9056A**	**05/20/09**	**9140368**
		Dilution Factor: 1		MDL.....: 0.023		
Nitrite as N	ND	0.10	mg/L	SW846 9056A	05/20/09	9140369
		Dilution Factor: 1		MDL.....: 0.012		
Nitrogen, as Ammonia	ND	0.2	mg/L	MCAWW 350.3	06/05/09	9156434
		Dilution Factor: 1		MDL.....: 0.1		
Sulfate	**36.2**	**1.0**	**mg/L**	**SW846 9056A**	**05/20/09**	**9140370**
		Dilution Factor: 1		MDL.....: 0.12		
Total Alkalinity	**750 J**	**5.0**	**mg/L**	**MCAWW 310.1**	**05/26/09**	**9146555**
		Dilution Factor: 1		MDL.....: 1.1		
Total Organic Carbon	**2**	**1**	**mg/L**	**SW846 9060**	**06/02/09**	**9153249**
		Dilution Factor: 1		MDL.....: 0.2		

NOTE(S):

RL Reporting Limit

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-007

General Chemistry

Lot-Sample #...: A9E190164-007 **Work Order #...:** LDAV9 **Matrix.....:** WG
Date Sampled...: 05/18/09 12:40 **Date Received..:** 05/19/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide	ND	3.0	mg/L	SW846 9030B/9034	05/21/09	9141466
		Dilution Factor: 1		MDL.....: 0.94		
Chloride	**17.0**	**1.0**	**mg/L**	**SW846 9056A**	**05/20/09**	**9140367**
		Dilution Factor: 1		MDL.....: 0.10		
Nitrate as N	**2.1**	**0.10**	**mg/L**	**SW846 9056A**	**05/20/09**	**9140368**
		Dilution Factor: 1		MDL.....: 0.023		
Nitrite as N	ND	0.10	mg/L	SW846 9056A	05/20/09	9140369
		Dilution Factor: 1		MDL.....: 0.012		
Nitrogen, as Ammonia	ND	0.2	mg/L	MCAWW 350.3	06/05/09	9156434
		Dilution Factor: 1		MDL.....: 0.1		
Sulfate	**36.1**	**1.0**	**mg/L**	**SW846 9056A**	**05/20/09**	**9140370**
		Dilution Factor: 1		MDL.....: 0.12		
Total Alkalinity	**740 J**	**5.0**	**mg/L**	**MCAWW 310.1**	**05/26/09**	**9146555**
		Dilution Factor: 1		MDL.....: 1.1		
Total Organic Carbon	**2**	**1**	**mg/L**	**SW846 9060**	**06/02/09**	**9153249**
		Dilution Factor: 1		MDL.....: 0.2		

NOTE(S):

RL Reporting Limit

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051809-BW-012

General Chemistry

Lot-Sample #...: A9E190164-012 Work Order #...: LDAWM Matrix.....: WG
Date Sampled...: 05/18/09 15:35 Date Received..: 05/19/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide	ND	3.0	mg/L	SW846 9030B/9034	05/21/09	9141466
		Dilution Factor: 1		MDL.....: 0.94		
Chloride	2.8	1.0	mg/L	SW846 9056A	05/20/09	9140367
		Dilution Factor: 1		MDL.....: 0.10		
Nitrate as N	1.1	0.10	mg/L	SW846 9056A	05/20/09	9140368
		Dilution Factor: 1		MDL.....: 0.023		
Nitrite as N	ND	0.10	mg/L	SW846 9056A	05/20/09	9140369
		Dilution Factor: 1		MDL.....: 0.012		
Nitrogen, as Ammonia	0.5	0.2	mg/L	MCAWW 350.3	06/05/09	9156434
		Dilution Factor: 1		MDL.....: 0.1		
Sulfate	22.1	1.0	mg/L	SW846 9056A	05/20/09	9140370
		Dilution Factor: 1		MDL.....: 0.12		
Total Alkalinity	690 J	5.0	mg/L	MCAWW 310.1	05/26/09	9146555
		Dilution Factor: 1		MDL.....: 1.1		
Total Organic Carbon	3	1	mg/L	SW846 9060	06/02/09	9153249
		Dilution Factor: 1		MDL.....: 0.2		

NOTE(S):

RL Reporting Limit

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-025

General Chemistry

Lot-Sample #...: A9E200123-010 **Work Order #...:** LDDTQ **Matrix.....:** WG
Date Sampled...: 05/19/09 11:20 **Date Received..:** 05/20/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide	ND	3.0	mg/L	SW846 9030B/9034	05/21/09	9141466
		Dilution Factor: 1		MDL.....: 0.94		
Chloride	**3.2**	**1.0**	**mg/L**	**SW846 9056A**	**05/21/09**	**9142125**
		Dilution Factor: 1		MDL.....: 0.10		
Nitrate as N	ND	0.10	mg/L	SW846 9056A	05/21/09	9142126
		Dilution Factor: 1		MDL.....: 0.023		
Nitrite as N	ND	0.10	mg/L	SW846 9056A	05/21/09	9142127
		Dilution Factor: 1		MDL.....: 0.012		
Nitrogen, as Ammonia	ND	0.2	mg/L	MCAWW 350.3	06/05/09	9156434
		Dilution Factor: 1		MDL.....: 0.1		
Sulfate	**49.5**	**1.0**	**mg/L**	**SW846 9056A**	**05/21/09**	**9142128**
		Dilution Factor: 1		MDL.....: 0.12		
Total Alkalinity	**310 J**	**5.0**	**mg/L**	**MCAWW 310.1**	**05/26/09**	**9147311**
		Dilution Factor: 1		MDL.....: 1.1		
Total Organic Carbon	**0.8 B**	**1**	**mg/L**	**SW846 9060**	**06/02/09**	**9153249**
		Dilution Factor: 1		MDL.....: 0.2		

NOTE(S):

RL Reporting Limit

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-027

General Chemistry

Lot-Sample #...: A9E200123-012 **Work Order #...:** LDDTT **Matrix.....:** WG
Date Sampled...: 05/19/09 14:25 **Date Received..:** 05/20/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide	ND	3.0	mg/L	SW846 9030B/9034	05/21/09	9141466
		Dilution Factor: 1		MDL.....: 0.94		
Chloride	**6.8**	**1.0**	**mg/L**	**SW846 9056A**	**05/21/09**	**9142125**
		Dilution Factor: 1		MDL.....: 0.10		
Nitrate as N	ND	0.10	mg/L	SW846 9056A	05/21/09	9142126
		Dilution Factor: 1		MDL.....: 0.023		
Nitrite as N	ND	0.10	mg/L	SW846 9056A	05/21/09	9142127
		Dilution Factor: 1		MDL.....: 0.012		
Nitrogen, as Ammonia	ND	0.2	mg/L	MCAWW 350.3	06/05/09	9156434
		Dilution Factor: 1		MDL.....: 0.1		
Sulfate	**49.6**	**1.0**	**mg/L**	**SW846 9056A**	**05/21/09**	**9142128**
		Dilution Factor: 1		MDL.....: 0.12		
Total Alkalinity	**440 J**	**5.0**	**mg/L**	**MCAWW 310.1**	**05/26/09**	**9147311**
		Dilution Factor: 1		MDL.....: 1.1		
Total Organic Carbon	**0.9 B**	**1**	**mg/L**	**SW846 9060**	**06/02/09**	**9153249**
		Dilution Factor: 1		MDL.....: 0.2		

NOTE(S):

RL Reporting Limit

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-051909-BW-029

General Chemistry

Lot-Sample #...: A9E200123-014 **Work Order #...:** LDDTX **Matrix.....:** WG
Date Sampled...: 05/19/09 16:20 **Date Received..:** 05/20/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide	ND	3.0	mg/L	SW846 9030B/9034	05/21/09	9141466
		Dilution Factor: 1		MDL.....: 0.94		
Chloride	**6.9**	**1.0**	**mg/L**	**SW846 9056A**	**05/21/09**	**9142125**
		Dilution Factor: 1		MDL.....: 0.10		
Nitrate as N	ND	0.10	mg/L	SW846 9056A	05/21/09	9142126
		Dilution Factor: 1		MDL.....: 0.023		
Nitrite as N	ND	0.10	mg/L	SW846 9056A	05/21/09	9142127
		Dilution Factor: 1		MDL.....: 0.012		
Nitrogen, as Ammonia	ND	0.2	mg/L	MCAWW 350.3	06/05/09	9156434
		Dilution Factor: 1		MDL.....: 0.1		
Sulfate	**55.8**	**1.0**	**mg/L**	**SW846 9056A**	**05/21/09**	**9142128**
		Dilution Factor: 1		MDL.....: 0.12		
Total Alkalinity	**360 J**	**5.0**	**mg/L**	**MCAWW 310.1**	**05/26/09**	**9147311**
		Dilution Factor: 1		MDL.....: 1.1		
Total Organic Carbon	**0.7 B**	**1**	**mg/L**	**SW846 9060**	**06/02/09**	**9153249**
		Dilution Factor: 1		MDL.....: 0.2		

NOTE(S):

RL Reporting Limit

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-17178-052009-BW-033

General Chemistry

Lot-Sample #...: A9E210121-003 Work Order #...: LDF7V Matrix.....: WG
Date Sampled...: 05/20/09 10:30 Date Received..: 05/21/09

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide	ND	3.0	mg/L	SW846 9030B/9034	05/27/09	9147203
		Dilution Factor: 1		MDL.....: 0.94		
Chloride	**1.9**	**1.0**	**mg/L**	**SW846 9056A**	**05/22/09**	**9146128**
		Dilution Factor: 1		MDL.....: 0.10		
Nitrate as N	**1.3**	**0.10**	**mg/L**	**SW846 9056A**	**05/22/09**	**9146129**
		Dilution Factor: 1		MDL.....: 0.023		
Nitrite as N	ND	0.10	mg/L	SW846 9056A	05/22/09	9146130
		Dilution Factor: 1		MDL.....: 0.012		
Nitrogen, as Ammonia	ND	0.2	mg/L	MCAWW 350.3	06/05/09	9156434
		Dilution Factor: 1		MDL.....: 0.1		
Sulfate	**19.9**	**1.0**	**mg/L**	**SW846 9056A**	**05/22/09**	**9146131**
		Dilution Factor: 1		MDL.....: 0.12		
Total Alkalinity	**330 J**	**5.0**	**mg/L**	**MCAWW 310.1**	**06/01/09**	**9153311**
		Dilution Factor: 1		MDL.....: 1.1		
Total Organic Carbon	**6**	**1**	**mg/L**	**SW846 9060**	**06/02/09**	**9153249**
		Dilution Factor: 1		MDL.....: 0.2		

NOTE(S):

RL Reporting Limit

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

QUALITY CONTROL SECTION

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVVG1AA **Matrix.....:** WATER
MB Lot-Sample #: A9E280000-318

Prep Date.....: 05/28/09
Analysis Date..: 05/28/09 **Prep Batch #...:** 9148318
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Cyclohexane	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
Methyl acetate	ND	10	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Methylcyclohexane	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVVG1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(73 - 122)
1,2-Dichloroethane-d4	96	(61 - 128)
Toluene-d8	89	(76 - 110)
4-Bromofluorobenzene	81	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDWER1AA **Matrix.....:** WATER
MB Lot-Sample #: A9E280000-431

Prep Date.....: 05/26/09
Analysis Date..: 05/26/09 **Prep Batch #...:** 9148431
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Cyclohexane	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
Methyl acetate	ND	10	ug/L	SW846 8260B
Methylene chloride	ND	1.0	ug/L	SW846 8260B
Methylcyclohexane	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDWER1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(73 - 122)
1,2-Dichloroethane-d4	93	(61 - 128)
Toluene-d8	95	(76 - 110)
4-Bromofluorobenzene	85	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDXET1AA **Matrix.....:** WATER
MB Lot-Sample #: A9E280000-535

Prep Date.....: 05/27/09
Analysis Date..: 05/27/09 **Prep Batch #...:** 9148535
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Acetone	ND	10	ug/L	SW846 8260B
Benzene	ND	1.0	ug/L	SW846 8260B
Bromodichloromethane	ND	1.0	ug/L	SW846 8260B
Bromoform	ND	1.0	ug/L	SW846 8260B
Bromomethane	ND	1.0	ug/L	SW846 8260B
2-Butanone	ND	10	ug/L	SW846 8260B
Carbon disulfide	ND	1.0	ug/L	SW846 8260B
Carbon tetrachloride	ND	1.0	ug/L	SW846 8260B
Chlorobenzene	ND	1.0	ug/L	SW846 8260B
Chloroethane	ND	1.0	ug/L	SW846 8260B
Chloroform	ND	1.0	ug/L	SW846 8260B
Chloromethane	ND	1.0	ug/L	SW846 8260B
Cyclohexane	ND	1.0	ug/L	SW846 8260B
Dibromochloromethane	ND	1.0	ug/L	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	SW846 8260B
1,2-Dibromoethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,3-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
1,4-Dichlorobenzene	ND	1.0	ug/L	SW846 8260B
Dichlorodifluoromethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,2-Dichloroethane	ND	1.0	ug/L	SW846 8260B
1,1-Dichloroethene	ND	1.0	ug/L	SW846 8260B
cis-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
trans-1,2-Dichloroethene	ND	1.0	ug/L	SW846 8260B
1,2-Dichloropropane	ND	1.0	ug/L	SW846 8260B
cis-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
trans-1,3-Dichloropropene	ND	1.0	ug/L	SW846 8260B
Ethylbenzene	ND	1.0	ug/L	SW846 8260B
2-Hexanone	ND	10	ug/L	SW846 8260B
Isopropylbenzene	ND	1.0	ug/L	SW846 8260B
Methyl acetate	ND	10	ug/L	SW846 8260B
Methylene chloride	**0.39 J**	**1.0**	**ug/L**	**SW846 8260B**
Methylcyclohexane	ND	1.0	ug/L	SW846 8260B
4-Methyl-2-pentanone	ND	10	ug/L	SW846 8260B
Methyl tert-butyl ether	ND	5.0	ug/L	SW846 8260B
Styrene	ND	1.0	ug/L	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	SW846 8260B
Tetrachloroethene	ND	1.0	ug/L	SW846 8260B
Toluene	ND	1.0	ug/L	SW846 8260B

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDXET1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
1,2,4-Trichloro-benzene	ND	1.0	ug/L	SW846 8260B
1,1,1-Trichloroethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloroethane	ND	1.0	ug/L	SW846 8260B
Trichloroethene	ND	1.0	ug/L	SW846 8260B
Trichlorofluoromethane	ND	1.0	ug/L	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	SW846 8260B
Vinyl chloride	ND	1.0	ug/L	SW846 8260B
Xylenes (total)	ND	2.0	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	97	(73 - 122)
1,2-Dichloroethane-d4	92	(61 - 128)
Toluene-d8	93	(76 - 110)
4-Bromofluorobenzene	84	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVVG1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-318 LDVVG1AD-LCSD
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148318
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acetone	10	9.1	ug/L	91		SW846 8260B
	10	8.4	ug/L	84	8.1	SW846 8260B
Benzene	**10**	**9.0**	**ug/L**	**90**		**SW846 8260B**
	10	**9.6**	**ug/L**	**96**	**5.9**	**SW846 8260B**
Bromodichloromethane	10	9.7	ug/L	97		SW846 8260B
	10	10	ug/L	103	6.1	SW846 8260B
Bromoform	10	8.6	ug/L	86		SW846 8260B
	10	8.9	ug/L	89	2.9	SW846 8260B
Bromomethane	10	8.6	ug/L	86		SW846 8260B
	10	8.5	ug/L	85	0.56	SW846 8260B
2-Butanone	10	9.2	ug/L	92		SW846 8260B
	10	9.7	ug/L	97	5.3	SW846 8260B
Carbon disulfide	10	8.4	ug/L	84		SW846 8260B
	10	8.7	ug/L	87	4.4	SW846 8260B
Carbon tetrachloride	10	8.8	ug/L	88		SW846 8260B
	10	9.2	ug/L	92	4.5	SW846 8260B
Chlorobenzene	**10**	**9.3**	**ug/L**	**93**		**SW846 8260B**
	10	**9.7**	**ug/L**	**97**	**4.3**	**SW846 8260B**
Chloroethane	10	12	ug/L	122		SW846 8260B
	10	13 a	ug/L	128	4.6	SW846 8260B
Chloroform	10	9.6	ug/L	96		SW846 8260B
	10	9.9	ug/L	99	3.8	SW846 8260B
Chloromethane	10	8.2	ug/L	82		SW846 8260B
	10	7.9	ug/L	79	4.0	SW846 8260B
Cyclohexane	10	6.5 a	ug/L	65		SW846 8260B
	10	6.6 a	ug/L	66	2.4	SW846 8260B
Dibromochloromethane	10	9.0	ug/L	90		SW846 8260B
	10	9.4	ug/L	94	4.1	SW846 8260B
1,2-Dibromo-3-chloro-propane	10	9.3	ug/L	93		SW846 8260B
	10	10	ug/L	102	10	SW846 8260B
1,2-Dibromoethane	10	9.9	ug/L	99		SW846 8260B
	10	10	ug/L	103	4.5	SW846 8260B
1,2-Dichlorobenzene	10	9.2	ug/L	92		SW846 8260B
	10	9.8	ug/L	98	7.1	SW846 8260B
1,3-Dichlorobenzene	10	9.1	ug/L	91		SW846 8260B
	10	9.6	ug/L	96	6.0	SW846 8260B
1,4-Dichlorobenzene	10	9.0	ug/L	90		SW846 8260B
	10	9.7	ug/L	97	6.8	SW846 8260B

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVVG1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-318 LDVVG1AD-LCSD

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Dichlorodifluoromethane	10	5.9 a	ug/L	59		SW846 8260B
	10	6.0 a	ug/L	60	1.7	SW846 8260B
1,1-Dichloroethane	10	9.7	ug/L	97		SW846 8260B
	10	10	ug/L	102	4.8	SW846 8260B
1,2-Dichloroethane	10	9.3	ug/L	93		SW846 8260B
	10	10	ug/L	100	6.6	SW846 8260B
1,1-Dichloroethene	**10**	**8.9**	**ug/L**	**89**		**SW846 8260B**
	10	**9.3**	**ug/L**	**93**	**4.7**	**SW846 8260B**
cis-1,2-Dichloroethene	10	9.6	ug/L	96		SW846 8260B
	10	9.9	ug/L	99	2.8	SW846 8260B
trans-1,2-Dichloroethene	10	9.1	ug/L	91		SW846 8260B
	10	9.5	ug/L	95	4.7	SW846 8260B
1,2-Dichloropropane	10	9.6	ug/L	96		SW846 8260B
	10	10	ug/L	100	4.6	SW846 8260B
cis-1,3-Dichloropropene	10	8.3 a	ug/L	83		SW846 8260B
	10	8.7	ug/L	87	4.1	SW846 8260B
trans-1,3-Dichloropropene	10	8.9	ug/L	89		SW846 8260B
	10	9.2	ug/L	92	4.2	SW846 8260B
Ethylbenzene	10	9.3	ug/L	93		SW846 8260B
	10	9.9	ug/L	99	6.8	SW846 8260B
2-Hexanone	10	8.9	ug/L	89		SW846 8260B
	10	9.1	ug/L	91	2.7	SW846 8260B
Isopropylbenzene	10	8.3	ug/L	83		SW846 8260B
	10	8.6	ug/L	86	3.6	SW846 8260B
Methyl acetate	10	7.5	ug/L	75		SW846 8260B
	10	7.9	ug/L	79	4.6	SW846 8260B
Methylene chloride	10	9.1	ug/L	91		SW846 8260B
	10	9.7	ug/L	97	5.7	SW846 8260B
Methylcyclohexane	10	6.4 a	ug/L	64		SW846 8260B
	10	6.6 a	ug/L	66	2.1	SW846 8260B
4-Methyl-2-pentanone	10	8.4	ug/L	84		SW846 8260B
	10	8.8	ug/L	88	4.0	SW846 8260B
Methyl tert-butyl ether (MTBE)	10	9.1	ug/L	91		SW846 8260B
	10	9.5	ug/L	95	4.3	SW846 8260B
Styrene	10	8.6	ug/L	86		SW846 8260B
	10	9.1	ug/L	91	6.2	SW846 8260B
1,1,2,2-Tetrachloroethane	10	9.5	ug/L	95		SW846 8260B
	10	10	ug/L	102	7.7	SW846 8260B
Tetrachloroethene	10	9.4	ug/L	94		SW846 8260B
	10	9.8	ug/L	98	3.5	SW846 8260B

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVVG1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-318 LDVVG1AD-LCSD

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Toluene	**10**	**9.8**	**ug/L**	**98**		**SW846 8260B**
	10	**10**	**ug/L**	**101**	**3.4**	**SW846 8260B**
1,2,4-Trichloro-benzene	10	8.9	ug/L	89		SW846 8260B
	10	9.6	ug/L	96	7.0	SW846 8260B
1,1,1-Trichloroethane	10	9.2	ug/L	92		SW846 8260B
	10	9.6	ug/L	96	4.3	SW846 8260B
1,1,2-Trichloroethane	10	9.7	ug/L	97		SW846 8260B
	10	10	ug/L	104	6.9	SW846 8260B
Trichloroethene	**10**	**9.0**	**ug/L**	**90**		**SW846 8260B**
	10	**9.7**	**ug/L**	**97**	**7.5**	**SW846 8260B**
Trichlorofluoromethane	10	9.3	ug/L	93		SW846 8260B
	10	9.6	ug/L	96	3.2	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	10	9.4	ug/L	94		SW846 8260B
	10	9.4	ug/L	94	0.95	SW846 8260B
Vinyl chloride	10	8.1	ug/L	81		SW846 8260B
	10	8.1	ug/L	81	0.22	SW846 8260B
Xylenes (total)	30	29	ug/L	98		SW846 8260B
	30	31	ug/L	103	5.0	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(73 - 122)
	94	(73 - 122)
1,2-Dichloroethane-d4	90	(61 - 128)
	93	(61 - 128)
Toluene-d8	96	(76 - 110)
	98	(76 - 110)
4-Bromofluorobenzene	102	(74 - 116)
	105	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVVG1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-318 LDVVG1AD-LCSD
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148318
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acetone	91	(22 - 200)			SW846 8260B
	84	(22 - 200)	8.1	(0-95)	SW846 8260B
Benzene	**90**	**(80 - 116)**			**SW846 8260B**
	96	**(80 - 116)**	**5.9**	**(0-20)**	**SW846 8260B**
Bromodichloromethane	97	(87 - 130)			SW846 8260B
	103	(87 - 130)	6.1	(0-30)	SW846 8260B
Bromoform	86	(76 - 150)			SW846 8260B
	89	(76 - 150)	2.9	(0-30)	SW846 8260B
Bromomethane	86	(64 - 129)			SW846 8260B
	85	(64 - 129)	0.56	(0-30)	SW846 8260B
2-Butanone	92	(28 - 237)			SW846 8260B
	97	(28 - 237)	5.3	(0-65)	SW846 8260B
Carbon disulfide	84	(73 - 139)			SW846 8260B
	87	(73 - 139)	4.4	(0-30)	SW846 8260B
Carbon tetrachloride	88	(75 - 149)			SW846 8260B
	92	(75 - 149)	4.5	(0-30)	SW846 8260B
Chlorobenzene	**93**	**(76 - 117)**			**SW846 8260B**
	97	**(76 - 117)**	**4.3**	**(0-20)**	**SW846 8260B**
Chloroethane	122	(66 - 126)			SW846 8260B
	128 a	(66 - 126)	4.6	(0-30)	SW846 8260B
Chloroform	96	(84 - 128)			SW846 8260B
	99	(84 - 128)	3.8	(0-30)	SW846 8260B
Chloromethane	82	(48 - 123)			SW846 8260B
	79	(48 - 123)	4.0	(0-30)	SW846 8260B
Cyclohexane	65 a	(70 - 130)			SW846 8260B
	66 a	(70 - 130)	2.4	(0-30)	SW846 8260B
Dibromochloromethane	90	(81 - 138)			SW846 8260B
	94	(81 - 138)	4.1	(0-30)	SW846 8260B
1,2-Dibromo-3-chloro-propane	93	(70 - 130)			SW846 8260B
	102	(70 - 130)	10	(0-30)	SW846 8260B
1,2-Dibromoethane	99	(70 - 130)			SW846 8260B
	103	(70 - 130)	4.5	(0-30)	SW846 8260B
1,2-Dichlorobenzene	92	(70 - 130)			SW846 8260B
	98	(70 - 130)	7.1	(0-30)	SW846 8260B
1,3-Dichlorobenzene	91	(70 - 130)			SW846 8260B
	96	(70 - 130)	6.0	(0-30)	SW846 8260B
1,4-Dichlorobenzene	90	(70 - 130)			SW846 8260B
	97	(70 - 130)	6.8	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVVG1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-318 LDVVG1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Dichlorodifluoromethane	59 a	(70 - 130)			SW846 8260B
	60 a	(70 - 130)	1.7	(0-30)	SW846 8260B
1,1-Dichloroethane	97	(86 - 123)			SW846 8260B
	102	(86 - 123)	4.8	(0-30)	SW846 8260B
1,2-Dichloroethane	93	(79 - 136)			SW846 8260B
	100	(79 - 136)	6.6	(0-30)	SW846 8260B
1,1-Dichloroethene	**89**	**(63 - 130)**			**SW846 8260B**
	93	**(63 - 130)**	**4.7**	**(0-20)**	**SW846 8260B**
cis-1,2-Dichloroethene	96	(85 - 113)			SW846 8260B
	99	(85 - 113)	2.8	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	91	(80 - 120)			SW846 8260B
	95	(80 - 120)	4.7	(0-30)	SW846 8260B
1,2-Dichloropropane	96	(82 - 115)			SW846 8260B
	100	(82 - 115)	4.6	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	83 a	(84 - 130)			SW846 8260B
	87	(84 - 130)	4.1	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	89	(84 - 130)			SW846 8260B
	92	(84 - 130)	4.2	(0-30)	SW846 8260B
Ethylbenzene	93	(86 - 116)			SW846 8260B
	99	(86 - 116)	6.8	(0-30)	SW846 8260B
2-Hexanone	89	(35 - 200)			SW846 8260B
	91	(35 - 200)	2.7	(0-52)	SW846 8260B
Isopropylbenzene	83	(70 - 130)			SW846 8260B
	86	(70 - 130)	3.6	(0-30)	SW846 8260B
Methyl acetate	75	(70 - 130)			SW846 8260B
	79	(70 - 130)	4.6	(0-30)	SW846 8260B
Methylene chloride	91	(78 - 118)			SW846 8260B
	97	(78 - 118)	5.7	(0-30)	SW846 8260B
Methylcyclohexane	64 a	(70 - 130)			SW846 8260B
	66 a	(70 - 130)	2.1	(0-30)	SW846 8260B
4-Methyl-2-pentanone	84	(78 - 141)			SW846 8260B
	88	(78 - 141)	4.0	(0-32)	SW846 8260B
Methyl tert-butyl ether (MTBE)	91	(70 - 130)			SW846 8260B
	95	(70 - 130)	4.3	(0-30)	SW846 8260B
Styrene	86	(85 - 117)			SW846 8260B
	91	(85 - 117)	6.2	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	95	(85 - 118)			SW846 8260B
	102	(85 - 118)	7.7	(0-30)	SW846 8260B
Tetrachloroethene	94	(88 - 113)			SW846 8260B
	98	(88 - 113)	3.5	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVVG1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-318 LDVVG1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Toluene	**98**	**(74 - 119)**			**SW846 8260B**
	101	**(74 - 119)**	**3.4**	**(0-20)**	**SW846 8260B**
1,2,4-Trichloro-benzene	89	(70 - 130)			SW846 8260B
	96	(70 - 130)	7.0	(0-30)	SW846 8260B
1,1,1-Trichloroethane	92	(78 - 140)			SW846 8260B
	96	(78 - 140)	4.3	(0-30)	SW846 8260B
1,1,2-Trichloroethane	97	(83 - 122)			SW846 8260B
	104	(83 - 122)	6.9	(0-30)	SW846 8260B
Trichloroethene	**90**	**(75 - 122)**			**SW846 8260B**
	97	**(75 - 122)**	**7.5**	**(0-20)**	**SW846 8260B**
Trichlorofluoromethane	93	(70 - 130)			SW846 8260B
	96	(70 - 130)	3.2	(0-30)	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	94	(70 - 130)			SW846 8260B
	94	(70 - 130)	0.95	(0-30)	SW846 8260B
Vinyl chloride	81	(61 - 120)			SW846 8260B
	81	(61 - 120)	0.22	(0-30)	SW846 8260B
Xylenes (total)	98	(87 - 116)			SW846 8260B
	103	(87 - 116)	5.0	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	91	(73 - 122)
	94	(73 - 122)
1,2-Dichloroethane-d4	90	(61 - 128)
	93	(61 - 128)
Toluene-d8	96	(76 - 110)
	98	(76 - 110)
4-Bromofluorobenzene	102	(74 - 116)
	105	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDWER1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-431 LDWER1AD-LCSD
Prep Date.....: 05/26/09 **Analysis Date..:** 05/26/09
Prep Batch #...: 9148431
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acetone	10	8.6	ug/L	86		SW846 8260B
	10	8.3	ug/L	83	4.6	SW846 8260B
Benzene	**10**	**9.3**	**ug/L**	**93**		**SW846 8260B**
	10	**9.0**	**ug/L**	**90**	**3.5**	**SW846 8260B**
Bromodichloromethane	10	9.4	ug/L	94		SW846 8260B
	10	8.8	ug/L	88	6.1	SW846 8260B
Bromoform	10	9.1	ug/L	91		SW846 8260B
	10	9.5	ug/L	95	4.4	SW846 8260B
Bromomethane	10	7.0	ug/L	70		SW846 8260B
	10	7.2	ug/L	72	2.0	SW846 8260B
2-Butanone	10	8.2	ug/L	82		SW846 8260B
	10	8.0	ug/L	80	1.8	SW846 8260B
Carbon disulfide	10	9.7	ug/L	97		SW846 8260B
	10	9.9	ug/L	99	1.9	SW846 8260B
Carbon tetrachloride	10	9.0	ug/L	90		SW846 8260B
	10	9.2	ug/L	92	1.7	SW846 8260B
Chlorobenzene	**10**	**9.9**	**ug/L**	**99**		**SW846 8260B**
	10	**9.5**	**ug/L**	**95**	**4.0**	**SW846 8260B**
Chloroethane	10	9.9	ug/L	99		SW846 8260B
	10	9.9	ug/L	99	0.050	SW846 8260B
Chloroform	10	9.3	ug/L	93		SW846 8260B
	10	8.8	ug/L	88	5.5	SW846 8260B
Chloromethane	10	6.9	ug/L	69		SW846 8260B
	10	6.9	ug/L	69	0.41	SW846 8260B
Cyclohexane	10	6.5 a	ug/L	65		SW846 8260B
	10	7.8	ug/L	78	17	SW846 8260B
Dibromochloromethane	10	10	ug/L	100		SW846 8260B
	10	9.6	ug/L	96	4.2	SW846 8260B
1,2-Dibromo-3-chloro-propane	10	9.4	ug/L	94		SW846 8260B
	10	9.2	ug/L	92	2.2	SW846 8260B
1,2-Dibromoethane	10	9.8	ug/L	98		SW846 8260B
	10	9.6	ug/L	96	1.7	SW846 8260B
1,2-Dichlorobenzene	10	10	ug/L	103		SW846 8260B
	10	9.7	ug/L	97	6.0	SW846 8260B
1,3-Dichlorobenzene	10	10	ug/L	102		SW846 8260B
	10	9.6	ug/L	96	6.2	SW846 8260B
1,4-Dichlorobenzene	10	10	ug/L	102		SW846 8260B
	10	9.6	ug/L	96	7.1	SW846 8260B

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDWER1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-431 LDWER1AD-LCSD

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Dichlorodifluoromethane	10	7.5	ug/L	75		SW846 8260B
	10	9.0	ug/L	90	18	SW846 8260B
1,1-Dichloroethane	10	9.2	ug/L	92		SW846 8260B
	10	8.9	ug/L	89	3.3	SW846 8260B
1,2-Dichloroethane	10	9.0	ug/L	90		SW846 8260B
	10	8.7	ug/L	87	3.6	SW846 8260B
1,1-Dichloroethene	**10**	**9.1**	**ug/L**	**91**		**SW846 8260B**
	10	**9.2**	**ug/L**	**92**	**1.0**	**SW846 8260B**
cis-1,2-Dichloroethene	10	9.7	ug/L	97		SW846 8260B
	10	9.3	ug/L	93	4.2	SW846 8260B
trans-1,2-Dichloroethene	10	9.3	ug/L	93		SW846 8260B
	10	9.0	ug/L	90	3.5	SW846 8260B
1,2-Dichloropropane	10	9.0	ug/L	90		SW846 8260B
	10	8.8	ug/L	88	3.0	SW846 8260B
cis-1,3-Dichloropropene	10	8.2 a	ug/L	82		SW846 8260B
	10	8.1 a	ug/L	81	0.86	SW846 8260B
trans-1,3-Dichloropropene	10	8.8	ug/L	88		SW846 8260B
	10	8.9	ug/L	89	1.1	SW846 8260B
Ethylbenzene	10	10	ug/L	101		SW846 8260B
	10	9.9	ug/L	99	2.7	SW846 8260B
2-Hexanone	10	8.5	ug/L	85		SW846 8260B
	10	8.6	ug/L	86	1.8	SW846 8260B
Isopropylbenzene	10	9.7	ug/L	97		SW846 8260B
	10	9.5	ug/L	95	1.3	SW846 8260B
Methyl acetate	10	7.5	ug/L	75		SW846 8260B
	10	7.5	ug/L	75	0.24	SW846 8260B
Methylene chloride	10	8.9	ug/L	89		SW846 8260B
	10	8.7	ug/L	87	1.9	SW846 8260B
Methylcyclohexane	10	6.5 a	ug/L	65		SW846 8260B
	10	8.1	ug/L	81	22	SW846 8260B
4-Methyl-2-pentanone	10	7.8	ug/L	78		SW846 8260B
	10	7.9	ug/L	79	0.47	SW846 8260B
Methyl tert-butyl ether (MTBE)	10	9.0	ug/L	90		SW846 8260B
	10	8.8	ug/L	88	1.9	SW846 8260B
Styrene	10	9.7	ug/L	97		SW846 8260B
	10	9.3	ug/L	93	4.7	SW846 8260B
1,1,2,2-Tetrachloroethane	10	9.6	ug/L	96		SW846 8260B
	10	9.2	ug/L	92	3.3	SW846 8260B
Tetrachloroethene	10	9.9	ug/L	99		SW846 8260B
	10	9.9	ug/L	99	0.13	SW846 8260B

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDWER1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-431 LDWER1AD-LCSD

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Toluene	**10**	**10**	**ug/L**	**100**		**SW846 8260B**
	10	**9.7**	**ug/L**	**97**	**3.3**	**SW846 8260B**
1,2,4-Trichloro-benzene	10	9.7	ug/L	97		SW846 8260B
	10	9.5	ug/L	95	2.8	SW846 8260B
1,1,1-Trichloroethane	10	9.2	ug/L	92		SW846 8260B
	10	9.1	ug/L	91	1.1	SW846 8260B
1,1,2-Trichloroethane	10	9.5	ug/L	95		SW846 8260B
	10	9.3	ug/L	93	1.8	SW846 8260B
Trichloroethene	**10**	**9.2**	**ug/L**	**92**		**SW846 8260B**
	10	**8.9**	**ug/L**	**89**	**2.8**	**SW846 8260B**
Trichlorofluoromethane	10	7.8	ug/L	78		SW846 8260B
	10	9.0	ug/L	90	14	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	10	9.5	ug/L	95		SW846 8260B
	10	11	ug/L	113	17	SW846 8260B
Vinyl chloride	10	8.2	ug/L	82		SW846 8260B
	10	8.2	ug/L	82	0.20	SW846 8260B
Xylenes (total)	30	32	ug/L	106		SW846 8260B
	30	30	ug/L	102	3.9	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(73 - 122)
	93	(73 - 122)
1,2-Dichloroethane-d4	91	(61 - 128)
	89	(61 - 128)
Toluene-d8	102	(76 - 110)
	101	(76 - 110)
4-Bromofluorobenzene	109	(74 - 116)
	110	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDWER1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-431 LDWER1AD-LCSD
Prep Date.....: 05/26/09 **Analysis Date..:** 05/26/09
Prep Batch #...: 9148431
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acetone	86	(22 - 200)			SW846 8260B
	83	(22 - 200)	4.6	(0-95)	SW846 8260B
Benzene	**93**	**(80 - 116)**			**SW846 8260B**
	90	**(80 - 116)**	**3.5**	**(0-20)**	**SW846 8260B**
Bromodichloromethane	94	(87 - 130)			SW846 8260B
	88	(87 - 130)	6.1	(0-30)	SW846 8260B
Bromoform	91	(76 - 150)			SW846 8260B
	95	(76 - 150)	4.4	(0-30)	SW846 8260B
Bromomethane	70	(64 - 129)			SW846 8260B
	72	(64 - 129)	2.0	(0-30)	SW846 8260B
2-Butanone	82	(28 - 237)			SW846 8260B
	80	(28 - 237)	1.8	(0-65)	SW846 8260B
Carbon disulfide	97	(73 - 139)			SW846 8260B
	99	(73 - 139)	1.9	(0-30)	SW846 8260B
Carbon tetrachloride	90	(75 - 149)			SW846 8260B
	92	(75 - 149)	1.7	(0-30)	SW846 8260B
Chlorobenzene	**99**	**(76 - 117)**			**SW846 8260B**
	95	**(76 - 117)**	**4.0**	**(0-20)**	**SW846 8260B**
Chloroethane	99	(66 - 126)			SW846 8260B
	99	(66 - 126)	0.050	(0-30)	SW846 8260B
Chloroform	93	(84 - 128)			SW846 8260B
	88	(84 - 128)	5.5	(0-30)	SW846 8260B
Chloromethane	69	(48 - 123)			SW846 8260B
	69	(48 - 123)	0.41	(0-30)	SW846 8260B
Cyclohexane	65 a	(70 - 130)			SW846 8260B
	78	(70 - 130)	17	(0-30)	SW846 8260B
Dibromochloromethane	100	(81 - 138)			SW846 8260B
	96	(81 - 138)	4.2	(0-30)	SW846 8260B
1,2-Dibromo-3-chloro-propane	94	(70 - 130)			SW846 8260B
	92	(70 - 130)	2.2	(0-30)	SW846 8260B
1,2-Dibromoethane	98	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.7	(0-30)	SW846 8260B
1,2-Dichlorobenzene	103	(70 - 130)			SW846 8260B
	97	(70 - 130)	6.0	(0-30)	SW846 8260B
1,3-Dichlorobenzene	102	(70 - 130)			SW846 8260B
	96	(70 - 130)	6.2	(0-30)	SW846 8260B
1,4-Dichlorobenzene	102	(70 - 130)			SW846 8260B
	96	(70 - 130)	7.1	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDWER1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-431 LDWER1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Dichlorodifluoromethane	75	(70 - 130)			SW846 8260B
	90	(70 - 130)	18	(0-30)	SW846 8260B
1,1-Dichloroethane	92	(86 - 123)			SW846 8260B
	89	(86 - 123)	3.3	(0-30)	SW846 8260B
1,2-Dichloroethane	90	(79 - 136)			SW846 8260B
	87	(79 - 136)	3.6	(0-30)	SW846 8260B
1,1-Dichloroethene	**91**	**(63 - 130)**			**SW846 8260B**
	92	**(63 - 130)**	**1.0**	**(0-20)**	**SW846 8260B**
cis-1,2-Dichloroethene	97	(85 - 113)			SW846 8260B
	93	(85 - 113)	4.2	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	93	(80 - 120)			SW846 8260B
	90	(80 - 120)	3.5	(0-30)	SW846 8260B
1,2-Dichloropropane	90	(82 - 115)			SW846 8260B
	88	(82 - 115)	3.0	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	82 a	(84 - 130)			SW846 8260B
	81 a	(84 - 130)	0.86	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	88	(84 - 130)			SW846 8260B
	89	(84 - 130)	1.1	(0-30)	SW846 8260B
Ethylbenzene	101	(86 - 116)			SW846 8260B
	99	(86 - 116)	2.7	(0-30)	SW846 8260B
2-Hexanone	85	(35 - 200)			SW846 8260B
	86	(35 - 200)	1.8	(0-52)	SW846 8260B
Isopropylbenzene	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	1.3	(0-30)	SW846 8260B
Methyl acetate	75	(70 - 130)			SW846 8260B
	75	(70 - 130)	0.24	(0-30)	SW846 8260B
Methylene chloride	89	(78 - 118)			SW846 8260B
	87	(78 - 118)	1.9	(0-30)	SW846 8260B
Methylcyclohexane	65 a	(70 - 130)			SW846 8260B
	81	(70 - 130)	22	(0-30)	SW846 8260B
4-Methyl-2-pentanone	78	(78 - 141)			SW846 8260B
	79	(78 - 141)	0.47	(0-32)	SW846 8260B
Methyl tert-butyl ether (MTBE)	90	(70 - 130)			SW846 8260B
	88	(70 - 130)	1.9	(0-30)	SW846 8260B
Styrene	97	(85 - 117)			SW846 8260B
	93	(85 - 117)	4.7	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	96	(85 - 118)			SW846 8260B
	92	(85 - 118)	3.3	(0-30)	SW846 8260B
Tetrachloroethene	99	(88 - 113)			SW846 8260B
	99	(88 - 113)	0.13	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDWER1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-431 LDWER1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Toluene	**100**	**(74 - 119)**			**SW846 8260B**
	97	**(74 - 119)**	**3.3**	**(0-20)**	**SW846 8260B**
1,2,4-Trichloro-benzene	97	(70 - 130)			SW846 8260B
	95	(70 - 130)	2.8	(0-30)	SW846 8260B
1,1,1-Trichloroethane	92	(78 - 140)			SW846 8260B
	91	(78 - 140)	1.1	(0-30)	SW846 8260B
1,1,2-Trichloroethane	95	(83 - 122)			SW846 8260B
	93	(83 - 122)	1.8	(0-30)	SW846 8260B
Trichloroethene	**92**	**(75 - 122)**			**SW846 8260B**
	89	**(75 - 122)**	**2.8**	**(0-20)**	**SW846 8260B**
Trichlorofluoromethane	78	(70 - 130)			SW846 8260B
	90	(70 - 130)	14	(0-30)	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	95	(70 - 130)			SW846 8260B
	113	(70 - 130)	17	(0-30)	SW846 8260B
Vinyl chloride	82	(61 - 120)			SW846 8260B
	82	(61 - 120)	0.20	(0-30)	SW846 8260B
Xylenes (total)	106	(87 - 116)			SW846 8260B
	102	(87 - 116)	3.9	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	93	(73 - 122)
	93	(73 - 122)
1,2-Dichloroethane-d4	91	(61 - 128)
	89	(61 - 128)
Toluene-d8	102	(76 - 110)
	101	(76 - 110)
4-Bromofluorobenzene	109	(74 - 116)
	110	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDXET1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-535 LDXET1AD-LCSD
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Acetone	10	7.8	ug/L	78		SW846 8260B
	10	8.2	ug/L	82	4.0	SW846 8260B
Benzene	**10**	**9.1**	**ug/L**	**91**		**SW846 8260B**
	10	**8.9**	**ug/L**	**89**	**2.6**	**SW846 8260B**
Bromodichloromethane	10	9.2	ug/L	92		SW846 8260B
	10	9.0	ug/L	90	2.4	SW846 8260B
Bromoform	10	9.9	ug/L	99		SW846 8260B
	10	9.5	ug/L	95	3.7	SW846 8260B
Bromomethane	10	6.5	ug/L	65		SW846 8260B
	10	6.6	ug/L	66	0.79	SW846 8260B
2-Butanone	10	8.0	ug/L	80		SW846 8260B
	10	7.8	ug/L	78	2.1	SW846 8260B
Carbon disulfide	10	9.8	ug/L	98		SW846 8260B
	10	9.9	ug/L	99	0.47	SW846 8260B
Carbon tetrachloride	10	9.2	ug/L	92		SW846 8260B
	10	9.3	ug/L	93	2.1	SW846 8260B
Chlorobenzene	**10**	**9.7**	**ug/L**	**97**		**SW846 8260B**
	10	**9.4**	**ug/L**	**94**	**3.4**	**SW846 8260B**
Chloroethane	10	9.1	ug/L	91		SW846 8260B
	10	9.6	ug/L	96	4.6	SW846 8260B
Chloroform	10	9.0	ug/L	90		SW846 8260B
	10	8.7	ug/L	87	3.2	SW846 8260B
Chloromethane	10	6.2	ug/L	62		SW846 8260B
	10	6.5	ug/L	65	3.7	SW846 8260B
Cyclohexane	10	6.8 a	ug/L	68		SW846 8260B
	10	7.6	ug/L	76	11	SW846 8260B
Dibromochloromethane	10	10	ug/L	103		SW846 8260B
	10	9.9	ug/L	99	4.0	SW846 8260B
1,2-Dibromo-3-chloro-propane	10	9.5	ug/L	95		SW846 8260B
	10	9.7	ug/L	97	1.8	SW846 8260B
1,2-Dibromoethane	10	9.6	ug/L	96		SW846 8260B
	10	9.4	ug/L	94	1.3	SW846 8260B
1,2-Dichlorobenzene	10	9.9	ug/L	99		SW846 8260B
	10	9.4	ug/L	94	5.3	SW846 8260B
1,3-Dichlorobenzene	10	9.9	ug/L	99		SW846 8260B
	10	9.4	ug/L	94	5.2	SW846 8260B
1,4-Dichlorobenzene	10	9.9	ug/L	99		SW846 8260B
	10	9.3	ug/L	93	6.5	SW846 8260B

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDXET1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-535 LDXET1AD-LCSD

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
Dichlorodifluoromethane	10	7.7	ug/L	77		SW846 8260B
	10	8.8	ug/L	88	14	SW846 8260B
1,1-Dichloroethane	10	9.0	ug/L	90		SW846 8260B
	10	8.8	ug/L	88	3.2	SW846 8260B
1,2-Dichloroethane	10	8.6	ug/L	86		SW846 8260B
	10	8.6	ug/L	86	0.77	SW846 8260B
1,1-Dichloroethene	**10**	**9.0**	**ug/L**	**90**		**SW846 8260B**
	10	**9.1**	**ug/L**	**91**	**1.7**	**SW846 8260B**
cis-1,2-Dichloroethene	10	9.6	ug/L	96		SW846 8260B
	10	9.3	ug/L	93	3.2	SW846 8260B
trans-1,2-Dichloroethene	10	9.2	ug/L	92		SW846 8260B
	10	9.0	ug/L	90	3.0	SW846 8260B
1,2-Dichloropropane	10	9.0	ug/L	90		SW846 8260B
	10	8.7	ug/L	87	4.0	SW846 8260B
cis-1,3-Dichloropropene	10	8.4	ug/L	84		SW846 8260B
	10	8.1 a	ug/L	81	3.3	SW846 8260B
trans-1,3-Dichloropropene	10	9.3	ug/L	93		SW846 8260B
	10	8.9	ug/L	89	3.8	SW846 8260B
Ethylbenzene	10	10	ug/L	101		SW846 8260B
	10	9.7	ug/L	97	3.5	SW846 8260B
2-Hexanone	10	7.9	ug/L	79		SW846 8260B
	10	8.6	ug/L	86	7.5	SW846 8260B
Isopropylbenzene	10	9.3	ug/L	93		SW846 8260B
	10	9.2	ug/L	92	1.2	SW846 8260B
Methyl acetate	10	7.0	ug/L	70		SW846 8260B
	10	7.2	ug/L	72	1.7	SW846 8260B
Methylene chloride	10	8.7	ug/L	87		SW846 8260B
	10	8.4	ug/L	84	3.4	SW846 8260B
Methylcyclohexane	10	6.5 a	ug/L	65		SW846 8260B
	10	7.6	ug/L	76	16	SW846 8260B
4-Methyl-2-pentanone	10	7.8	ug/L	78		SW846 8260B
	10	8.0	ug/L	80	2.9	SW846 8260B
Methyl tert-butyl ether (MTBE)	10	8.9	ug/L	89		SW846 8260B
	10	8.7	ug/L	87	2.5	SW846 8260B
Styrene	10	9.6	ug/L	96		SW846 8260B
	10	9.3	ug/L	93	3.1	SW846 8260B
1,1,2,2-Tetrachloroethane	10	9.7	ug/L	97		SW846 8260B
	10	9.3	ug/L	93	4.1	SW846 8260B
Tetrachloroethene	10	9.9	ug/L	99		SW846 8260B
	10	9.9	ug/L	99	0.060	SW846 8260B
Toluene	**10**	**9.9**	**ug/L**	**99**		**SW846 8260B**
	10	**9.7**	**ug/L**	**97**	**2.3**	**SW846 8260B**

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LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDXET1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-535 LDXET1AD-LCSD

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	RPD	METHOD
1,2,4-Trichloro-benzene	10	8.7	ug/L	87		SW846 8260B
	10	8.5	ug/L	85	3.0	SW846 8260B
1,1,1-Trichloroethane	10	9.1	ug/L	91		SW846 8260B
	10	9.1	ug/L	91	0.40	SW846 8260B
1,1,2-Trichloroethane	10	9.5	ug/L	95		SW846 8260B
	10	9.3	ug/L	93	2.6	SW846 8260B
Trichloroethene	**10**	**9.1**	**ug/L**	**91**		**SW846 8260B**
	10	**9.0**	**ug/L**	**90**	**1.0**	**SW846 8260B**
Trichlorofluoromethane	10	7.7	ug/L	77		SW846 8260B
	10	8.6	ug/L	86	12	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	10	10	ug/L	101		SW846 8260B
	10	11	ug/L	110	8.2	SW846 8260B
Vinyl chloride	10	8.1	ug/L	81		SW846 8260B
	10	8.1	ug/L	81	0.61	SW846 8260B
Xylenes (total)	30	31	ug/L	103		SW846 8260B
	30	30	ug/L	100	3.4	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	90	(73 - 122)
	92	(73 - 122)
1,2-Dichloroethane-d4	86	(61 - 128)
	88	(61 - 128)
Toluene-d8	99	(76 - 110)
	102	(76 - 110)
4-Bromofluorobenzene	107	(74 - 116)
	109	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDXET1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-535 LDXET1AD-LCSD
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acetone	78	(22 - 200)			SW846 8260B
	82	(22 - 200)	4.0	(0-95)	SW846 8260B
Benzene	**91**	**(80 - 116)**			**SW846 8260B**
	89	**(80 - 116)**	**2.6**	**(0-20)**	**SW846 8260B**
Bromodichloromethane	92	(87 - 130)			SW846 8260B
	90	(87 - 130)	2.4	(0-30)	SW846 8260B
Bromoform	99	(76 - 150)			SW846 8260B
	95	(76 - 150)	3.7	(0-30)	SW846 8260B
Bromomethane	65	(64 - 129)			SW846 8260B
	66	(64 - 129)	0.79	(0-30)	SW846 8260B
2-Butanone	80	(28 - 237)			SW846 8260B
	78	(28 - 237)	2.1	(0-65)	SW846 8260B
Carbon disulfide	98	(73 - 139)			SW846 8260B
	99	(73 - 139)	0.47	(0-30)	SW846 8260B
Carbon tetrachloride	92	(75 - 149)			SW846 8260B
	93	(75 - 149)	2.1	(0-30)	SW846 8260B
Chlorobenzene	**97**	**(76 - 117)**			**SW846 8260B**
	94	**(76 - 117)**	**3.4**	**(0-20)**	**SW846 8260B**
Chloroethane	91	(66 - 126)			SW846 8260B
	96	(66 - 126)	4.6	(0-30)	SW846 8260B
Chloroform	90	(84 - 128)			SW846 8260B
	87	(84 - 128)	3.2	(0-30)	SW846 8260B
Chloromethane	62	(48 - 123)			SW846 8260B
	65	(48 - 123)	3.7	(0-30)	SW846 8260B
Cyclohexane	68 a	(70 - 130)			SW846 8260B
	76	(70 - 130)	11	(0-30)	SW846 8260B
Dibromochloromethane	103	(81 - 138)			SW846 8260B
	99	(81 - 138)	4.0	(0-30)	SW846 8260B
1,2-Dibromo-3-chloro-propane	95	(70 - 130)			SW846 8260B
	97	(70 - 130)	1.8	(0-30)	SW846 8260B
1,2-Dibromoethane	96	(70 - 130)			SW846 8260B
	94	(70 - 130)	1.3	(0-30)	SW846 8260B
1,2-Dichlorobenzene	99	(70 - 130)			SW846 8260B
	94	(70 - 130)	5.3	(0-30)	SW846 8260B
1,3-Dichlorobenzene	99	(70 - 130)			SW846 8260B
	94	(70 - 130)	5.2	(0-30)	SW846 8260B
1,4-Dichlorobenzene	99	(70 - 130)			SW846 8260B
	93	(70 - 130)	6.5	(0-30)	SW846 8260B

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDXET1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-535 LDXET1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Dichlorodifluoromethane	77	(70 - 130)			SW846 8260B
	88	(70 - 130)	14	(0-30)	SW846 8260B
1,1-Dichloroethane	90	(86 - 123)			SW846 8260B
	88	(86 - 123)	3.2	(0-30)	SW846 8260B
1,2-Dichloroethane	86	(79 - 136)			SW846 8260B
	86	(79 - 136)	0.77	(0-30)	SW846 8260B
1,1-Dichloroethene	**90**	**(63 - 130)**			**SW846 8260B**
	91	**(63 - 130)**	**1.7**	**(0-20)**	**SW846 8260B**
cis-1,2-Dichloroethene	96	(85 - 113)			SW846 8260B
	93	(85 - 113)	3.2	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	92	(80 - 120)			SW846 8260B
	90	(80 - 120)	3.0	(0-30)	SW846 8260B
1,2-Dichloropropane	90	(82 - 115)			SW846 8260B
	87	(82 - 115)	4.0	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	84	(84 - 130)			SW846 8260B
	81 a	(84 - 130)	3.3	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	93	(84 - 130)			SW846 8260B
	89	(84 - 130)	3.8	(0-30)	SW846 8260B
Ethylbenzene	101	(86 - 116)			SW846 8260B
	97	(86 - 116)	3.5	(0-30)	SW846 8260B
2-Hexanone	79	(35 - 200)			SW846 8260B
	86	(35 - 200)	7.5	(0-52)	SW846 8260B
Isopropylbenzene	93	(70 - 130)			SW846 8260B
	92	(70 - 130)	1.2	(0-30)	SW846 8260B
Methyl acetate	70	(70 - 130)			SW846 8260B
	72	(70 - 130)	1.7	(0-30)	SW846 8260B
Methylene chloride	87	(78 - 118)			SW846 8260B
	84	(78 - 118)	3.4	(0-30)	SW846 8260B
Methylcyclohexane	65 a	(70 - 130)			SW846 8260B
	76	(70 - 130)	16	(0-30)	SW846 8260B
4-Methyl-2-pentanone	78	(78 - 141)			SW846 8260B
	80	(78 - 141)	2.9	(0-32)	SW846 8260B
Methyl tert-butyl ether (MTBE)	89	(70 - 130)			SW846 8260B
	87	(70 - 130)	2.5	(0-30)	SW846 8260B
Styrene	96	(85 - 117)			SW846 8260B
	93	(85 - 117)	3.1	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	97	(85 - 118)			SW846 8260B
	93	(85 - 118)	4.1	(0-30)	SW846 8260B
Tetrachloroethene	99	(88 - 113)			SW846 8260B
	99	(88 - 113)	0.060	(0-30)	SW846 8260B
Toluene	**99**	**(74 - 119)**			**SW846 8260B**
	97	**(74 - 119)**	**2.3**	**(0-20)**	**SW846 8260B**

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDXET1AC-LCS **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-535 LDXET1AD-LCSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
1,2,4-Trichloro-benzene	87	(70 - 130)			SW846 8260B
	85	(70 - 130)	3.0	(0-30)	SW846 8260B
1,1,1-Trichloroethane	91	(78 - 140)			SW846 8260B
	91	(78 - 140)	0.40	(0-30)	SW846 8260B
1,1,2-Trichloroethane	95	(83 - 122)			SW846 8260B
	93	(83 - 122)	2.6	(0-30)	SW846 8260B
Trichloroethene	**91**	**(75 - 122)**			**SW846 8260B**
	90	**(75 - 122)**	**1.0**	**(0-20)**	**SW846 8260B**
Trichlorofluoromethane	77	(70 - 130)			SW846 8260B
	86	(70 - 130)	12	(0-30)	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	101	(70 - 130)			SW846 8260B
	110	(70 - 130)	8.2	(0-30)	SW846 8260B
Vinyl chloride	81	(61 - 120)			SW846 8260B
	81	(61 - 120)	0.61	(0-30)	SW846 8260B
Xylenes (total)	103	(87 - 116)			SW846 8260B
	100	(87 - 116)	3.4	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	90	(73 - 122)
	92	(73 - 122)
1,2-Dichloroethane-d4	86	(61 - 128)
	88	(61 - 128)
Toluene-d8	99	(76 - 110)
	102	(76 - 110)
4-Bromofluorobenzene	107	(74 - 116)
	109	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LC5521AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E150253-005 LC5521AD-MSD
Date Sampled...: 05/14/09 09:30 **Date Received..:** 05/15/09
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148318
Dilution Factor: 40

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Acetone	770	400	1000	ug/L	69		SW846 8260B
	770	400	1000	ug/L	64	1.8	SW846 8260B
Benzene	**ND**	**400**	**370**	**ug/L**	**93**		**SW846 8260B**
	ND	**400**	**370**	**ug/L**	**92**	**1.4**	**SW846 8260B**
Bromodichloromethane	ND	400	400	ug/L	100		SW846 8260B
	ND	400	390	ug/L	99	1.7	SW846 8260B
Bromoform	ND	400	340	ug/L	86		SW846 8260B
	ND	400	340	ug/L	85	0.31	SW846 8260B
Bromomethane	ND	400	220	ug/L	55		SW846 8260B
	ND	400	300	ug/L	74	30	SW846 8260B
2-Butanone	820	400	1200	ug/L	92		SW846 8260B
	820	400	1100	ug/L	81	3.8	SW846 8260B
Carbon disulfide	17	400	340	ug/L	81		SW846 8260B
	17	400	360	ug/L	86	5.4	SW846 8260B
Carbon tetrachloride	ND	400	370	ug/L	94		SW846 8260B
	ND	400	380	ug/L	94	0.26	SW846 8260B
Chlorobenzene	**ND**	**400**	**370**	**ug/L**	**93**		**SW846 8260B**
	ND	**400**	**380**	**ug/L**	**94**	**1.0**	**SW846 8260B**
Chloroethane	ND	400	390	ug/L	98		SW846 8260B
	ND	400	480	ug/L	120	21	SW846 8260B
Chloroform	270	400	650	ug/L	96		SW846 8260B
	270	400	640	ug/L	92	2.6	SW846 8260B
Chloromethane	ND	400	260	ug/L	64		SW846 8260B
	ND	400	290	ug/L	74	14	SW846 8260B
Cyclohexane	ND	400	290	ug/L	74		SW846 8260B
	ND	400	310	ug/L	77	4.5	SW846 8260B
Dibromochloromethane	ND	400	360	ug/L	90		SW846 8260B
	ND	400	360	ug/L	90	0.22	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	400	410	ug/L	102		SW846 8260B
	ND	400	420	ug/L	105	3.5	SW846 8260B
1,2-Dibromoethane	ND	400	400	ug/L	100		SW846 8260B
	ND	400	400	ug/L	100	0.34	SW846 8260B
1,2-Dichlorobenzene	ND	400	380	ug/L	94		SW846 8260B
	ND	400	370	ug/L	92	2.7	SW846 8260B
1,3-Dichlorobenzene	ND	400	370	ug/L	92		SW846 8260B
	ND	400	370	ug/L	92	0.47	SW846 8260B
1,4-Dichlorobenzene	ND	400	370	ug/L	92		SW846 8260B
	ND	400	370	ug/L	92	0.15	SW846 8260B

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LC5521AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E150253-005 LC5521AD-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Dichlorodifluoromethane	ND	400	250	ug/L	62 a		SW846 8260B
	ND	400	270	ug/L	68 a	9.5	SW846 8260B
1,1-Dichloroethane	ND	400	390	ug/L	97		SW846 8260B
	ND	400	390	ug/L	98	1.2	SW846 8260B
1,2-Dichloroethane	42	400	430	ug/L	97		SW846 8260B
	42	400	430	ug/L	96	1.2	SW846 8260B
1,1-Dichloroethene	**ND**	**400**	**360**	**ug/L**	**91**		**SW846 8260B**
	ND	**400**	**380**	**ug/L**	**95**	**4.2**	**SW846 8260B**
cis-1,2-Dichloroethene	210	400	600	ug/L	98		SW846 8260B
	210	400	590	ug/L	95	1.9	SW846 8260B
trans-1,2-Dichloroethene	ND	400	360	ug/L	91		SW846 8260B
	ND	400	360	ug/L	91	0.56	SW846 8260B
1,2-Dichloropropane	ND	400	400	ug/L	99		SW846 8260B
	ND	400	390	ug/L	98	1.4	SW846 8260B
cis-1,3-Dichloropropene	ND	400	320	ug/L	80 a		SW846 8260B
	ND	400	320	ug/L	80 a	0.36	SW846 8260B
trans-1,3-Dichloropropene	ND	400	340	ug/L	84		SW846 8260B
	ND	400	340	ug/L	86	2.8	SW846 8260B
Ethylbenzene	ND	400	390	ug/L	96		SW846 8260B
	ND	400	380	ug/L	96	0.07	SW846 8260B
2-Hexanone	ND	400	360	ug/L	91		SW846 8260B
	ND	400	350	ug/L	89	2.7	SW846 8260B
Isopropylbenzene	ND	400	330	ug/L	84		SW846 8260B
	ND	400	340	ug/L	86	2.6	SW846 8260B
Methyl acetate	27	400	320	ug/L	74		SW846 8260B
	27	400	310	ug/L	72	2.3	SW846 8260B
Methylene chloride	200	400	560	ug/L	90		SW846 8260B
	200	400	560	ug/L	91	0.52	SW846 8260B
Methylcyclohexane	ND	400	300	ug/L	75		SW846 8260B
	ND	400	310	ug/L	79	4.4	SW846 8260B
4-Methyl-2-pentanone	ND	400	360	ug/L	89		SW846 8260B
	ND	400	360	ug/L	91	2.0	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	400	360	ug/L	91		SW846 8260B
	ND	400	360	ug/L	91	0.10	SW846 8260B
Styrene	ND	400	340	ug/L	86		SW846 8260B
	ND	400	350	ug/L	87	1.2	SW846 8260B
1,1,2,2-Tetrachloroethane	1100	400	1300	ug/L	43 a		SW846 8260B
	1100	400	1200	ug/L	38 a	1.8	SW846 8260B
Tetrachloroethene	25	400	410	ug/L	95		SW846 8260B
	25	400	420	ug/L	98	2.5	SW846 8260B

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LC5521AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E150253-005 LC5521AD-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Toluene	**ND**	**400**	**390**	**ug/L**	**97**		**SW846 8260B**
	ND	**400**	**400**	**ug/L**	**99**	**2.6**	**SW846 8260B**
1,2,4-Trichloro-benzene	ND	400	360	ug/L	91		SW846 8260B
	ND	400	370	ug/L	92	1.2	SW846 8260B
1,1,1-Trichloroethane	ND	400	380	ug/L	95		SW846 8260B
	ND	400	380	ug/L	96	0.60	SW846 8260B
1,1,2-Trichloroethane	690	400	1100	ug/L	91		SW846 8260B
	690	400	1000	ug/L	86	2.0	SW846 8260B
Trichloroethene	**90**	**400**	**470**	**ug/L**	**95**		**SW846 8260B**
	90	**400**	**470**	**ug/L**	**95**	**0.65**	**SW846 8260B**
Trichlorofluoromethane	ND	400	340	ug/L	86		SW846 8260B
	ND	400	400	ug/L	99	14	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	400	440	ug/L	111		SW846 8260B
	ND	400	450	ug/L	111	0.76	SW846 8260B
Vinyl chloride	ND	400	320	ug/L	79 a		SW846 8260B
	ND	400	340	ug/L	84 a	6.3	SW846 8260B
Xylenes (total)	ND	1200	1200	ug/L	98		SW846 8260B
	ND	1200	1200	ug/L	98	0.35	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(73 - 122)
	92	(73 - 122)
1,2-Dichloroethane-d4	94	(61 - 128)
	91	(61 - 128)
Toluene-d8	96	(76 - 110)
	96	(76 - 110)
4-Bromofluorobenzene	102	(74 - 116)
	101	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LC5521AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E150253-005 LC5521AD-MSD
Date Sampled...: 05/14/09 09:30 **Date Received..:** 05/15/09
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148318
Dilution Factor: 40

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acetone	69	(45 - 128)			SW846 8260B
	64	(45 - 128)	1.8	(0-30)	SW846 8260B
Benzene	**93**	**(78 - 118)**			**SW846 8260B**
	92	**(78 - 118)**	**1.4**	**(0-20)**	**SW846 8260B**
Bromodichloromethane	100	(80 - 146)			SW846 8260B
	99	(80 - 146)	1.7	(0-30)	SW846 8260B
Bromoform	86	(58 - 176)			SW846 8260B
	85	(58 - 176)	0.31	(0-30)	SW846 8260B
Bromomethane	55	(55 - 145)			SW846 8260B
	74	(55 - 145)	30	(0-30)	SW846 8260B
2-Butanone	92	(71 - 123)			SW846 8260B
	81	(71 - 123)	3.8	(0-30)	SW846 8260B
Carbon disulfide	81	(69 - 138)			SW846 8260B
	86	(69 - 138)	5.4	(0-41)	SW846 8260B
Carbon tetrachloride	94	(63 - 176)			SW846 8260B
	94	(63 - 176)	0.26	(0-30)	SW846 8260B
Chlorobenzene	**93**	**(76 - 117)**			**SW846 8260B**
	94	**(76 - 117)**	**1.0**	**(0-20)**	**SW846 8260B**
Chloroethane	98	(59 - 142)			SW846 8260B
	120	(59 - 142)	21	(0-30)	SW846 8260B
Chloroform	96	(83 - 141)			SW846 8260B
	92	(83 - 141)	2.6	(0-30)	SW846 8260B
Chloromethane	64	(40 - 137)			SW846 8260B
	74	(40 - 137)	14	(0-39)	SW846 8260B
Cyclohexane	74	(70 - 130)			SW846 8260B
	77	(70 - 130)	4.5	(0-30)	SW846 8260B
Dibromochloromethane	90	(71 - 158)			SW846 8260B
	90	(71 - 158)	0.22	(0-30)	SW846 8260B
1,2-Dibromo-3-chloro-propane	102	(70 - 130)			SW846 8260B
	105	(70 - 130)	3.5	(0-30)	SW846 8260B
1,2-Dibromoethane	100	(70 - 130)			SW846 8260B
	100	(70 - 130)	0.34	(0-30)	SW846 8260B
1,2-Dichlorobenzene	94	(70 - 130)			SW846 8260B
	92	(70 - 130)	2.7	(0-30)	SW846 8260B
1,3-Dichlorobenzene	92	(70 - 130)			SW846 8260B
	92	(70 - 130)	0.47	(0-30)	SW846 8260B
1,4-Dichlorobenzene	92	(70 - 130)			SW846 8260B
	92	(70 - 130)	0.15	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LC5521AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E150253-005 LC5521AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Dichlorodifluoromethane	62 a	(70 - 130)			SW846 8260B
	68 a	(70 - 130)	9.5	(0-30)	SW846 8260B
1,1-Dichloroethane	97	(88 - 127)			SW846 8260B
	98	(88 - 127)	1.2	(0-30)	SW846 8260B
1,2-Dichloroethane	97	(71 - 160)			SW846 8260B
	96	(71 - 160)	1.2	(0-30)	SW846 8260B
1,1-Dichloroethene	**91**	**(62 - 130)**			**SW846 8260B**
	95	**(62 - 130)**	**4.2**	**(0-20)**	**SW846 8260B**
cis-1,2-Dichloroethene	98	(87 - 114)			SW846 8260B
	95	(87 - 114)	1.9	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	91	(85 - 116)			SW846 8260B
	91	(85 - 116)	0.56	(0-30)	SW846 8260B
1,2-Dichloropropane	99	(87 - 114)			SW846 8260B
	98	(87 - 114)	1.4	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	80 a	(82 - 130)			SW846 8260B
	80 a	(82 - 130)	0.36	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	84	(73 - 147)			SW846 8260B
	86	(73 - 147)	2.8	(0-30)	SW846 8260B
Ethylbenzene	96	(86 - 132)			SW846 8260B
	96	(86 - 132)	0.07	(0-30)	SW846 8260B
2-Hexanone	91	(81 - 128)			SW846 8260B
	89	(81 - 128)	2.7	(0-30)	SW846 8260B
Isopropylbenzene	84	(70 - 130)			SW846 8260B
	86	(70 - 130)	2.6	(0-30)	SW846 8260B
Methyl acetate	74	(70 - 130)			SW846 8260B
	72	(70 - 130)	2.3	(0-30)	SW846 8260B
Methylene chloride	90	(82 - 115)			SW846 8260B
	91	(82 - 115)	0.52	(0-30)	SW846 8260B
Methylcyclohexane	75	(70 - 130)			SW846 8260B
	79	(70 - 130)	4.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	89	(82 - 135)			SW846 8260B
	91	(82 - 135)	2.0	(0-30)	SW846 8260B
Methyl tert-butyl ether (MTBE)	91	(70 - 130)			SW846 8260B
	91	(70 - 130)	0.10	(0-30)	SW846 8260B
Styrene	86	(83 - 120)			SW846 8260B
	87	(83 - 120)	1.2	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	43 a	(88 - 116)			SW846 8260B
	38 a	(88 - 116)	1.8	(0-30)	SW846 8260B
Tetrachloroethene	95	(85 - 121)			SW846 8260B
	98	(85 - 121)	2.5	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LC5521AC-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E150253-005 LC5521AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Toluene	**97**	**(70 - 119)**			**SW846 8260B**
	99	**(70 - 119)**	**2.6**	**(0-20)**	**SW846 8260B**
1,2,4-Trichloro-benzene	91	(70 - 130)			SW846 8260B
	92	(70 - 130)	1.2	(0-30)	SW846 8260B
1,1,1-Trichloroethane	95	(71 - 162)			SW846 8260B
	96	(71 - 162)	0.60	(0-30)	SW846 8260B
1,1,2-Trichloroethane	91	(86 - 129)			SW846 8260B
	86	(86 - 129)	2.0	(0-30)	SW846 8260B
Trichloroethene	**95**	**(62 - 130)**			**SW846 8260B**
	95	**(62 - 130)**	**0.65**	**(0-20)**	**SW846 8260B**
Trichlorofluoromethane	86	(70 - 130)			SW846 8260B
	99	(70 - 130)	14	(0-30)	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	111	(70 - 130)			SW846 8260B
	111	(70 - 130)	0.76	(0-30)	SW846 8260B
Vinyl chloride	79 a	(88 - 126)			SW846 8260B
	84 a	(88 - 126)	6.3	(0-30)	SW846 8260B
Xylenes (total)	98	(89 - 121)			SW846 8260B
	98	(89 - 121)	0.35	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(73 - 122)
	92	(73 - 122)
1,2-Dichloroethane-d4	94	(61 - 128)
	91	(61 - 128)
Toluene-d8	96	(76 - 110)
	96	(76 - 110)
4-Bromofluorobenzene	102	(74 - 116)
	101	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDGDE1AT-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E210139-001 LDGDE1AU-MSD
Date Sampled...: 05/19/09 17:04 **Date Received..:** 05/21/09
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148318
Dilution Factor: 7.14

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Acetone	ND	71	68	ug/L	87		SW846 8260B
	ND	71	70	ug/L	90	3.6	SW846 8260B
Benzene	**ND**	**71**	**63**	**ug/L**	**89**		**SW846 8260B**
	ND	**71**	**67**	**ug/L**	**94**	**6.1**	**SW846 8260B**
Bromodichloromethane	ND	71	66	ug/L	92		SW846 8260B
	ND	71	72	ug/L	101	9.2	SW846 8260B
Bromoform	ND	71	58	ug/L	81		SW846 8260B
	ND	71	61	ug/L	85	5.7	SW846 8260B
Bromomethane	ND	71	56	ug/L	79		SW846 8260B
	ND	71	64	ug/L	89	12	SW846 8260B
2-Butanone	ND	71	68	ug/L	96		SW846 8260B
	ND	71	71	ug/L	99	3.7	SW846 8260B
Carbon disulfide	ND	71	57	ug/L	80		SW846 8260B
	ND	71	60	ug/L	84	5.3	SW846 8260B
Carbon tetrachloride	ND	71	66	ug/L	93		SW846 8260B
	ND	71	66	ug/L	93	0.25	SW846 8260B
Chlorobenzene	**ND**	**71**	**63**	**ug/L**	**88**		**SW846 8260B**
	ND	**71**	**67**	**ug/L**	**94**	**5.8**	**SW846 8260B**
Chloroethane	ND	71	87	ug/L	121		SW846 8260B
	ND	71	89	ug/L	125	3.0	SW846 8260B
Chloroform	ND	71	66	ug/L	92		SW846 8260B
	ND	71	70	ug/L	98	6.4	SW846 8260B
Chloromethane	ND	71	51	ug/L	71		SW846 8260B
	ND	71	56	ug/L	78	9.2	SW846 8260B
Cyclohexane	ND	71	52	ug/L	72		SW846 8260B
	ND	71	51	ug/L	72	1.2	SW846 8260B
Dibromochloromethane	ND	71	60	ug/L	84		SW846 8260B
	ND	71	64	ug/L	90	6.8	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	71	69	ug/L	97		SW846 8260B
	ND	71	72	ug/L	101	4.0	SW846 8260B
1,2-Dibromoethane	ND	71	68	ug/L	96		SW846 8260B
	ND	71	73	ug/L	102	6.3	SW846 8260B
1,2-Dichlorobenzene	ND	71	62	ug/L	86		SW846 8260B
	ND	71	67	ug/L	94	8.6	SW846 8260B
1,3-Dichlorobenzene	ND	71	61	ug/L	85		SW846 8260B
	ND	71	65	ug/L	91	6.4	SW846 8260B
1,4-Dichlorobenzene	ND	71	60	ug/L	84		SW846 8260B
	ND	71	65	ug/L	92	8.2	SW846 8260B

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDGDE1AT-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E210139-001 LDGDE1AU-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Dichlorodifluoromethane	ND	71	46	ug/L	64 a		SW846 8260B
	ND	71	43	ug/L	60 a	6.3	SW846 8260B
1,1-Dichloroethane	1.7	71	68	ug/L	93		SW846 8260B
	1.7	71	72	ug/L	99	6.3	SW846 8260B
1,2-Dichloroethane	ND	71	66	ug/L	93		SW846 8260B
	ND	71	70	ug/L	99	6.4	SW846 8260B
1,1-Dichloroethene	**ND**	**71**	**65**	**ug/L**	**91**		**SW846 8260B**
	ND	**71**	**67**	**ug/L**	**94**	**3.7**	**SW846 8260B**
cis-1,2-Dichloroethene	1.8	71	65	ug/L	89		SW846 8260B
	1.8	71	72	ug/L	98	9.5	SW846 8260B
trans-1,2-Dichloroethene	ND	71	63	ug/L	88		SW846 8260B
	ND	71	66	ug/L	93	4.8	SW846 8260B
1,2-Dichloropropane	ND	71	66	ug/L	93		SW846 8260B
	ND	71	72	ug/L	101	8.2	SW846 8260B
cis-1,3-Dichloropropene	ND	71	50	ug/L	70 a		SW846 8260B
	ND	71	55	ug/L	78 a	10	SW846 8260B
trans-1,3-Dichloropropene	ND	71	57	ug/L	80		SW846 8260B
	ND	71	61	ug/L	86	6.7	SW846 8260B
Ethylbenzene	ND	71	64	ug/L	89		SW846 8260B
	ND	71	68	ug/L	95	6.6	SW846 8260B
2-Hexanone	ND	71	63	ug/L	88		SW846 8260B
	ND	71	66	ug/L	92	4.7	SW846 8260B
Isopropylbenzene	ND	71	57	ug/L	80		SW846 8260B
	ND	71	59	ug/L	82	2.4	SW846 8260B
Methyl acetate	ND	71	54	ug/L	76		SW846 8260B
	ND	71	57	ug/L	80	5.8	SW846 8260B
Methylene chloride	ND	71	62	ug/L	87		SW846 8260B
	ND	71	66	ug/L	92	6.1	SW846 8260B
Methylcyclohexane	ND	71	56	ug/L	79		SW846 8260B
	ND	71	53	ug/L	74	6.1	SW846 8260B
4-Methyl-2-pentanone	ND	71	59	ug/L	83		SW846 8260B
	ND	71	64	ug/L	89	7.7	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	71	63	ug/L	88		SW846 8260B
	ND	71	67	ug/L	94	6.5	SW846 8260B
Styrene	ND	71	58	ug/L	82 a		SW846 8260B
	ND	71	62	ug/L	87	5.9	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	71	66	ug/L	92		SW846 8260B
	ND	71	72	ug/L	100	8.6	SW846 8260B
Tetrachloroethene	ND	71	66	ug/L	93		SW846 8260B
	ND	71	68	ug/L	95	2.6	SW846 8260B

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDGDE1AT-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E210139-001 LDGDE1AU-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Toluene	**ND**	**71**	**66**	**ug/L**	**92**		**SW846 8260B**
	ND	**71**	**70**	**ug/L**	**98**	**6.4**	**SW846 8260B**
1,2,4-Trichloro-benzene	ND	71	56	ug/L	78		SW846 8260B
	ND	71	60	ug/L	84	6.7	SW846 8260B
1,1,1-Trichloroethane	ND	71	66	ug/L	92		SW846 8260B
	ND	71	68	ug/L	95	2.8	SW846 8260B
1,1,2-Trichloroethane	ND	71	67	ug/L	94		SW846 8260B
	ND	71	72	ug/L	101	7.6	SW846 8260B
Trichloroethene	**220**	**71**	**270**	**ug/L**	**61 a**		**SW846 8260B**
	220	**71**	**270**	**ug/L**	**68**	**2.0**	**SW846 8260B**
Trichlorofluoromethane	ND	71	71	ug/L	100		SW846 8260B
	ND	71	70	ug/L	98	1.3	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	71	80	ug/L	112		SW846 8260B
	ND	71	73	ug/L	102	9.2	SW846 8260B
Vinyl chloride	ND	71	56	ug/L	78 a		SW846 8260B
	ND	71	58	ug/L	81 a	3.3	SW846 8260B
Xylenes (total)	ND	210	200	ug/L	94		SW846 8260B
	ND	210	210	ug/L	98	4.6	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(73 - 122)
	91	(73 - 122)
1,2-Dichloroethane-d4	94	(61 - 128)
	92	(61 - 128)
Toluene-d8	96	(76 - 110)
	95	(76 - 110)
4-Bromofluorobenzene	103	(74 - 116)
	99	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDGDE1AT-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E210139-001 LDGDE1AU-MSD
Date Sampled...: 05/19/09 17:04 **Date Received..:** 05/21/09
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148318
Dilution Factor: 7.14

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acetone	87	(45 - 128)			SW846 8260B
	90	(45 - 128)	3.6	(0-30)	SW846 8260B
Benzene	**89**	**(78 - 118)**			**SW846 8260B**
	94	**(78 - 118)**	**6.1**	**(0-20)**	**SW846 8260B**
Bromodichloromethane	92	(80 - 146)			SW846 8260B
	101	(80 - 146)	9.2	(0-30)	SW846 8260B
Bromoform	81	(58 - 176)			SW846 8260B
	85	(58 - 176)	5.7	(0-30)	SW846 8260B
Bromomethane	79	(55 - 145)			SW846 8260B
	89	(55 - 145)	12	(0-30)	SW846 8260B
2-Butanone	96	(71 - 123)			SW846 8260B
	99	(71 - 123)	3.7	(0-30)	SW846 8260B
Carbon disulfide	80	(69 - 138)			SW846 8260B
	84	(69 - 138)	5.3	(0-41)	SW846 8260B
Carbon tetrachloride	93	(63 - 176)			SW846 8260B
	93	(63 - 176)	0.25	(0-30)	SW846 8260B
Chlorobenzene	**88**	**(76 - 117)**			**SW846 8260B**
	94	**(76 - 117)**	**5.8**	**(0-20)**	**SW846 8260B**
Chloroethane	121	(59 - 142)			SW846 8260B
	125	(59 - 142)	3.0	(0-30)	SW846 8260B
Chloroform	92	(83 - 141)			SW846 8260B
	98	(83 - 141)	6.4	(0-30)	SW846 8260B
Chloromethane	71	(40 - 137)			SW846 8260B
	78	(40 - 137)	9.2	(0-39)	SW846 8260B
Cyclohexane	72	(70 - 130)			SW846 8260B
	72	(70 - 130)	1.2	(0-30)	SW846 8260B
Dibromochloromethane	84	(71 - 158)			SW846 8260B
	90	(71 - 158)	6.8	(0-30)	SW846 8260B
1,2-Dibromo-3-chloro-propane	97	(70 - 130)			SW846 8260B
	101	(70 - 130)	4.0	(0-30)	SW846 8260B
1,2-Dibromoethane	96	(70 - 130)			SW846 8260B
	102	(70 - 130)	6.3	(0-30)	SW846 8260B
1,2-Dichlorobenzene	86	(70 - 130)			SW846 8260B
	94	(70 - 130)	8.6	(0-30)	SW846 8260B
1,3-Dichlorobenzene	85	(70 - 130)			SW846 8260B
	91	(70 - 130)	6.4	(0-30)	SW846 8260B
1,4-Dichlorobenzene	84	(70 - 130)			SW846 8260B
	92	(70 - 130)	8.2	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDGDE1AT-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E210139-001 LDGDE1AU-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Dichlorodifluoromethane	64 a	(70 - 130)			SW846 8260B
	60 a	(70 - 130)	6.3	(0-30)	SW846 8260B
1,1-Dichloroethane	93	(88 - 127)			SW846 8260B
	99	(88 - 127)	6.3	(0-30)	SW846 8260B
1,2-Dichloroethane	93	(71 - 160)			SW846 8260B
	99	(71 - 160)	6.4	(0-30)	SW846 8260B
1,1-Dichloroethene	**91**	**(62 - 130)**			**SW846 8260B**
	94	**(62 - 130)**	**3.7**	**(0-20)**	**SW846 8260B**
cis-1,2-Dichloroethene	89	(87 - 114)			SW846 8260B
	98	(87 - 114)	9.5	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	88	(85 - 116)			SW846 8260B
	93	(85 - 116)	4.8	(0-30)	SW846 8260B
1,2-Dichloropropane	93	(87 - 114)			SW846 8260B
	101	(87 - 114)	8.2	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	70 a	(82 - 130)			SW846 8260B
	78 a	(82 - 130)	10	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	80	(73 - 147)			SW846 8260B
	86	(73 - 147)	6.7	(0-30)	SW846 8260B
Ethylbenzene	89	(86 - 132)			SW846 8260B
	95	(86 - 132)	6.6	(0-30)	SW846 8260B
2-Hexanone	88	(81 - 128)			SW846 8260B
	92	(81 - 128)	4.7	(0-30)	SW846 8260B
Isopropylbenzene	80	(70 - 130)			SW846 8260B
	82	(70 - 130)	2.4	(0-30)	SW846 8260B
Methyl acetate	76	(70 - 130)			SW846 8260B
	80	(70 - 130)	5.8	(0-30)	SW846 8260B
Methylene chloride	87	(82 - 115)			SW846 8260B
	92	(82 - 115)	6.1	(0-30)	SW846 8260B
Methylcyclohexane	79	(70 - 130)			SW846 8260B
	74	(70 - 130)	6.1	(0-30)	SW846 8260B
4-Methyl-2-pentanone	83	(82 - 135)			SW846 8260B
	89	(82 - 135)	7.7	(0-30)	SW846 8260B
Methyl tert-butyl ether (MTBE)	88	(70 - 130)			SW846 8260B
	94	(70 - 130)	6.5	(0-30)	SW846 8260B
Styrene	82 a	(83 - 120)			SW846 8260B
	87	(83 - 120)	5.9	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	92	(88 - 116)			SW846 8260B
	100	(88 - 116)	8.6	(0-30)	SW846 8260B
Tetrachloroethene	93	(85 - 121)			SW846 8260B
	95	(85 - 121)	2.6	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDGDE1AT-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E210139-001 LDGDE1AU-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Toluene	**92**	**(70 - 119)**			**SW846 8260B**
	98	**(70 - 119)**	**6.4**	**(0-20)**	**SW846 8260B**
1,2,4-Trichloro-benzene	78	(70 - 130)			SW846 8260B
	84	(70 - 130)	6.7	(0-30)	SW846 8260B
1,1,1-Trichloroethane	92	(71 - 162)			SW846 8260B
	95	(71 - 162)	2.8	(0-30)	SW846 8260B
1,1,2-Trichloroethane	94	(86 - 129)			SW846 8260B
	101	(86 - 129)	7.6	(0-30)	SW846 8260B
Trichloroethene	**61 a**	**(62 - 130)**			**SW846 8260B**
	68	**(62 - 130)**	**2.0**	**(0-20)**	**SW846 8260B**
Trichlorofluoromethane	100	(70 - 130)			SW846 8260B
	98	(70 - 130)	1.3	(0-30)	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	112	(70 - 130)			SW846 8260B
	102	(70 - 130)	9.2	(0-30)	SW846 8260B
Vinyl chloride	78 a	(88 - 126)			SW846 8260B
	81 a	(88 - 126)	3.3	(0-30)	SW846 8260B
Xylenes (total)	94	(89 - 121)			SW846 8260B
	98	(89 - 121)	4.6	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	94	(73 - 122)
	91	(73 - 122)
1,2-Dichloroethane-d4	94	(61 - 128)
	92	(61 - 128)
Toluene-d8	96	(76 - 110)
	95	(76 - 110)
4-Bromofluorobenzene	103	(74 - 116)
	99	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDDTR1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9E200123-011 LDDTR1AD-MSD
Date Sampled...: 05/19/09 13:35 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Acetone	ND	10	7.0	ug/L	70		SW846 8260B
	ND	10	7.2	ug/L	72	2.3	SW846 8260B
Benzene	**ND**	**10**	**9.1**	**ug/L**	**91**		**SW846 8260B**
	ND	**10**	**9.0**	**ug/L**	**90**	**1.8**	**SW846 8260B**
Bromodichloromethane	ND	10	9.3	ug/L	93		SW846 8260B
	ND	10	9.1	ug/L	91	2.0	SW846 8260B
Bromoform	ND	10	8.2	ug/L	82		SW846 8260B
	ND	10	7.9	ug/L	79	3.8	SW846 8260B
Bromomethane	ND	10	5.9	ug/L	59		SW846 8260B
	ND	10	5.7	ug/L	57	4.8	SW846 8260B
2-Butanone	ND	10	7.8	ug/L	78		SW846 8260B
	ND	10	7.5	ug/L	75	3.4	SW846 8260B
Carbon disulfide	ND	10	10	ug/L	104		SW846 8260B
	ND	10	10	ug/L	100	3.3	SW846 8260B
Carbon tetrachloride	ND	10	8.6	ug/L	86		SW846 8260B
	ND	10	8.5	ug/L	85	0.79	SW846 8260B
Chlorobenzene	**ND**	**10**	**9.4**	**ug/L**	**94**		**SW846 8260B**
	ND	**10**	**9.4**	**ug/L**	**94**	**0.74**	**SW846 8260B**
Chloroethane	ND	10	14	ug/L	137		SW846 8260B
	ND	10	13	ug/L	127	7.0	SW846 8260B
Chloroform	ND	10	9.0	ug/L	90		SW846 8260B
	ND	10	9.0	ug/L	90	0.78	SW846 8260B
Chloromethane	ND	10	5.5	ug/L	55		SW846 8260B
	ND	10	5.3	ug/L	53	4.1	SW846 8260B
Cyclohexane	ND	10	6.0	ug/L	60 a		SW846 8260B
	ND	10	6.0	ug/L	60 a	1.4	SW846 8260B
Dibromochloromethane	ND	10	9.4	ug/L	94		SW846 8260B
	ND	10	9.3	ug/L	93	0.91	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	9.2	ug/L	92		SW846 8260B
	ND	10	9.3	ug/L	93	1.7	SW846 8260B
1,2-Dibromoethane	ND	10	9.7	ug/L	97		SW846 8260B
	ND	10	9.6	ug/L	96	1.0	SW846 8260B
1,2-Dichlorobenzene	ND	10	9.4	ug/L	94		SW846 8260B
	ND	10	9.3	ug/L	93	0.90	SW846 8260B
1,3-Dichlorobenzene	ND	10	9.3	ug/L	93		SW846 8260B
	ND	10	9.3	ug/L	93	0.46	SW846 8260B
1,4-Dichlorobenzene	ND	10	9.2	ug/L	92		SW846 8260B
	ND	10	9.3	ug/L	93	0.56	SW846 8260B

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDDTR1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9E200123-011 LDDTR1AD-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Dichlorodifluoromethane	ND	10	7.4	ug/L	74		SW846 8260B
	ND	10	7.0	ug/L	70	4.8	SW846 8260B
1,1-Dichloroethane	ND	10	9.1	ug/L	91		SW846 8260B
	ND	10	9.1	ug/L	91	0.15	SW846 8260B
1,2-Dichloroethane	ND	10	9.1	ug/L	91		SW846 8260B
	ND	10	8.7	ug/L	87	4.6	SW846 8260B
1,1-Dichloroethene	**ND**	**10**	**8.8**	**ug/L**	**88**		**SW846 8260B**
	ND	**10**	**8.8**	**ug/L**	**88**	**0.60**	**SW846 8260B**
cis-1,2-Dichloroethene	ND	10	9.2	ug/L	92		SW846 8260B
	ND	10	9.2	ug/L	92	0.28	SW846 8260B
trans-1,2-Dichloroethene	ND	10	9.0	ug/L	90		SW846 8260B
	ND	10	8.9	ug/L	89	1.6	SW846 8260B
1,2-Dichloropropane	ND	10	8.8	ug/L	88		SW846 8260B
	ND	10	8.9	ug/L	89	0.95	SW846 8260B
cis-1,3-Dichloropropene	ND	10	5.7	ug/L	57 a		SW846 8260B
	ND	10	5.6	ug/L	56 a	1.8	SW846 8260B
trans-1,3-Dichloropropene	ND	10	5.9	ug/L	59 a		SW846 8260B
	ND	10	6.0	ug/L	60 a	0.77	SW846 8260B
Ethylbenzene	ND	10	9.6	ug/L	96		SW846 8260B
	ND	10	9.4	ug/L	94	1.5	SW846 8260B
2-Hexanone	ND	10	8.0	ug/L	80 a		SW846 8260B
	ND	10	8.1	ug/L	81	0.69	SW846 8260B
Isopropylbenzene	ND	10	8.4	ug/L	84		SW846 8260B
	ND	10	8.5	ug/L	85	0.92	SW846 8260B
Methyl acetate	ND	10	6.8	ug/L	68 a		SW846 8260B
	ND	10	6.8	ug/L	68 a	0.11	SW846 8260B
Methylene chloride	ND	10	8.5	ug/L	85		SW846 8260B
	ND	10	8.2	ug/L	82	2.9	SW846 8260B
Methylcyclohexane	ND	10	5.5	ug/L	55 a		SW846 8260B
	ND	10	5.4	ug/L	54 a	1.4	SW846 8260B
4-Methyl-2-pentanone	ND	10	7.3	ug/L	73 a		SW846 8260B
	ND	10	7.3	ug/L	73 a	0.91	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	10	8.6	ug/L	86		SW846 8260B
	ND	10	8.6	ug/L	86	0.06	SW846 8260B
Styrene	ND	10	9.0	ug/L	90		SW846 8260B
	ND	10	9.0	ug/L	90	0.26	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	10	9.7	ug/L	97		SW846 8260B
	ND	10	9.6	ug/L	96	0.44	SW846 8260B
Tetrachloroethene	ND	10	9.2	ug/L	92		SW846 8260B
	ND	10	9.2	ug/L	92	0.40	SW846 8260B

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDDTR1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9E200123-011 LDDTR1AD-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Toluene	**ND**	**10**	**9.8**	**ug/L**	**98**		**SW846 8260B**
	ND	**10**	**9.7**	**ug/L**	**97**	**0.71**	**SW846 8260B**
1,2,4-Trichloro-benzene	ND	10	8.0	ug/L	80		SW846 8260B
	ND	10	8.3	ug/L	83	3.7	SW846 8260B
1,1,1-Trichloroethane	ND	10	9.0	ug/L	90		SW846 8260B
	ND	10	8.8	ug/L	88	1.5	SW846 8260B
1,1,2-Trichloroethane	ND	10	9.6	ug/L	96		SW846 8260B
	ND	10	9.6	ug/L	96	0.34	SW846 8260B
Trichloroethene	**1.8**	**10**	**10**	**ug/L**	**87**		**SW846 8260B**
	1.8	**10**	**10**	**ug/L**	**87**	**0.26**	**SW846 8260B**
Trichlorofluoromethane	ND	10	7.7	ug/L	77		SW846 8260B
	ND	10	7.4	ug/L	74	3.1	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	10	9.4	ug/L	94		SW846 8260B
	ND	10	9.1	ug/L	91	2.3	SW846 8260B
Vinyl chloride	ND	10	8.0	ug/L	80 a		SW846 8260B
	ND	10	7.8	ug/L	78 a	1.5	SW846 8260B
Xylenes (total)	ND	30	30	ug/L	99		SW846 8260B
	ND	30	29	ug/L	98	0.85	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(73 - 122)
	94	(73 - 122)
1,2-Dichloroethane-d4	91	(61 - 128)
	89	(61 - 128)
Toluene-d8	101	(76 - 110)
	101	(76 - 110)
4-Bromofluorobenzene	111	(74 - 116)
	110	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDDTR1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9E200123-011 LDDTR1AD-MSD
Date Sampled...: 05/19/09 13:35 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148431
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acetone	70	(45 - 128)			SW846 8260B
	72	(45 - 128)	2.3	(0-30)	SW846 8260B
Benzene	**91**	**(78 - 118)**			**SW846 8260B**
	90	**(78 - 118)**	**1.8**	**(0-20)**	**SW846 8260B**
Bromodichloromethane	93	(80 - 146)			SW846 8260B
	91	(80 - 146)	2.0	(0-30)	SW846 8260B
Bromoform	82	(58 - 176)			SW846 8260B
	79	(58 - 176)	3.8	(0-30)	SW846 8260B
Bromomethane	59	(55 - 145)			SW846 8260B
	57	(55 - 145)	4.8	(0-30)	SW846 8260B
2-Butanone	78	(71 - 123)			SW846 8260B
	75	(71 - 123)	3.4	(0-30)	SW846 8260B
Carbon disulfide	104	(69 - 138)			SW846 8260B
	100	(69 - 138)	3.3	(0-41)	SW846 8260B
Carbon tetrachloride	86	(63 - 176)			SW846 8260B
	85	(63 - 176)	0.79	(0-30)	SW846 8260B
Chlorobenzene	**94**	**(76 - 117)**			**SW846 8260B**
	94	**(76 - 117)**	**0.74**	**(0-20)**	**SW846 8260B**
Chloroethane	137	(59 - 142)			SW846 8260B
	127	(59 - 142)	7.0	(0-30)	SW846 8260B
Chloroform	90	(83 - 141)			SW846 8260B
	90	(83 - 141)	0.78	(0-30)	SW846 8260B
Chloromethane	55	(40 - 137)			SW846 8260B
	53	(40 - 137)	4.1	(0-39)	SW846 8260B
Cyclohexane	60 a	(70 - 130)			SW846 8260B
	60 a	(70 - 130)	1.4	(0-30)	SW846 8260B
Dibromochloromethane	94	(71 - 158)			SW846 8260B
	93	(71 - 158)	0.91	(0-30)	SW846 8260B
1,2-Dibromo-3-chloro-propane	92	(70 - 130)			SW846 8260B
	93	(70 - 130)	1.7	(0-30)	SW846 8260B
1,2-Dibromoethane	97	(70 - 130)			SW846 8260B
	96	(70 - 130)	1.0	(0-30)	SW846 8260B
1,2-Dichlorobenzene	94	(70 - 130)			SW846 8260B
	93	(70 - 130)	0.90	(0-30)	SW846 8260B
1,3-Dichlorobenzene	93	(70 - 130)			SW846 8260B
	93	(70 - 130)	0.46	(0-30)	SW846 8260B
1,4-Dichlorobenzene	92	(70 - 130)			SW846 8260B
	93	(70 - 130)	0.56	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDDTR1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9E200123-011 LDDTR1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Dichlorodifluoromethane	74	(70 - 130)			SW846 8260B
	70	(70 - 130)	4.8	(0-30)	SW846 8260B
1,1-Dichloroethane	91	(88 - 127)			SW846 8260B
	91	(88 - 127)	0.15	(0-30)	SW846 8260B
1,2-Dichloroethane	91	(71 - 160)			SW846 8260B
	87	(71 - 160)	4.6	(0-30)	SW846 8260B
1,1-Dichloroethene	**88**	**(62 - 130)**			**SW846 8260B**
	88	**(62 - 130)**	**0.60**	**(0-20)**	**SW846 8260B**
cis-1,2-Dichloroethene	92	(87 - 114)			SW846 8260B
	92	(87 - 114)	0.28	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	90	(85 - 116)			SW846 8260B
	89	(85 - 116)	1.6	(0-30)	SW846 8260B
1,2-Dichloropropane	88	(87 - 114)			SW846 8260B
	89	(87 - 114)	0.95	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	57 a	(82 - 130)			SW846 8260B
	56 a	(82 - 130)	1.8	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	59 a	(73 - 147)			SW846 8260B
	60 a	(73 - 147)	0.77	(0-30)	SW846 8260B
Ethylbenzene	96	(86 - 132)			SW846 8260B
	94	(86 - 132)	1.5	(0-30)	SW846 8260B
2-Hexanone	80 a	(81 - 128)			SW846 8260B
	81	(81 - 128)	0.69	(0-30)	SW846 8260B
Isopropylbenzene	84	(70 - 130)			SW846 8260B
	85	(70 - 130)	0.92	(0-30)	SW846 8260B
Methyl acetate	68 a	(70 - 130)			SW846 8260B
	68 a	(70 - 130)	0.11	(0-30)	SW846 8260B
Methylene chloride	85	(82 - 115)			SW846 8260B
	82	(82 - 115)	2.9	(0-30)	SW846 8260B
Methylcyclohexane	55 a	(70 - 130)			SW846 8260B
	54 a	(70 - 130)	1.4	(0-30)	SW846 8260B
4-Methyl-2-pentanone	73 a	(82 - 135)			SW846 8260B
	73 a	(82 - 135)	0.91	(0-30)	SW846 8260B
Methyl tert-butyl ether (MTBE)	86	(70 - 130)			SW846 8260B
	86	(70 - 130)	0.06	(0-30)	SW846 8260B
Styrene	90	(83 - 120)			SW846 8260B
	90	(83 - 120)	0.26	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	97	(88 - 116)			SW846 8260B
	96	(88 - 116)	0.44	(0-30)	SW846 8260B
Tetrachloroethene	92	(85 - 121)			SW846 8260B
	92	(85 - 121)	0.40	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDDTR1AC-MS **Matrix.....:** WG
MS Lot-Sample #: A9E200123-011 LDDTR1AD-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Toluene	**98**	**(70 - 119)**			**SW846 8260B**
	97	**(70 - 119)**	**0.71**	**(0-20)**	**SW846 8260B**
1,2,4-Trichloro-benzene	80	(70 - 130)			SW846 8260B
	83	(70 - 130)	3.7	(0-30)	SW846 8260B
1,1,1-Trichloroethane	90	(71 - 162)			SW846 8260B
	88	(71 - 162)	1.5	(0-30)	SW846 8260B
1,1,2-Trichloroethane	96	(86 - 129)			SW846 8260B
	96	(86 - 129)	0.34	(0-30)	SW846 8260B
Trichloroethene	**87**	**(62 - 130)**			**SW846 8260B**
	87	**(62 - 130)**	**0.26**	**(0-20)**	**SW846 8260B**
Trichlorofluoromethane	77	(70 - 130)			SW846 8260B
	74	(70 - 130)	3.1	(0-30)	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	94	(70 - 130)			SW846 8260B
	91	(70 - 130)	2.3	(0-30)	SW846 8260B
Vinyl chloride	80 a	(88 - 126)			SW846 8260B
	78 a	(88 - 126)	1.5	(0-30)	SW846 8260B
Xylenes (total)	99	(89 - 121)			SW846 8260B
	98	(89 - 121)	0.85	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(73 - 122)
	94	(73 - 122)
1,2-Dichloroethane-d4	91	(61 - 128)
	89	(61 - 128)
Toluene-d8	101	(76 - 110)
	101	(76 - 110)
4-Bromofluorobenzene	111	(74 - 116)
	110	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDDTX1A8-MS **Matrix.....:** WG
MS Lot-Sample #: A9E200123-014 LDDTX1A9-MSD
Date Sampled...: 05/19/09 16:20 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Acetone	ND	10	6.5	ug/L	65		SW846 8260B
	ND	10	7.2	ug/L	72	11	SW846 8260B
Benzene	**ND**	**10**	**8.9**	**ug/L**	**89**		**SW846 8260B**
	ND	**10**	**9.4**	**ug/L**	**94**	**5.6**	**SW846 8260B**
Bromodichloromethane	ND	10	9.0	ug/L	90		SW846 8260B
	ND	10	9.4	ug/L	94	4.2	SW846 8260B
Bromoform	ND	10	8.3	ug/L	83		SW846 8260B
	ND	10	8.3	ug/L	83	0.33	SW846 8260B
Bromomethane	ND	10	7.4	ug/L	74		SW846 8260B
	ND	10	8.5	ug/L	85	13	SW846 8260B
2-Butanone	ND	10	6.8	ug/L	68 a		SW846 8260B
	ND	10	7.2	ug/L	72	6.2	SW846 8260B
Carbon disulfide	0.51	10	11	ug/L	107		SW846 8260B
	0.51	10	11	ug/L	107	0.08	SW846 8260B
Carbon tetrachloride	ND	10	9.3	ug/L	93		SW846 8260B
	ND	10	9.4	ug/L	94	1.2	SW846 8260B
Chlorobenzene	**ND**	**10**	**9.2**	**ug/L**	**92**		**SW846 8260B**
	ND	**10**	**9.9**	**ug/L**	**99**	**7.4**	**SW846 8260B**
Chloroethane	ND	10	16	ug/L	158 a		SW846 8260B
	ND	10	17	ug/L	169 a	6.3	SW846 8260B
Chloroform	ND	10	8.8	ug/L	88		SW846 8260B
	ND	10	9.4	ug/L	94	6.9	SW846 8260B
Chloromethane	ND	10	5.3	ug/L	53		SW846 8260B
	ND	10	6.0	ug/L	60	12	SW846 8260B
Cyclohexane	ND	10	7.2	ug/L	72		SW846 8260B
	ND	10	6.4	ug/L	64 a	11	SW846 8260B
Dibromochloromethane	ND	10	9.3	ug/L	93		SW846 8260B
	ND	10	9.6	ug/L	96	3.4	SW846 8260B
1,2-Dibromo-3-chloro-propane	ND	10	8.4	ug/L	84		SW846 8260B
	ND	10	8.5	ug/L	85	1.5	SW846 8260B
1,2-Dibromoethane	ND	10	9.0	ug/L	90		SW846 8260B
	ND	10	9.4	ug/L	94	3.3	SW846 8260B
1,2-Dichlorobenzene	ND	10	9.2	ug/L	92		SW846 8260B
	ND	10	9.8	ug/L	98	5.5	SW846 8260B
1,3-Dichlorobenzene	ND	10	9.0	ug/L	90		SW846 8260B
	ND	10	9.8	ug/L	98	8.4	SW846 8260B
1,4-Dichlorobenzene	ND	10	9.1	ug/L	91		SW846 8260B
	ND	10	9.8	ug/L	98	7.1	SW846 8260B

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDDTX1A8-MS **Matrix.....:** WG
MS Lot-Sample #: A9E200123-014 LDDTX1A9-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Dichlorodifluoromethane	ND	10	8.7	ug/L	87		SW846 8260B
	ND	10	7.3	ug/L	73	18	SW846 8260B
1,1-Dichloroethane	1.5	10	10	ug/L	87 a		SW846 8260B
	1.5	10	11	ug/L	94	6.4	SW846 8260B
1,2-Dichloroethane	0.67	10	9.1	ug/L	85		SW846 8260B
	0.67	10	9.7	ug/L	90	5.8	SW846 8260B
1,1-Dichloroethene	**ND**	**10**	**9.2**	**ug/L**	**92**		**SW846 8260B**
	ND	**10**	**9.4**	**ug/L**	**94**	**2.6**	**SW846 8260B**
cis-1,2-Dichloroethene	0.75	10	9.8	ug/L	91		SW846 8260B
	0.75	10	11	ug/L	98	6.7	SW846 8260B
trans-1,2-Dichloroethene	ND	10	8.9	ug/L	89		SW846 8260B
	ND	10	9.5	ug/L	95	6.6	SW846 8260B
1,2-Dichloropropane	ND	10	8.6	ug/L	86 a		SW846 8260B
	ND	10	9.2	ug/L	92	6.2	SW846 8260B
cis-1,3-Dichloropropene	ND	10	6.2	ug/L	62 a		SW846 8260B
	ND	10	6.0	ug/L	60 a	3.0	SW846 8260B
trans-1,3-Dichloropropene	ND	10	6.5	ug/L	65 a		SW846 8260B
	ND	10	6.0	ug/L	60 a	9.1	SW846 8260B
Ethylbenzene	ND	10	9.3	ug/L	93		SW846 8260B
	ND	10	10	ug/L	101	8.0	SW846 8260B
2-Hexanone	ND	10	7.1	ug/L	71 a		SW846 8260B
	ND	10	7.8	ug/L	78 a	10	SW846 8260B
Isopropylbenzene	ND	10	8.6	ug/L	86		SW846 8260B
	ND	10	9.4	ug/L	94	9.2	SW846 8260B
Methyl acetate	ND	10	6.0	ug/L	60 a		SW846 8260B
	ND	10	6.6	ug/L	66 a	8.8	SW846 8260B
Methylene chloride	ND	10	8.4	ug/L	84		SW846 8260B
	ND	10	8.8	ug/L	88	5.0	SW846 8260B
Methylcyclohexane	ND	10	7.0	ug/L	70		SW846 8260B
	ND	10	6.0	ug/L	60 a	16	SW846 8260B
4-Methyl-2-pentanone	ND	10	6.5	ug/L	65 a		SW846 8260B
	ND	10	6.7	ug/L	67 a	3.6	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	10	8.0	ug/L	80		SW846 8260B
	ND	10	8.7	ug/L	87	8.1	SW846 8260B
Styrene	ND	10	8.0	ug/L	80 a		SW846 8260B
	ND	10	8.5	ug/L	85	5.1	SW846 8260B
1,1,2,2-Tetrachloroethane	ND	10	8.7	ug/L	87 a		SW846 8260B
	ND	10	9.1	ug/L	91	4.3	SW846 8260B
Tetrachloroethene	ND	10	9.6	ug/L	96		SW846 8260B
	ND	10	9.9	ug/L	99	3.3	SW846 8260B

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MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDDTX1A8-MS **Matrix.....:** WG
MS Lot-Sample #: A9E200123-014 LDDTX1A9-MSD

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Toluene	**ND**	**10**	**9.5**	**ug/L**	**95**		**SW846 8260B**
	ND	**10**	**10**	**ug/L**	**101**	**5.4**	**SW846 8260B**
1,2,4-Trichloro-benzene	ND	10	7.4	ug/L	74		SW846 8260B
	ND	10	8.4	ug/L	84	14	SW846 8260B
1,1,1-Trichloroethane	ND	10	9.1	ug/L	91		SW846 8260B
	ND	10	9.7	ug/L	97	6.1	SW846 8260B
1,1,2-Trichloroethane	ND	10	9.0	ug/L	90		SW846 8260B
	ND	10	9.3	ug/L	93	3.3	SW846 8260B
Trichloroethene	**ND**	**10**	**8.7**	**ug/L**	**87**		**SW846 8260B**
	ND	**10**	**9.3**	**ug/L**	**93**	**6.7**	**SW846 8260B**
Trichlorofluoromethane	ND	10	8.6	ug/L	86		SW846 8260B
	ND	10	8.3	ug/L	83	3.0	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	10	11	ug/L	114		SW846 8260B
	ND	10	9.7	ug/L	97	16	SW846 8260B
Vinyl chloride	ND	10	8.3	ug/L	83 a		SW846 8260B
	ND	10	8.5	ug/L	85 a	2.0	SW846 8260B
Xylenes (total)	ND	30	29	ug/L	97		SW846 8260B
	ND	30	32	ug/L	106	8.7	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(73 - 122)
	96	(73 - 122)
1,2-Dichloroethane-d4	90	(61 - 128)
	89	(61 - 128)
Toluene-d8	100	(76 - 110)
	101	(76 - 110)
4-Bromofluorobenzene	108	(74 - 116)
	109	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDDTX1A8-MS **Matrix.....:** WG
MS Lot-Sample #: A9E200123-014 LDDTX1A9-MSD
Date Sampled...: 05/19/09 16:20 **Date Received..:** 05/20/09
Prep Date.....: 05/27/09 **Analysis Date..:** 05/27/09
Prep Batch #...: 9148535
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Acetone	65	(45 - 128)			SW846 8260B
	72	(45 - 128)	11	(0-30)	SW846 8260B
Benzene	**89**	**(78 - 118)**			**SW846 8260B**
	94	**(78 - 118)**	**5.6**	**(0-20)**	**SW846 8260B**
Bromodichloromethane	90	(80 - 146)			SW846 8260B
	94	(80 - 146)	4.2	(0-30)	SW846 8260B
Bromoform	83	(58 - 176)			SW846 8260B
	83	(58 - 176)	0.33	(0-30)	SW846 8260B
Bromomethane	74	(55 - 145)			SW846 8260B
	85	(55 - 145)	13	(0-30)	SW846 8260B
2-Butanone	68 a	(71 - 123)			SW846 8260B
	72	(71 - 123)	6.2	(0-30)	SW846 8260B
Carbon disulfide	107	(69 - 138)			SW846 8260B
	107	(69 - 138)	0.08	(0-41)	SW846 8260B
Carbon tetrachloride	93	(63 - 176)			SW846 8260B
	94	(63 - 176)	1.2	(0-30)	SW846 8260B
Chlorobenzene	**92**	**(76 - 117)**			**SW846 8260B**
	99	**(76 - 117)**	**7.4**	**(0-20)**	**SW846 8260B**
Chloroethane	158 a	(59 - 142)			SW846 8260B
	169 a	(59 - 142)	6.3	(0-30)	SW846 8260B
Chloroform	88	(83 - 141)			SW846 8260B
	94	(83 - 141)	6.9	(0-30)	SW846 8260B
Chloromethane	53	(40 - 137)			SW846 8260B
	60	(40 - 137)	12	(0-39)	SW846 8260B
Cyclohexane	72	(70 - 130)			SW846 8260B
	64 a	(70 - 130)	11	(0-30)	SW846 8260B
Dibromochloromethane	93	(71 - 158)			SW846 8260B
	96	(71 - 158)	3.4	(0-30)	SW846 8260B
1,2-Dibromo-3-chloro-propane	84	(70 - 130)			SW846 8260B
	85	(70 - 130)	1.5	(0-30)	SW846 8260B
1,2-Dibromoethane	90	(70 - 130)			SW846 8260B
	94	(70 - 130)	3.3	(0-30)	SW846 8260B
1,2-Dichlorobenzene	92	(70 - 130)			SW846 8260B
	98	(70 - 130)	5.5	(0-30)	SW846 8260B
1,3-Dichlorobenzene	90	(70 - 130)			SW846 8260B
	98	(70 - 130)	8.4	(0-30)	SW846 8260B
1,4-Dichlorobenzene	91	(70 - 130)			SW846 8260B
	98	(70 - 130)	7.1	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDDTX1A8-MS **Matrix.....:** WG
MS Lot-Sample #: A9E200123-014 LDDTX1A9-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Dichlorodifluoromethane	87	(70 - 130)			SW846 8260B
	73	(70 - 130)	18	(0-30)	SW846 8260B
1,1-Dichloroethane	87 a	(88 - 127)			SW846 8260B
	94	(88 - 127)	6.4	(0-30)	SW846 8260B
1,2-Dichloroethane	85	(71 - 160)			SW846 8260B
	90	(71 - 160)	5.8	(0-30)	SW846 8260B
1,1-Dichloroethene	**92**	**(62 - 130)**			**SW846 8260B**
	94	**(62 - 130)**	**2.6**	**(0-20)**	**SW846 8260B**
cis-1,2-Dichloroethene	91	(87 - 114)			SW846 8260B
	98	(87 - 114)	6.7	(0-30)	SW846 8260B
trans-1,2-Dichloroethene	89	(85 - 116)			SW846 8260B
	95	(85 - 116)	6.6	(0-30)	SW846 8260B
1,2-Dichloropropane	86 a	(87 - 114)			SW846 8260B
	92	(87 - 114)	6.2	(0-30)	SW846 8260B
cis-1,3-Dichloropropene	62 a	(82 - 130)			SW846 8260B
	60 a	(82 - 130)	3.0	(0-30)	SW846 8260B
trans-1,3-Dichloropropene	65 a	(73 - 147)			SW846 8260B
	60 a	(73 - 147)	9.1	(0-30)	SW846 8260B
Ethylbenzene	93	(86 - 132)			SW846 8260B
	101	(86 - 132)	8.0	(0-30)	SW846 8260B
2-Hexanone	71 a	(81 - 128)			SW846 8260B
	78 a	(81 - 128)	10	(0-30)	SW846 8260B
Isopropylbenzene	86	(70 - 130)			SW846 8260B
	94	(70 - 130)	9.2	(0-30)	SW846 8260B
Methyl acetate	60 a	(70 - 130)			SW846 8260B
	66 a	(70 - 130)	8.8	(0-30)	SW846 8260B
Methylene chloride	84	(82 - 115)			SW846 8260B
	88	(82 - 115)	5.0	(0-30)	SW846 8260B
Methylcyclohexane	70	(70 - 130)			SW846 8260B
	60 a	(70 - 130)	16	(0-30)	SW846 8260B
4-Methyl-2-pentanone	65 a	(82 - 135)			SW846 8260B
	67 a	(82 - 135)	3.6	(0-30)	SW846 8260B
Methyl tert-butyl ether (MTBE)	80	(70 - 130)			SW846 8260B
	87	(70 - 130)	8.1	(0-30)	SW846 8260B
Styrene	80 a	(83 - 120)			SW846 8260B
	85	(83 - 120)	5.1	(0-30)	SW846 8260B
1,1,2,2-Tetrachloroethane	87 a	(88 - 116)			SW846 8260B
	91	(88 - 116)	4.3	(0-30)	SW846 8260B
Tetrachloroethene	96	(85 - 121)			SW846 8260B
	99	(85 - 121)	3.3	(0-30)	SW846 8260B

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MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDDTX1A8-MS **Matrix.....:** WG
MS Lot-Sample #: A9E200123-014 LDDTX1A9-MSD

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Toluene	**95**	**(70 - 119)**			**SW846 8260B**
	101	**(70 - 119)**	**5.4**	**(0-20)**	**SW846 8260B**
1,2,4-Trichloro-benzene	74	(70 - 130)			SW846 8260B
	84	(70 - 130)	14	(0-30)	SW846 8260B
1,1,1-Trichloroethane	91	(71 - 162)			SW846 8260B
	97	(71 - 162)	6.1	(0-30)	SW846 8260B
1,1,2-Trichloroethane	90	(86 - 129)			SW846 8260B
	93	(86 - 129)	3.3	(0-30)	SW846 8260B
Trichloroethene	**87**	**(62 - 130)**			**SW846 8260B**
	93	**(62 - 130)**	**6.7**	**(0-20)**	**SW846 8260B**
Trichlorofluoromethane	86	(70 - 130)			SW846 8260B
	83	(70 - 130)	3.0	(0-30)	SW846 8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	114	(70 - 130)			SW846 8260B
	97	(70 - 130)	16	(0-30)	SW846 8260B
Vinyl chloride	83 a	(88 - 126)			SW846 8260B
	85 a	(88 - 126)	2.0	(0-30)	SW846 8260B
Xylenes (total)	97	(89 - 121)			SW846 8260B
	106	(89 - 121)	8.7	(0-30)	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	95	(73 - 122)
	96	(73 - 122)
1,2-Dichloroethane-d4	90	(61 - 128)
	89	(61 - 128)
Toluene-d8	100	(76 - 110)
	101	(76 - 110)
4-Bromofluorobenzene	108	(74 - 116)
	109	(74 - 116)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDJQ81AA **Matrix.....:** WATER
MB Lot-Sample #: A9E220000-109

Prep Date.....: 05/22/09
Analysis Date..: 05/22/09 **Prep Batch #...:** 9142109
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methane	**0.23 J**	**0.50**	**ug/L**	**RSK SOP-175**
Ethene	ND	0.50	ug/L	RSK SOP-175
Ethane	ND	0.50	ug/L	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVDR1AA **Matrix.....:** WATER
MB Lot-Sample #: A9E280000-221

Prep Date.....: 05/27/09
Analysis Date..: 05/27/09 **Prep Batch #...:** 9148221
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methane	ND	0.50	ug/L	RSK SOP-175
Ethane	ND	0.50	ug/L	RSK SOP-175
Ethene	ND	0.50	ug/L	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVD11AA **Matrix.....:** WATER
MB Lot-Sample #: A9E280000-222

Prep Date.....: 05/27/09
Analysis Date..: 05/28/09 **Prep Batch #...:** 9148222
Dilution Factor: 1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Methane	**0.24 J**	**0.50**	**ug/L**	**RSK SOP-175**
Ethane	ND	0.50	ug/L	RSK SOP-175
Ethene	ND	0.50	ug/L	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

J Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDJQ81AC **Matrix.....:** WATER
LCS Lot-Sample#: A9E220000-109
Prep Date.....: 05/21/09 **Analysis Date..:** 05/22/09
Prep Batch #...: 9142109
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Methane	**73**	**77**	**ug/L**	**106**	**RSK SOP-175**
Ethane	**140**	**140**	**ug/L**	**99**	**RSK SOP-175**
Ethene	**130**	**130**	**ug/L**	**104**	**RSK SOP-175**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDJQ81AC **Matrix.....:** WATER
LCS Lot-Sample#: A9E220000-109
Prep Date.....: 05/21/09 **Analysis Date..:** 05/22/09
Prep Batch #...: 9142109
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Methane	**106**	**(75 - 127)**	**RSK SOP-175**
Ethane	**99**	**(74 - 138)**	**RSK SOP-175**
Ethene	**104**	**(73 - 140)**	**RSK SOP-175**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVDR1AC **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-221
Prep Date.....: 05/27/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148221
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Methane	**73**	**77**	**ug/L**	**105**	**RSK SOP-175**
Ethane	**140**	**150**	**ug/L**	**107**	**RSK SOP-175**
Ethene	**130**	**160**	**ug/L**	**124**	**RSK SOP-175**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVDR1AC **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-221
Prep Date.....: 05/27/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148221
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Methane	**105**	**(75 - 127)**	**RSK SOP-175**
Ethane	**107**	**(74 - 138)**	**RSK SOP-175**
Ethene	**124**	**(73 - 140)**	**RSK SOP-175**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVD11AC **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-222
Prep Date.....: 05/27/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148222
Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Methane	**73**	**76**	**ug/L**	**104**	**RSK SOP-175**
Ethane	**140**	**140**	**ug/L**	**103**	**RSK SOP-175**
Ethene	**130**	**150**	**ug/L**	**117**	**RSK SOP-175**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDVD11AC **Matrix.....:** WATER
LCS Lot-Sample#: A9E280000-222
Prep Date.....: 05/27/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148222
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Methane	**104**	**(75 - 127)**	**RSK SOP-175**
Ethane	**103**	**(74 - 138)**	**RSK SOP-175**
Ethene	**117**	**(73 - 140)**	**RSK SOP-175**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LC1RD1AF-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E140151-009 LC1RD1AG-MSD
Date Sampled...: 05/13/09 14:26 **Date Received..:** 05/14/09
Prep Date.....: 05/22/09 **Analysis Date..:** 05/22/09
Prep Batch #...: 9142109
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Methane	**620**	**73**	**1600**	**ug/L**	**1330 a**		**RSK SOP-175**
	620	**73**	**1700**	**ug/L**	**1490 a**	**7.3**	**RSK SOP-175**
Ethane	**1.7**	**140**	**130**	**ug/L**	**91**		**RSK SOP-175**
	1.7	**140**	**120**	**ug/L**	**88**	**2.6**	**RSK SOP-175**
Ethene	**0.77**	**130**	**120**	**ug/L**	**93**		**RSK SOP-175**
	0.77	**130**	**110**	**ug/L**	**90**	**3.5**	**RSK SOP-175**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: 9E19164 Work Order #...: LC1RD1AF-MS Matrix.....: WATER
MS Lot-Sample #: A9E140151-009 LC1RD1AG-MSD
Date Sampled...: 05/13/09 14:26 Date Received..: 05/14/09
Prep Date.....: 05/22/09 Analysis Date..: 05/22/09
Prep Batch #...: 9142109
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Methane	1330 a	(75 - 127)			RSK SOP-175
	1490 a	(75 - 127)	7.3	(0-30)	RSK SOP-175
Ethane	91	(74 - 138)			RSK SOP-175
	88	(74 - 138)	2.6	(0-30)	RSK SOP-175
Ethene	93	(73 - 140)			RSK SOP-175
	90	(73 - 140)	3.5	(0-30)	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: 9E19164 Work Order #...: LDDTX1A5-MS Matrix.....: WG
MS Lot-Sample #: A9E200123-014 LDDTX1A6-MSD
Date Sampled...: 05/19/09 16:20 Date Received..: 05/20/09
Prep Date.....: 05/28/09 Analysis Date..: 05/28/09
Prep Batch #...: 9148221
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Methane	20	73	89	ug/L	95		RSK SOP-175
	20	73	120	ug/L	143	33	RSK SOP-175
	Qualifiers:		a,p				
Ethane	0.50	140	94	ug/L	68 a		RSK SOP-175
	0.50	140	150	ug/L	111 p	48	RSK SOP-175
Ethene	0.39	130	96	ug/L	75		RSK SOP-175
	0.39	130	150	ug/L	120 p	46	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: 9E19164 Work Order #...: LDDTX1A5-MS Matrix.....: WG
MS Lot-Sample #: A9E200123-014 LDDTX1A6-MSD
Date Sampled...: 05/19/09 16:20 Date Received..: 05/20/09
Prep Date.....: 05/28/09 Analysis Date..: 05/28/09
Prep Batch #...: 9148221
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Methane	95	(75 - 127)			RSK SOP-175
	143 a,p	(75 - 127)	33	(0-30)	RSK SOP-175
Ethane	68 a	(74 - 138)			RSK SOP-175
	111 p	(74 - 138)	48	(0-30)	RSK SOP-175
Ethene	75	(73 - 140)			RSK SOP-175
	120 p	(73 - 140)	46	(0-30)	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

p Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

GC Volatiles

Client Lot #...: 9E19164 Work Order #...: LDGGF1AX-MS Matrix.....: WATER
MS Lot-Sample #: A9E210148-001 LDGGF1A0-MSD
Date Sampled...: 05/20/09 08:10 Date Received..: 05/21/09
Prep Date.....: 05/28/09 Analysis Date..: 05/28/09
Prep Batch #...: 9148222
Dilution Factor: 1

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Methane	150	73	240	ug/L	122		RSK SOP-175
	150	73	240	ug/L	121	0.12	RSK SOP-175
Ethane	1.6	140	140	ug/L	100		RSK SOP-175
	1.6	140	140	ug/L	101	1.4	RSK SOP-175
Ethene	0.45	130	140	ug/L	107		RSK SOP-175
	0.45	130	140	ug/L	108	1.2	RSK SOP-175

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC Volatiles

Client Lot #...: 9E19164 **Work Order #...:** LDGGF1AX-MS **Matrix.....:** WATER
MS Lot-Sample #: A9E210148-001 LDGGF1A0-MSD
Date Sampled...: 05/20/09 08:10 **Date Received..:** 05/21/09
Prep Date.....: 05/28/09 **Analysis Date..:** 05/28/09
Prep Batch #...: 9148222
Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Methane	**122**	**(75 - 127)**			**RSK SOP-175**
	121	**(75 - 127)**	**0.12**	**(0-30)**	**RSK SOP-175**
Ethane	**100**	**(74 - 138)**			**RSK SOP-175**
	101	**(74 - 138)**	**1.4**	**(0-30)**	**RSK SOP-175**
Ethene	**107**	**(73 - 140)**			**RSK SOP-175**
	108	**(73 - 140)**	**1.2**	**(0-30)**	**RSK SOP-175**

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: 9E19164 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A9E200000-016 **Prep Batch #...:** 9140016						
Iron	ND	50.0	ug/L	SW846 6020	05/20/09	LDDEE1C6
		Dilution Factor: 1				
Manganese	ND	15.0	ug/L	SW846 6020	05/20/09	LDDEE1C5
		Dilution Factor: 1				
MB Lot-Sample #: A9E210000-023 **Prep Batch #...:** 9141023						
Iron	ND	50.0	ug/L	SW846 6020	05/21-05/27/09	LDFVW1DG
		Dilution Factor: 1				
Manganese	**1.2 B**	**15.0**	**ug/L**	**SW846 6020**	**05/21-05/28/09**	**LDFVW1DF**
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

DISSOLVED Metals

Client Lot #...: 9E19164 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A9E200000-016 **Prep Batch #...:** 9140016						
Iron	ND	50.0	ug/L	SW846 6020	05/20/09	LDDEE1CA
		Dilution Factor: 1				
Manganese	ND	15.0	ug/L	SW846 6020	05/20/09	LDDEE1CC
		Dilution Factor: 1				
MB Lot-Sample #: A9E210000-023 **Prep Batch #...:** 9141023						
Iron	ND	50.0	ug/L	SW846 6020	05/21-05/27/09	LDFVW1DD
		Dilution Factor: 1				
Manganese	**1.2 B**	**15.0**	**ug/L**	**SW846 6020**	**05/21-05/28/09**	**LDFVW1DE**
		Dilution Factor: 1				
MB Lot-Sample #: A9E220000-022 **Prep Batch #...:** 9142022						
Iron	**26.0 B**	**50.0**	**ug/L**	**SW846 6020**	**05/22-05/27/09**	**LDJJM1CV**
		Dilution Factor: 1				
Manganese	ND	15.0	ug/L	SW846 6020	05/22-05/27/09	LDJJM1CW
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: 9E19164 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A9E200000-016 **Prep Batch #...:** 9140016							
Manganese	100	100	ug/L	100	SW846 6020	05/20/09	LDDEE1C7
			Dilution Factor: 1				
Iron	10000	10200	ug/L	102	SW846 6020	05/20/09	LDDEE1C8
			Dilution Factor: 1				
LCS Lot-Sample#: A9E210000-023 **Prep Batch #...:** 9141023							
Manganese	100	92.5	ug/L	92	SW846 6020	05/21-05/28/09	LDFVW1DM
			Dilution Factor: 1				
Iron	10000	9270	ug/L	93	SW846 6020	05/21-05/27/09	LDFVW1DN
			Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: 9E19164 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A9E200000-016 **Prep Batch #...:** 9140016					
Manganese	100	(80 - 120)	SW846 6020	05/20/09	LDDEE1C7
		Dilution Factor: 1			
Iron	102	(80 - 120)	SW846 6020	05/20/09	LDDEE1C8
		Dilution Factor: 1			
LCS Lot-Sample#: A9E210000-023 **Prep Batch #...:** 9141023					
Manganese	92	(80 - 120)	SW846 6020	05/21-05/28/09	LDFVW1DM
		Dilution Factor: 1			
Iron	93	(80 - 120)	SW846 6020	05/21-05/27/09	LDFVW1DN
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #...: 9E19164 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A9E200000-016 **Prep Batch #...:** 9140016							
Iron	10000	10200	ug/L	102	SW846 6020	05/20/09	LDDEE1CL
			Dilution Factor: 1				
Manganese	100	100	ug/L	100	SW846 6020	05/20/09	LDDEE1CM
			Dilution Factor: 1				
LCS Lot-Sample#: A9E210000-023 **Prep Batch #...:** 9141023							
Iron	10000	9270	ug/L	93	SW846 6020	05/21-05/27/09	LDFVW1DK
			Dilution Factor: 1				
Manganese	100	92.5	ug/L	92	SW846 6020	05/21-05/28/09	LDFVW1DL
			Dilution Factor: 1				
LCS Lot-Sample#: A9E220000-022 **Prep Batch #...:** 9142022							
Iron	10000	9190	ug/L	92	SW846 6020	05/22-05/27/09	LDJJM1DH
			Dilution Factor: 1				
Manganese	100	89.3	ug/L	89	SW846 6020	05/22-05/27/09	LDJJM1DJ
			Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #...: 9E19164 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A9E200000-016 **Prep Batch #...:** 9140016					
Iron	102	(80 - 120)	SW846 6020	05/20/09	LDDEE1CL
		Dilution Factor: 1			
Manganese	100	(80 - 120)	SW846 6020	05/20/09	LDDEE1CM
		Dilution Factor: 1			
LCS Lot-Sample#: A9E210000-023 **Prep Batch #...:** 9141023					
Iron	93	(80 - 120)	SW846 6020	05/21-05/27/09	LDFVW1DK
		Dilution Factor: 1			
Manganese	92	(80 - 120)	SW846 6020	05/21-05/28/09	LDFVW1DL
		Dilution Factor: 1			
LCS Lot-Sample#: A9E220000-022 **Prep Batch #...:** 9142022					
Iron	92	(80 - 120)	SW846 6020	05/22-05/27/09	LDJJM1DH
		Dilution Factor: 1			
Manganese	89	(80 - 120)	SW846 6020	05/22-05/27/09	LDJJM1DJ
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: 9E19164 **Matrix.....:** WG
Date Sampled...: 05/19/09 13:35 **Date Received..:** 05/20/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9E200123-011 **Prep Batch #...:** 9141023									
Iron									
	90.6	10000	10100	ug/L	100		SW846 6020	05/21-05/27/09	LDDTR1AJ
	90.6	10000	10100	ug/L	100	0.09	SW846 6020	05/21-05/27/09	LDDTR1AK
			Dilution Factor: 1						
Manganese									
	99.8	100	199	ug/L	99		SW846 6020	05/21-05/27/09	LDDTR1AF
	99.8	100	198	ug/L	98	0.45	SW846 6020	05/21-05/27/09	LDDTR1AG
			Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: 9E19164 **Matrix.....:** WG
Date Sampled...: 05/19/09 13:35 **Date Received..:** 05/20/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9E200123-011 **Prep Batch #...:** 9141023							
Iron	100	(22 - 169)			SW846 6020	05/21-05/27/09	LDDTR1AJ
	100	(22 - 169)	0.09	(0-20)	SW846 6020	05/21-05/27/09	LDDTR1AK
		Dilution Factor: 1					
Manganese	99	(10 - 172)			SW846 6020	05/21-05/27/09	LDDTR1AF
	98	(10 - 172)	0.45	(0-20)	SW846 6020	05/21-05/27/09	LDDTR1AG
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

TOTAL Metals

Client Lot #...: 9E19164 **Matrix.....:** WG
Date Sampled...: 05/19/09 16:20 **Date Received..:** 05/20/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9E200123-014 **Prep Batch #...:** 9141023									
Iron									
	1110	10000	11100	ug/L	100		SW846 6020	05/21-05/27/09	LDDTX1CF
	1110	10000	11000	ug/L	99	0.18	SW846 6020	05/21-05/27/09	LDDTX1CG
			Dilution Factor: 1						
Manganese									
	44.5	100	136	ug/L	91		SW846 6020	05/21-05/27/09	LDDTX1CC
	44.5	100	142	ug/L	98	4.5	SW846 6020	05/21-05/27/09	LDDTX1CD
			Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: 9E19164 **Matrix.....:** WG
Date Sampled...: 05/19/09 16:20 **Date Received..:** 05/20/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9E200123-014 **Prep Batch #...:** 9141023							
Iron	100	(22 - 169)			SW846 6020	05/21-05/27/09	LDDTX1CF
	99	(22 - 169)	0.18	(0-20)	SW846 6020	05/21-05/27/09	LDDTX1CG
		Dilution Factor: 1					
Manganese	91	(10 - 172)			SW846 6020	05/21-05/27/09	LDDTX1CC
	98	(10 - 172)	4.5	(0-20)	SW846 6020	05/21-05/27/09	LDDTX1CD
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #...: 9E19164 **Matrix.....:** WATER
Date Sampled...: 05/15/09 13:40 **Date Received..:** 05/19/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9E190252-001 **Prep Batch #...:** 9140016									
Iron									
	ND	10000	9930	ug/L	99		SW846 6020	05/20/09	LDCTQ1CQ
	ND	10000	10000	ug/L	100	0.86	SW846 6020	05/20/09	LDCTQ1CR
			Dilution Factor: 1						
Manganese									
	2830	100	2940	ug/L			SW846 6020	05/20/09	LDCTQ1CU
			Qualifiers: NC,MSB						
	2830	100	2940	ug/L			SW846 6020	05/20/09	LDCTQ1CV
			Qualifiers: NC,MSB						
			Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD may be outside control limits because the sample amount was greater than 4X the spike amount.

MATRIX SPIKE SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #...: 9E19164 **Matrix.....:** WATER
Date Sampled...: 05/15/09 13:40 **Date Received..:** 05/19/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9E190252-001 **Prep Batch #...:** 9140016							
Iron	99	(22 - 169)			SW846 6020	05/20/09	LDCTQ1CQ
	100	(22 - 169)	0.86	(0-20)	SW846 6020	05/20/09	LDCTQ1CR
		Dilution Factor: 1					
Manganese	NC,MSB	(10 - 172)			SW846 6020	05/20/09	LDCTQ1CU
	NC,MSB	(10 - 172)		(0-20)	SW846 6020	05/20/09	LDCTQ1CV
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD may be outside control limits because the sample amount was greater than 4X the spike amount.

MATRIX SPIKE SAMPLE DATA REPORT

DISSOLVED Metals

Client Lot #...: 9E19164 **Matrix.....:** WATER
Date Sampled...: 05/19/09 11:50 **Date Received..:** 05/21/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9E210146-004 **Prep Batch #...:** 9142022									
Iron									
	ND	10000	9700	ug/L	97		SW846 6020	05/22-05/28/09	LDGF61FQ
	ND	10000	10100	ug/L	101	3.8	SW846 6020	05/22-05/28/09	LDGF61FR
			Dilution Factor: 1						
Manganese									
	ND	100	103	ug/L	103		SW846 6020	05/22-05/28/09	LDGF61FU
	ND	100	105	ug/L	105	1.8	SW846 6020	05/22-05/28/09	LDGF61FV
			Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

DISSOLVED Metals

Client Lot #...: 9E19164 **Matrix.....:** WATER
Date Sampled...: 05/19/09 11:50 **Date Received..:** 05/21/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A9E210146-004 **Prep Batch #...:** 9142022							
Iron	97	(22 - 169)			SW846 6020	05/22-05/28/09	LDGF61FQ
	101	(22 - 169)	3.8	(0-20)	SW846 6020	05/22-05/28/09	LDGF61FR
		Dilution Factor: 1					
Manganese	103	(10 - 172)			SW846 6020	05/22-05/28/09	LDGF61FU
	105	(10 - 172)	1.8	(0-20)	SW846 6020	05/22-05/28/09	LDGF61FV
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: 9E19164 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide		Work Order #: LDH1A1AA		MB Lot-Sample #:	A9E210000-466	
	ND	3.0	mg/L	SW846 9030B/9034	05/21/09	9141466
		Dilution Factor: 1				
Acid-soluble sulfide		Work Order #: LDREJ1AA		MB Lot-Sample #:	A9E270000-203	
	ND	3.0	mg/L	SW846 9030B/9034	05/27/09	9147203
		Dilution Factor: 1				
Chloride		Work Order #: LDEN51AA		MB Lot-Sample #:	A9E200000-367	
	ND	1.0	mg/L	SW846 9056A	05/20/09	9140367
		Dilution Factor: 1				
Chloride		Work Order #: LDJPK1AA		MB Lot-Sample #:	A9E220000-125	
	ND	1.0	mg/L	SW846 9056A	05/21/09	9142125
		Dilution Factor: 1				
Chloride		Work Order #: LDPGL1AA		MB Lot-Sample #:	A9E260000-128	
	ND	1.0	mg/L	SW846 9056A	05/22/09	9146128
		Dilution Factor: 1				
Nitrate as N		Work Order #: LDEN71AA		MB Lot-Sample #:	A9E200000-368	
	ND	0.10	mg/L	SW846 9056A	05/20/09	9140368
		Dilution Factor: 1				
Nitrate as N		Work Order #: LDJPN1AA		MB Lot-Sample #:	A9E220000-126	
	ND	0.10	mg/L	SW846 9056A	05/21/09	9142126
		Dilution Factor: 1				
Nitrate as N		Work Order #: LDPGM1AA		MB Lot-Sample #:	A9E260000-129	
	ND	0.10	mg/L	SW846 9056A	05/22/09	9146129
		Dilution Factor: 1				
Nitrite as N		Work Order #: LDEN81AA		MB Lot-Sample #:	A9E200000-369	
	ND	0.10	mg/L	SW846 9056A	05/19/09	9140369
		Dilution Factor: 1				
Nitrite as N		Work Order #: LDJPQ1AA		MB Lot-Sample #:	A9E220000-127	
	ND	0.10	mg/L	SW846 9056A	05/20/09	9142127
		Dilution Factor: 1				
Nitrite as N		Work Order #: LDPGP1AA		MB Lot-Sample #:	A9E260000-130	
	ND	0.10	mg/L	SW846 9056A	05/22/09	9146130
		Dilution Factor: 1				

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METHOD BLANK REPORT

General Chemistry

Client Lot #...: 9E19164 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrogen, as Ammonia		Work Order #: LEFQ01AA		MB Lot-Sample #:	A9F050000-434	
	ND	0.2	mg/L	MCAWW 350.3	06/05/09	9156434
		Dilution Factor: 1				
Sulfate		Work Order #: LDEN91AA		MB Lot-Sample #:	A9E200000-370	
	ND	1.0	mg/L	SW846 9056A	05/20/09	9140370
		Dilution Factor: 1				
Sulfate		Work Order #: LDJPT1AA		MB Lot-Sample #:	A9E220000-128	
	ND	1.0	mg/L	SW846 9056A	05/21/09	9142128
		Dilution Factor: 1				
Sulfate		Work Order #: LDPGR1AA		MB Lot-Sample #:	A9E260000-131	
	ND	1.0	mg/L	SW846 9056A	05/22/09	9146131
		Dilution Factor: 1				
Total Alkalinity		Work Order #: LDQMP1AA		MB Lot-Sample #:	A9E260000-555	
	3.7 B	**5.0**	**mg/L**	**MCAWW 310.1**	**05/26/09**	**9146555**
		Dilution Factor: 1				
Total Alkalinity		Work Order #: LDRX31AA		MB Lot-Sample #:	A9E270000-311	
	2.7 B	**5.0**	**mg/L**	**MCAWW 310.1**	**05/26/09**	**9147311**
		Dilution Factor: 1				
Total Alkalinity		Work Order #: LD6PK1AA		MB Lot-Sample #:	A9F020000-311	
	3.1 B	**5.0**	**mg/L**	**MCAWW 310.1**	**06/01/09**	**9153311**
		Dilution Factor: 1				
Total Organic Carbon		Work Order #: LD6HA1AA		MB Lot-Sample #:	A9F020000-249	
	ND	1	mg/L	SW846 9060	06/02/09	9153249
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: 9E19164 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#:LDEN51AC-LCS/LDEN51AD-LCSD LCS Lot-Sample#: A9E200000-367						
	50.0	52.2	mg/L	104		SW846 9056A	05/20/09	9140367
	50.0	52.4	mg/L	105	0.38	SW846 9056A	05/20/09	9140367
			Dilution Factor: 1					
Chloride		WO#:LDJPK1AC-LCS/LDJPK1AD-LCSD LCS Lot-Sample#: A9E220000-125						
	50.0	52.3	mg/L	105		SW846 9056A	05/21/09	9142125
	50.0	52.3	mg/L	105	0.0	SW846 9056A	05/21/09	9142125
			Dilution Factor: 1					
Chloride		WO#:LDPGL1AC-LCS/LDPGL1AD-LCSD LCS Lot-Sample#: A9E260000-128						
	50.0	50.4	mg/L	101		SW846 9056A	05/22/09	9146128
	50.0	50.8	mg/L	102	0.79	SW846 9056A	05/22/09	9146128
			Dilution Factor: 1					
Nitrate as N		WO#:LDEN71AC-LCS/LDEN71AD-LCSD LCS Lot-Sample#: A9E200000-368						
	2.5	2.5	mg/L	100		SW846 9056A	05/20/09	9140368
	2.5	2.5	mg/L	100	0.0	SW846 9056A	05/20/09	9140368
			Dilution Factor: 1					
Nitrate as N		WO#:LDJPN1AC-LCS/LDJPN1AD-LCSD LCS Lot-Sample#: A9E220000-126						
	2.5	2.5	mg/L	100		SW846 9056A	05/21/09	9142126
	2.5	2.5	mg/L	100	0.0	SW846 9056A	05/21/09	9142126
			Dilution Factor: 1					
Nitrate as N		WO#:LDPGM1AC-LCS/LDPGM1AD-LCSD LCS Lot-Sample#: A9E260000-129						
	2.5	2.4	mg/L	96		SW846 9056A	05/22/09	9146129
	2.5	2.4	mg/L	96	0.0	SW846 9056A	05/22/09	9146129
			Dilution Factor: 1					
Nitrite as N		WO#:LDEN81AC-LCS/LDEN81AD-LCSD LCS Lot-Sample#: A9E200000-369						
	2.5	2.5	mg/L	100		SW846 9056A	05/19/09	9140369
	2.5	2.5	mg/L	100	0.0	SW846 9056A	05/19/09	9140369
			Dilution Factor: 1					
Nitrite as N		WO#:LDJPQ1AC-LCS/LDJPQ1AD-LCSD LCS Lot-Sample#: A9E220000-127						
	2.5	2.5	mg/L	100		SW846 9056A	05/20/09	9142127
	2.5	2.5	mg/L	100	0.0	SW846 9056A	05/20/09	9142127
			Dilution Factor: 1					

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LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: 9E19164 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrite as N			WO#:LDPGP1AC-LCS/LDPGP1AD-LCSD			LCS Lot-Sample#: A9E260000-130		
	2.5	2.3	mg/L	92		SW846 9056A	05/22/09	9146130
	2.5	2.3	mg/L	92	0.0	SW846 9056A	05/22/09	9146130
			Dilution Factor: 1					
Sulfate			WO#:LDEN91AC-LCS/LDEN91AD-LCSD			LCS Lot-Sample#: A9E200000-370		
	50.0	48.9	mg/L	98		SW846 9056A	05/20/09	9140370
	50.0	49.1	mg/L	98	0.40	SW846 9056A	05/20/09	9140370
			Dilution Factor: 1					
Sulfate			WO#:LDJPT1AC-LCS/LDJPT1AD-LCSD			LCS Lot-Sample#: A9E220000-128		
	50.0	49.2	mg/L	98		SW846 9056A	05/21/09	9142128
	50.0	49.0	mg/L	98	0.40	SW846 9056A	05/21/09	9142128
			Dilution Factor: 1					
Sulfate			WO#:LDPGR1AC-LCS/LDPGR1AD-LCSD			LCS Lot-Sample#: A9E260000-131		
	50.0	48.5	mg/L	97		SW846 9056A	05/22/09	9146131
	50.0	49.0	mg/L	98	1.0	SW846 9056A	05/22/09	9146131
			Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: 9E19164 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		WO#:LDEN51AC-LCS/LDEN51AD-LCSD LCS Lot-Sample#: A9E200000-367					
	104	(90 - 110)			SW846 9056A	05/20/09	9140367
	105	(90 - 110)	0.38	(0-20)	SW846 9056A	05/20/09	9140367
		Dilution Factor: 1					
Chloride		WO#:LDJPK1AC-LCS/LDJPK1AD-LCSD LCS Lot-Sample#: A9E220000-125					
	105	(90 - 110)			SW846 9056A	05/21/09	9142125
	105	(90 - 110)	0.0	(0-20)	SW846 9056A	05/21/09	9142125
		Dilution Factor: 1					
Chloride		WO#:LDPGL1AC-LCS/LDPGL1AD-LCSD LCS Lot-Sample#: A9E260000-128					
	101	(90 - 110)			SW846 9056A	05/22/09	9146128
	102	(90 - 110)	0.79	(0-20)	SW846 9056A	05/22/09	9146128
		Dilution Factor: 1					
Nitrate as N		WO#:LDEN71AC-LCS/LDEN71AD-LCSD LCS Lot-Sample#: A9E200000-368					
	100	(90 - 110)			SW846 9056A	05/20/09	9140368
	100	(90 - 110)	0.0	(0-20)	SW846 9056A	05/20/09	9140368
		Dilution Factor: 1					
Nitrate as N		WO#:LDJPN1AC-LCS/LDJPN1AD-LCSD LCS Lot-Sample#: A9E220000-126					
	100	(90 - 110)			SW846 9056A	05/21/09	9142126
	100	(90 - 110)	0.0	(0-20)	SW846 9056A	05/21/09	9142126
		Dilution Factor: 1					
Nitrate as N		WO#:LDPGM1AC-LCS/LDPGM1AD-LCSD LCS Lot-Sample#: A9E260000-129					
	96	(90 - 110)			SW846 9056A	05/22/09	9146129
	96	(90 - 110)	0.0	(0-20)	SW846 9056A	05/22/09	9146129
		Dilution Factor: 1					
Nitrite as N		WO#:LDEN81AC-LCS/LDEN81AD-LCSD LCS Lot-Sample#: A9E200000-369					
	100	(90 - 110)			SW846 9056A	05/19/09	9140369
	100	(90 - 110)	0.0	(0-20)	SW846 9056A	05/19/09	9140369
		Dilution Factor: 1					
Nitrite as N		WO#:LDJPQ1AC-LCS/LDJPQ1AD-LCSD LCS Lot-Sample#: A9E220000-127					
	100	(90 - 110)			SW846 9056A	05/20/09	9142127
	100	(90 - 110)	0.0	(0-20)	SW846 9056A	05/20/09	9142127
		Dilution Factor: 1					

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: 9E19164 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Nitrite as N		WO#:LDPGP1AC-LCS/LDPGP1AD-LCSD LCS Lot-Sample#: A9E260000-130					
	92	(90 - 110)			SW846 9056A	05/22/09	9146130
	92	(90 - 110)	0.0	(0-20)	SW846 9056A	05/22/09	9146130
		Dilution Factor: 1					
Sulfate		WO#:LDEN91AC-LCS/LDEN91AD-LCSD LCS Lot-Sample#: A9E200000-370					
	98	(90 - 110)			SW846 9056A	05/20/09	9140370
	98	(90 - 110)	0.40	(0-20)	SW846 9056A	05/20/09	9140370
		Dilution Factor: 1					
Sulfate		WO#:LDJPT1AC-LCS/LDJPT1AD-LCSD LCS Lot-Sample#: A9E220000-128					
	98	(90 - 110)			SW846 9056A	05/21/09	9142128
	98	(90 - 110)	0.40	(0-20)	SW846 9056A	05/21/09	9142128
		Dilution Factor: 1					
Sulfate		WO#:LDPGR1AC-LCS/LDPGR1AD-LCSD LCS Lot-Sample#: A9E260000-131					
	97	(90 - 110)			SW846 9056A	05/22/09	9146131
	98	(90 - 110)	1.0	(0-20)	SW846 9056A	05/22/09	9146131
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #...: 9E19164 **Matrix.....:** WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCNT RECVRY	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide			Work Order #:	LDH1A1AC	LCS Lot-Sample#:	A9E210000-466	
	8.4	8.1	mg/L	97	SW846 9030B/9034	05/21/09	9141466
			Dilution Factor: 1				
Acid-soluble sulfide			Work Order #:	LDREJ1AC	LCS Lot-Sample#:	A9E270000-203	
	9.0	7.7	mg/L	85	SW846 9030B/9034	05/27/09	9147203
			Dilution Factor: 1				
Nitrogen, as Ammonia			Work Order #:	LEFQ01AC	LCS Lot-Sample#:	A9F050000-434	
	16	16	mg/L	99	MCAWW 350.3	06/05/09	9156434
			Dilution Factor: 1				
Total Alkalinity			Work Order #:	LDQMP1AC	LCS Lot-Sample#:	A9E260000-555	
	110	110	mg/L	102	MCAWW 310.1	05/26/09	9146555
			Dilution Factor: 1				
Total Alkalinity			Work Order #:	LDRX31AC	LCS Lot-Sample#:	A9E270000-311	
	110	110	mg/L	103	MCAWW 310.1	05/26/09	9147311
			Dilution Factor: 1				
Total Alkalinity			Work Order #:	LD6PK1AC	LCS Lot-Sample#:	A9F020000-311	
	110	110	mg/L	99	MCAWW 310.1	06/01/09	9153311
			Dilution Factor: 1				
Total Organic Carbon			Work Order #:	LD6HA1AC	LCS Lot-Sample#:	A9F020000-249	
	35	35	mg/L	101	SW846 9060	06/02/09	9153249
			Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: 9E19164 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide		Work Order #: LDH1A1AC	LCS Lot-Sample#: A9E210000-466		
	97	(70 - 130)	SW846 9030B/9034	05/21/09	9141466
		Dilution Factor: 1			
Acid-soluble sulfide		Work Order #: LDREJ1AC	LCS Lot-Sample#: A9E270000-203		
	85	(70 - 130)	SW846 9030B/9034	05/27/09	9147203
		Dilution Factor: 1			
Nitrogen, as Ammonia		Work Order #: LEFQ01AC	LCS Lot-Sample#: A9F050000-434		
	99	(85 - 114)	MCAWW 350.3	06/05/09	9156434
		Dilution Factor: 1			
Total Alkalinity		Work Order #: LDQMP1AC	LCS Lot-Sample#: A9E260000-555		
	102	(90 - 127)	MCAWW 310.1	05/26/09	9146555
		Dilution Factor: 1			
Total Alkalinity		Work Order #: LDRX31AC	LCS Lot-Sample#: A9E270000-311		
	103	(90 - 127)	MCAWW 310.1	05/26/09	9147311
		Dilution Factor: 1			
Total Alkalinity		Work Order #: LD6PK1AC	LCS Lot-Sample#: A9F020000-311		
	99	(90 - 127)	MCAWW 310.1	06/01/09	9153311
		Dilution Factor: 1			
Total Organic Carbon		Work Order #: LD6HA1AC	LCS Lot-Sample#: A9F020000-249		
	101	(88 - 115)	SW846 9060	06/02/09	9153249
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: 9E19164 **Matrix.....:** WG
Date Sampled...: 05/19/09 16:20 **Date Received..:** 05/20/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide			WO#: LDDTX1CH-MS/LDDTX1CJ-MSD				MS Lot-Sample #: A9E200123-014		
	ND	8.4	8.1	mg/L	92		SW846 9030B/9	05/21/09	9141466
	ND	8.4	8.9	mg/L	102	9.5	SW846 9030B/9	05/21/09	9141466
			Dilution Factor: 1						
Chloride			WO#: LDDTX1AM-MS/LDDTX1AN-MSD				MS Lot-Sample #: A9E200123-014		
	6.9	50.0	62.8	mg/L	112		SW846 9056A	05/21/09	9142125
	6.9	50.0	63.4	mg/L	113	0.95	SW846 9056A	05/21/09	9142125
			Dilution Factor: 1						
Nitrate as N			WO#: LDDTX1AQ-MS/LDDTX1AR-MSD				MS Lot-Sample #: A9E200123-014		
	ND	2.5	2.5	mg/L	100		SW846 9056A	05/21/09	9142126
	ND	2.5	2.5	mg/L	100	0.0	SW846 9056A	05/21/09	9142126
			Dilution Factor: 1						
Nitrite as N			WO#: LDDTX1AU-MS/LDDTX1AV-MSD				MS Lot-Sample #: A9E200123-014		
	ND	2.5	2.5	mg/L	100		SW846 9056A	05/21/09	9142127
	ND	2.5	2.5	mg/L	100	0.0	SW846 9056A	05/21/09	9142127
			Dilution Factor: 1						
Nitrogen, as Ammonia			WO#: LDDTX1AF-MS/LDDTX1AG-MSD				MS Lot-Sample #: A9E200123-014		
	ND	2.5	2.3	mg/L	90		MCAWW 350.3	06/05/09	9156434
	ND	2.5	2.2	mg/L	87	3.7	MCAWW 350.3	06/05/09	9156434
			Dilution Factor: 1						
Sulfate			WO#: LDDTX1AX-MS/LDDTX1A0-MSD				MS Lot-Sample #: A9E200123-014		
	55.8	50.0	113	mg/L	114		SW846 9056A	05/21/09	9142128
	55.8	50.0	113	mg/L	114	0.35	SW846 9056A	05/21/09	9142128
			Dilution Factor: 1						
Total Alkalinity			WO#: LDDTX1AC-MS/LDDTX1AD-MSD				MS Lot-Sample #: A9E200123-014		
	360	500	630	mg/L	53		MCAWW 310.1	05/26/09	9147311
	360	500	640	mg/L	55	1.8	MCAWW 310.1	05/26/09	9147311
			Dilution Factor: 1						
Total Organic Carbon			WO#: LDDTX1A2-MS/LDDTX1A3-MSD				MS Lot-Sample #: A9E200123-014		
	0.7	25	24	mg/L	94		SW846 9060	06/02/09	9153249
	0.7	25	24	mg/L	94	0.48	SW846 9060	06/02/09	9153249
			Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: 9E19164 **Matrix.....:** WG
Date Sampled...: 05/19/09 16:20 **Date Received..:** 05/20/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide		WO#: LDDTX1CH-MS/LDDTX1CJ-MSD				MS Lot-Sample #: A9E200123-014	
	92	(27 - 124)			SW846 9030B/9034	05/21/09	9141466
	102	(27 - 124)	9.5	(0-20)	SW846 9030B/9034	05/21/09	9141466
		Dilution Factor: 1					
Chloride		WO#: LDDTX1AM-MS/LDDTX1AN-MSD				MS Lot-Sample #: A9E200123-014	
	112	(80 - 120)			SW846 9056A	05/21/09	9142125
	113	(80 - 120)	0.95	(0-20)	SW846 9056A	05/21/09	9142125
		Dilution Factor: 1					
Nitrate as N		WO#: LDDTX1AQ-MS/LDDTX1AR-MSD				MS Lot-Sample #: A9E200123-014	
	100	(80 - 120)			SW846 9056A	05/21/09	9142126
	100	(80 - 120)	0.0	(0-20)	SW846 9056A	05/21/09	9142126
		Dilution Factor: 1					
Nitrite as N		WO#: LDDTX1AU-MS/LDDTX1AV-MSD				MS Lot-Sample #: A9E200123-014	
	100	(80 - 120)			SW846 9056A	05/21/09	9142127
	100	(80 - 120)	0.0	(0-20)	SW846 9056A	05/21/09	9142127
		Dilution Factor: 1					
Nitrogen, as Ammonia		WO#: LDDTX1AF-MS/LDDTX1AG-MSD				MS Lot-Sample #: A9E200123-014	
	90	(75 - 125)			MCAWW 350.3	06/05/09	9156434
	87	(75 - 125)	3.7	(0-20)	MCAWW 350.3	06/05/09	9156434
		Dilution Factor: 1					
Sulfate		WO#: LDDTX1AX-MS/LDDTX1A0-MSD				MS Lot-Sample #: A9E200123-014	
	114	(80 - 120)			SW846 9056A	05/21/09	9142128
	114	(80 - 120)	0.35	(0-20)	SW846 9056A	05/21/09	9142128
		Dilution Factor: 1					
Total Alkalinity		WO#: LDDTX1AC-MS/LDDTX1AD-MSD				MS Lot-Sample #: A9E200123-014	
	53	(10 - 160)			MCAWW 310.1	05/26/09	9147311
	55	(10 - 160)	1.8	(0-24)	MCAWW 310.1	05/26/09	9147311
		Dilution Factor: 1					
Total Organic Carbon		WO#: LDDTX1A2-MS/LDDTX1A3-MSD				MS Lot-Sample #: A9E200123-014	
	94	(72 - 136)			SW846 9060	06/02/09	9153249
	94	(72 - 136)	0.48	(0-20)	SW846 9060	06/02/09	9153249
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: 9E19164 **Matrix.....:** WATER
Date Sampled...: 05/19/09 11:50 **Date Received..:** 05/21/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide			WO#: LDGGD1CJ-MS/LDGGD1CK-MSD				MS Lot-Sample #: A9E210146-007		
	6.9	9.0	15.0	mg/L	90		SW846 9030B/9	05/27/09	9147203
	6.9	9.0	14.6	mg/L	85	2.8	SW846 9030B/9	05/27/09	9147203
			Dilution Factor: 1						
Chloride			WO#: LDGDE1AX-MS/LDGDE1A0-MSD				MS Lot-Sample #: A9E210139-001		
	3310	50.0	3210	mg/L			SW846 9056A	05/21/09	9146128
			Qualifiers: NC,MSB						
	3310	50.0	3210	mg/L			SW846 9056A	05/21/09	9146128
			Qualifiers: NC,MSB						
			Dilution Factor: 20						
Nitrate as N			WO#: LDGDE1A1-MS/LDGDE1A2-MSD				MS Lot-Sample #: A9E210139-001		
	ND	2.5	3.6 N	mg/L	144		SW846 9056A	05/21/09	9146129
	ND	2.5	3.6 N	mg/L	144	0.0	SW846 9056A	05/21/09	9146129
			Dilution Factor: 1						
Nitrite as N			WO#: LDGDE1A3-MS/LDGDE1A4-MSD				MS Lot-Sample #: A9E210139-001		
	ND	2.5	NC,MSB	mg/L			SW846 9056A	05/21/09	9146130
	ND	2.5	NC,MSB	mg/L			SW846 9056A	05/21/09	9146130
			Dilution Factor: 1						
Total Alkalinity			WO#: LDDRR1CU-MS/LDDRR1CV-MSD				MS Lot-Sample #: A9E200122-001		
	440	500	610	mg/L	35		MCAWW 310.1	05/26/09	9146555
	440	500	610	mg/L	34	0.92	MCAWW 310.1	05/26/09	9146555
			Dilution Factor: 1						
Total Alkalinity			WO#: LDGF61A2-MS/LDGF61A3-MSD				MS Lot-Sample #: A9E210146-004		
	270	500	520	mg/L	50		MCAWW 310.1	06/01/09	9153311
	270	500	450	mg/L	37	14	MCAWW 310.1	06/01/09	9153311
			Dilution Factor: 1						

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD may be outside control limits because the sample amount was greater than 4X the spike amount.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: 9E19164 **Matrix.....:** WATER
Date Sampled...: 04/28/09 14:55 **Date Received..:** 05/19/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride			Work Order #...:		LDA4R1AC		MS Lot-Sample #: A9E190	187-004
	26.0	50.0	86.2	mg/L	120	SW846 9056A	05/21/09	9142125
			Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: 9E19164 **Matrix.....:** WATER
Date Sampled...: 05/19/09 11:50 **Date Received..:** 05/21/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Acid-soluble sulfide		WO#: LDGGD1CJ-MS/LDGGD1CK-MSD				MS Lot-Sample #: A9E210146-007	
	90	(27 - 124)			SW846 9030B/9034	05/27/09	9147203
	85	(27 - 124)	2.8	(0-20)	SW846 9030B/9034	05/27/09	9147203
		Dilution Factor: 1					
Chloride		WO#: LDGDE1AX-MS/LDGDE1A0-MSD				MS Lot-Sample #: A9E210139-001	
	NC,MSB	(80 - 120)			SW846 9056A	05/21/09	9146128
	NC,MSB	(80 - 120)		(0-20)	SW846 9056A	05/21/09	9146128
		Dilution Factor: 20					
Nitrate as N		WO#: LDGDE1A1-MS/LDGDE1A2-MSD				MS Lot-Sample #: A9E210139-001	
	144 N	(80 - 120)			SW846 9056A	05/21/09	9146129
	144 N	(80 - 120)	0.0	(0-20)	SW846 9056A	05/21/09	9146129
		Dilution Factor: 1					
Nitrite as N		WO#: LDGDE1A3-MS/LDGDE1A4-MSD				MS Lot-Sample #: A9E210139-001	
	NC,MSB	(80 - 120)			SW846 9056A	05/21/09	9146130
	NC,MSB	(80 - 120)		(0-20)	SW846 9056A	05/21/09	9146130
		Dilution Factor: 1					
Total Alkalinity		WO#: LDDRR1CU-MS/LDDRR1CV-MSD				MS Lot-Sample #: A9E200122-001	
	35	(10 - 160)			MCAWW 310.1	05/26/09	9146555
	34	(10 - 160)	0.92	(0-24)	MCAWW 310.1	05/26/09	9146555
		Dilution Factor: 1					
Total Alkalinity		WO#: LDGF61A2-MS/LDGF61A3-MSD				MS Lot-Sample #: A9E210146-004	
	50	(10 - 160)			MCAWW 310.1	06/01/09	9153311
	37	(10 - 160)	14	(0-24)	MCAWW 310.1	06/01/09	9153311
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD may be outside control limits because the sample amount was greater than 4X the spike amount.

N Spiked analyte recovery is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: 9E19164 **Matrix.....:** WATER
Date Sampled...: 04/28/09 14:55 **Date Received..:** 05/19/09

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Chloride		Work Order #...:	LDA4R1AC	MS Lot-Sample #:	A9E190187-004
	120	(80 - 120)	SW846 9056A	05/21/09	9142125
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

CONESTOGA-ROVERS & ASSOCIATES

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

PAGE 1 OF 1

ID # № D 6175

SSOW Ref. Code: 17178-9-005

Required Client Information:

Company: CRA, Inc.	Report To: Paul W
Address: 14496 Sheldon Rd.	Copy To:
Suite 200	Invoice To:
Plymouth, MI 48170	P.O.:
Phone: 734-453-5123	Project Name: A-1 Landfill
Fax: 734-453-5201	Project Number: 17178
Email:	

Laboratory:	Test America
Laboratory Location:	North Canton, OH
Laboratory Contact:	
Requested Due Date:	TAT: 2wk
QA/QC Requirements:	

Valid Matrix Codes: WG Groundwater; WB Borehole Water; WS Surface Water; SO Soil; SE Sediment; See Back for Additional Codes

Analysis and Method / Preservative

	Sample Identification:	Matrix Code	Date Collected	Time Collected	# Containers	Unpreserved	HCl	H2SO4	HNO3	NaOH	Other:	TCL VOCs	Select metals (Fe, Mn)		Diss Gas	Alk, Chl	Ammon, N. Nitr	Nitrate, Nitrite	Sulfate	TOC			Remarks/Lab ID
1.	GW-17178-051809-BW-001	WG	5/18/09	0950								X	X										field filtered metals
2.	002			1025								X	X										
3.	003			1040								X											
4.	004			1110								X			X	X	X	X	X	X			
5.	005			1131								X			X	X	X	X	X	X			
6.	006			1235								X			X	X	X	X	X	X			
7.	007			1240								X			X	X	X	X	X	X			
8.	008			1320								X											
9.	009			1340								X											
10.	010			1410								X	X										field filtered metals
11.	011			1430								X	X										field filtered metals
12.	012			1535								X			X	X	X	X	X	X			
13.	013			1610								X	X										field filtered metals
14.	014			1650								X	X										field filtered metals
15.	TB-17178-015	WQ	—																				
	TOTAL NUMBER OF CONTAINERS																						

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY / AFFILIATION	DATE	TIME	RECEIVED BY / AFFILIATION	DATE	TIME
FED-EX	2	[illegible]	5/18/09	1830	[illegible]	5-19-09	0920
AIRBILL NO.							

Sample Condition

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Samples Intact	Y / N

Additional Comments: where noted field filtered, used 0.45 micron

Sampler Name:

Sampler Signature: Date:

Distribution: WHITE - Fully Executed Copy YELLOW - Receiving Laboratory Copy PINK - Shipper GOLDENROD - Sampler Copy

REV 0

Blaise Blastos REVISED COC MAY 20, 2009 A9E190164

CONESTOGA-ROVERS & ASSOCIATES

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

PAGE 1 OF 1

ID # № D 6175

SSOW Ref. Code: 17178-9-005

Required Client Information:

Company: CRA, Inc.	Report To: Paul W
Address: 14496 Sheldon Rd.	Copy To:
Suite 200	Invoice To:
Plymouth, MI 48170	P.O.:
Phone: 734-453-5123	Project Name: A-1 Landfill
Fax: 734-453-5201	Project Number: 17178
Email:	

Laboratory:	TEST America
Laboratory Location:	North Canton, OH
Laboratory Contact:	
Requested Due Date:	TAT: 2wk
QA/QC Requirements:	

Valid Matrix Codes: WG Groundwater; WB Borehole Water; WS Surface Water; SO Soil; SE Sediment; See Back for Additional Codes

Preservative

Analysis and Method

	Sample Identification:	Matrix Code	Date Collected	Time Collected	# Containers	Unpreserved	HCl	H2SO4	HNO3	NaOH	Other:	TCL VOCs	Select metals (Fe, Mn)		Diss Gas	Alk, Chl	Ammonia, Nitrate	Nitrite, Sulfate	Sulfide	TOC		Remarks/Lab ID
1.	GW 17178-051809-BW 001	WG	5/18/09	0950								X	X									← field filtered metals
2.	002			1025								X	X									← ? FIELD FILTERED ? 5/20/09
3.	003			1040								X										
4.	004			1110								X			X	X	X	X	X	X		
5.	005			1131								X			X	X	X	X	X	X		
6.	006			1235								X			X	X	X	X	X	X		
7.	007			1240								X			X	X	X	X	X	X		
8.	008			1320								X										
9.	009			1340								X										
10.	010			1410								X	X									← field filters metals
11.	011			1430								X	X									← field filtered metals
12.	012			1535								X			X	X	X	X	X	X		
13.	013			1610								X	X									← field filtered metals
14.	014			1650								X	X									← field filtered metals
15.	TB 17178-015	WQ	—									X										
	TOTAL NUMBER OF CONTAINERS																					

→ TRIP BLANK → TCL VOCs BB 5/20/09

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY / AFFILIATION	DATE	TIME	RECEIVED BY / AFFILIATION	DATE	TIME
FED-EX	2		5/18/09	1830			
AIRBILL NO.							

Sample Condition

Temp in °C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Samples Intact	Y / N

Additional Comments: where noted field filtered, used 0.45 micron

Sampler Name:

Sampler Signature: Date:

Distribution: WHITE - Fully Executed Copy YELLOW - Receiving Laboratory Copy PINK - Shipper GOLDENROD - Sampler Copy

REV. 8/6/04

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9E190164
North Canton Facility

Client CRA Project _____ By: [signature]
Cooler Received on 5.19.09 Opened on 5.19.09 (Signature)
FedEx ☑ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☐ Other _____
TestAmerica Cooler # _____ Multiple Coolers ☑ Foam Box ☐ Client Cooler ☐ Other _____

1. Were custody seals on the outside of the cooler(s)? Yes ☐ No ☑ Intact? Yes ☐ No ☐ NA ☑
   If YES, Quantity _____ Quantity Unsalvageable _____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☐ No ☐ NA ☑
   Were custody seals on the bottle(s)? Yes ☐ No ☑
   If YES, are there any exceptions? _____
2. Shippers' packing slip attached to the cooler(s)? Yes ☑ No ☐
3. Did custody papers accompany the sample(s)? Yes ☑ No ☐ Relinquished by client? Yes ☑ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☑ No ☐
5. Packing material used: Bubble Wrap ☑ Foam ☐ None ☐ Other _____
6. Cooler temperature upon receipt 2.9 °C See back of form for multiple coolers/temps ☐
   METHOD: IR ☑ Other ☐ _____
   COOLANT: Wet Ice ☑ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☑ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☑ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☑ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☑ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☑ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☑ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☑ No ☐ Were VOAs on the COC? Yes ☑ No ☐

Contacted PM DDH Date 5/19/09 by AM via Verbal ☒ Voice Mail ☐ Other ☐
Concerning 14

14. CHAIN OF CUSTODY

The following discrepancies occurred:
COC= no metals for 004, 005, rec'd HNO3 pres. bottles, will archive metals bottle for 004 + 005 per DDH.
Rec'd 3x40 unpres VOA vials for sam. ID's ending in 004, 005, 006, 007 + 012 – will archive vials per DDH.

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
001	<2	5.19.09	[initials]
2	<2		
4	<2 <2 79		
5	<2 <2 79		
6	<2 79		
7	<2 79		
10	<2		
11	<2		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
12	<2 >9		
13	<2		
14	<2		

Cooler #	Temp. °C	Method	Coolant

Discrepancies Cont'd:

CONESTOGA-ROVERS & ASSOCIATES

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

PAGE 1 OF 1

ID # № D 6176

SSOW Ref. Code: 17178-9-005

Required Client Information:

Company: CRA, Inc.	Report To: Paul W.
Address: 14496 Sheldon Rd.	Copy To:
Suite 200	Invoice To:
Plymouth, MI 48170	P.O.:
Phone: 734-453-5123	Project Name: A-1 Landfill
Fax: 734-453-5201	Project Number: 17178-
Email:	

Laboratory:	Test America
Laboratory Location:	
Laboratory Contact:	
Requested Due Date:	TAT: 2wk
QA/QC Requirements:	

Valid Matrix Codes: WG Groundwater; WB Borehole Water; WS Surface Water; SO Soil; SE Sediment; See Back for Additional Codes

Analysis and Method

	Sample Identification:	Matrix Code	Date Collected	Time Collected	# Containers	Unpreserved	HCl	H2SO4	HNO3	NaOH	Other:	VOC	Selectedmetals (Fe, Mn)		Diss Gases	Alk, Chl	Ammonia, Nitrate	Nitrite, Sulfate	SulfIDE	TOC			Remarks/Lab ID
1.	GW-17178-051809-BW-016	WG	5/18/09	1700	3							X											
2.	017			1953	3							X											
3.	018			2025	3							X											
4.	GW-17178-051909-BW-019		5/19/09	0750	3							X											
5.	020			0830	3							X											
6.	021			0835	3							X											
7.	022			0940	4							X	X										field filtered metals
8.	023			1025	4							X	X										
9.	024			1030	4							X	X										
10.	025			1120	15							X	X		X	X	X	X	X	X			
11.	026			1335	11							X	X										MSMSD
12.	027			1425	15							X	X		X	X	X	X	X	X			
13.	028			1525	4							X	X										
14.	029			1620	30							X	X		X	X	X	X	X	X			MSMSD
15.	TB-17178-030	WQ	—	—								X											
	TOTAL NUMBER OF CONTAINERS																						

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY / AFFILIATION	DATE	TIME	RECEIVED BY / AFFILIATION	DATE	TIME
	2		5/19/09	1830		5-20-09	9:30
AIRBILL NO.							

Sample Condition

Temp in C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Samples Intact	Y / N

Additional Comments:

Sampler Name: Williams

Sampler Signature: Date:

Distribu... E - F... ecute... W - R... g Lab Copy NK - ENRC npler REV

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9E20123
North Canton Facility

Client CRA Project _____ By: Ch. Lyil
Cooler Received on 5-20-09 Opened on 5-20-09 (Signature)
FedEx ☒ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☐ Other _____
TestAmerica Cooler # _____ Multiple Coolers ☒ Foam Box ☐ Client Cooler ☐ Other _____

1. Were custody seals on the outside of the cooler(s)? Yes ☐ No ☒ Intact? Yes ☐ No ☐ NA ☒
   If YES, Quantity _____ Quantity Unsalvageable _____
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☐ No ☐ NA ☒
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions? _____
2. Shippers' packing slip attached to the cooler(s)? Yes ☒ No ☐
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other _____
6. Cooler temperature upon receipt _____ °C See back of form for multiple coolers/temps ☒
   METHOD: IR ☒ Other ☐ _____
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☒ NA ☐
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☒ No ☐ Were VOAs on the COC? Yes ☒ No ☐

Contacted PM _____ Date _____ by _____ via Verbal ☐ Voice Mail ☐ Other ☐
Concerning _____

14. CHAIN OF CUSTODY

The following discrepancies occurred:

_____

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
22	<2	5-20-09	CSL
23	<2		
24	<2		
25	<2<2>12		
26	<2<2		
27	<2<2>12		
28	<2		
29	<2<2<2<2>12>12		

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
241-104	2-7	IR	Ice
241-404	2.2	IR	Ice

Discrepancies Cont'd:

CONESTOGA-ROVERS & ASSOCIATES

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

PAGE 1 OF 1

ID # № D 6177

SSOW Ref. Code: 17178-9-005

Required Client Information:

Company: CRA, Inc.	Report To: Paul W
Address: 14496 Sheldon Rd.	Copy To:
Suite 200	Invoice To:
Plymouth, MI 48170	P.O.:
Phone: 734-453-5123	Project Name: A-1 Landfill
Fax: 734-453-5201	Project Number: 17178
Email:	

Laboratory:	TEST America
Laboratory Location:	North Canton OH
Laboratory Contact:	
Requested Due Date:	TAT: 2wk
QA/QC Requirements:	

Valid Matrix Codes: WG Groundwater; WB Borehole Water; WS Surface Water; SO Soil; SE Sediment; See Back for Additional Codes

Analysis and Method

	Sample Identification:	Matrix Code	Date Collected	Time Collected	# Containers	Preservative: Unpreserved	HCl	H2SO4	HNO3	NaOH	Other:	TCL VOC	Select metals (Fe, Mn)		Dissolved Gases	Alkalinity, Ammonia	Nitrate, Nitrite	Sulfate, Sulfide		TOC			Remarks/Lab ID
1.	GW-17178-052009-BW-031	WG	5/20/09	0815	3							X											
2.	-032		5/20/09	0900	2							X											
3.	-033			1030	4							X	X		X	X	X	X		X			field filtered
4.	-034			1120	3							X	X										~~field filtered~~ BW
5.	TB-17178-035	WQ	NA	—	1							X											
6.																							
7.																							
8.																							
9.																							
10.																							
11.																							
12.																							
13.																							
14.																							
15.																							
	TOTAL NUMBER OF CONTAINERS																						

222 of 225

SHIPMENT METHOD	NO. OF COOLERS	RELINQUISHED BY / AFFILIATION	DATE	TIME	RECEIVED BY / AFFILIATION	DATE	TIME
	1		5/20/09	1600	TEST America	21 May 09	0910
AIRBILL NO.							

Sample Condition

Temp in °C	
Received on Ice	Y / N
Sealed Cooler	Y / N
Samples Intact	Y / N

Additional Comments:

Sampler Name: Sam Williams

Sampler Signature: Date: 5/

Distribution: WHITE - Fully Executed Copy YELLOW - Receiving Laboratory Copy PINK - Shipper GOLDENROD - Sampler Copy

REV. 11/6/04

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** A9E210121
North Canton Facility

Client CRA Project A-1 LANDFILL By: MAF
Cooler Received on 21 MAY 2009 Opened on 21 MAY 2009 (Signature)
FedEx [X] UPS [ ] DHL [ ] FAS [ ] Stetson [ ] Client Drop Off [ ] TestAmerica Courier [ ] Other
TestAmerica Cooler # 241 723 Multiple Coolers [ ] Foam Box [ ] Client Cooler [ ] Other

1. Were custody seals on the outside of the cooler(s)? Yes [ ] No [X] Intact? Yes [ ] No [ ] NA [X]
   If YES, Quantity Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes [ ] No [ ] NA [X]
   Were custody seals on the bottle(s)? Yes [ ] No [X]
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes [X] No [ ]
3. Did custody papers accompany the sample(s)? Yes [X] No [ ] Relinquished by client? Yes [X] No [ ]
4. Were the custody papers signed in the appropriate place? Yes [X] No [ ]
5. Packing material used: Bubble Wrap [X] Foam [X] None [ ] Other PLASTIC BAG
6. Cooler temperature upon receipt 2.4 °C See back of form for multiple coolers/temps [ ]
   METHOD: IR [X] Other [ ]
   COOLANT: Wet Ice [X] Blue Ice [ ] Dry Ice [ ] Water [ ] None [ ]
7. Did all bottles arrive in good condition (Unbroken)? Yes [X] No [ ]
8. Could all bottle labels be reconciled with the COC? Yes [X] No [ ]
9. Were sample(s) at the correct pH upon receipt? Yes [X] No [ ] NA [ ]
10. Were correct bottle(s) used for the test(s) indicated? Yes [X] No [ ]
11. Were air bubbles >6 mm in any VOA vials? Yes [X] No [ ] NA [ ]
12. Sufficient quantity received to perform indicated analyses? Yes [X] No [ ]
13. Was a trip blank present in the cooler(s)? Yes [X] No [ ] Were VOAs on the COC? Yes [X] No [ ]

Contacted PM PDH Date 5/15 by AM via Verbal [X] Voice Mail [ ] Other [ ]
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:
REC'D 15 BOTTLES... 033, COC = 4, will log actual volume.

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) 1X40ml (032) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot# 031909-HNO_3; Sulfuric Acid Lot# 100108-H_2SO_4; Sodium Hydroxide Lot# 073007 -NaOH; Hydrochloric Acid Lot# 092006-HCl; Sodium Hydroxide and Zinc Acetate Lot# 050205-$(CH_3COO)_2ZN/NaOH$.* What time was preservative added to sample(s)?

Client ID	pH	Date	Initials
33	<2 >9 <2	21 MAY 09	MAF

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant

Discrepancies Cont'd:

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

END OF REPORT

ATTACHMENT C

DATA QUALITY ASSESSMENT AND VALIDATION MEMORANDUM

CONESTOGA-ROVERS & ASSOCIATES

14496 Sheldon Road, Suite #200
Plymouth, Michigan 48170
Telephone: (734) 453-5123 Fax: (734) 453-5201
www.CRAworld.com

MEMORANDUM

TO: Renato Pasqualoni

REF. NO.: 17178

FROM: Rawa Fleisher/ma/4/Det.

DATE: June 12, 2009

RE: Data Quality Assessment and Reduced Validation
Groundwater Monitoring – May 2009
A-1 Landfill, Ostego, Michigan

The following details a quality assessment and validation of the analytical data resulting from the May 2009 collection of 29 water samples, and six (6) quality control samples from the A-1 Landfill Site in Ostego, Michigan The sample summary detailing sample identification, sample location, quality control samples, and analytical parameters is presented in Table 1. Sample analysis was completed at TestAmerica Laboratories, Inc in North Canton, Ohio (TA-NC) with the methodologies presented in Table 2.

The quality control criteria used to assess the data were established by the methods and the quality assurance project plan (QAPP). Application of quality assurance criteria was consistent with following guidance documents:

i. "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", EPA-540/R-99/008, October 1999;

ii. "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Review", EPA-540/R-94/013, February 1994.

These guidelines are collectively referred to as "NFGs" in this Memorandum.

Sample Quantitation

The laboratory reported detected concentrations of volatile organic compounds (VOC), gases, and inorganics below the laboratory's report limit (RL) but above the laboratory's method detection limit (MDL). The laboratory flagged these sample concentrations with a "J" or a "B" for organics and inorganics, respectively. These concentrations should be qualified as estimated (J) values unless qualified otherwise in this memorandum. The laboratory "B" flags may be disregarded.

Sample Preservation and Holding Times

Sample holding time periods and preservation requirements are presented in Table 2.

The samples were prepared and/or analyzed within the specified holding time periods. The samples were shipped and maintained in accordance with the sample preservation requirements.

Method Blank Samples

Method blank samples are prepared from a purified sample matrix and are processed concurrently with investigative samples to assess the presence and the magnitude of sample contamination introduced during sample analysis. Method blank samples are analyzed at a minimum frequency of one per analytical batch and target analytes should be non-detect.

The samples presented in Table 3 should be qualified due to laboratory contamination. The laboratory flagged the organic concentrations with a "B" and the inorganics with a "J", both of which may be disregarded. The remaining method blank samples did not contain target compounds with concentrations that impacted the investigative samples.

Surrogate Compounds – Organic Analyses

Individual sample performance for organic analyses was monitored by assessing the results of surrogate compound percent recoveries. Surrogate percent recoveries are reviewed against the laboratory developed control limits provided in the analytical report.

The surrogate recovery acceptance criteria were met for all samples.

Matrix Spike/Matrix Spike Duplicate Analyses

To assess the long term accuracy and precision of the analytical methods on various matrices, matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and the relative percent difference (RPD) of the concentrations were determined. The organic MS/MSD percent recovery and RPD control limits are established by the laboratory. The inorganic control limits are defined by the methods and the NFGs. The samples selected for MS/MSD analysis are identified in Table 1.

In some sample batches, non-Site-specific samples were utilized as MS/MSDs. Qualification of samples associated with these MS/MSDs was not performed. If MS/MSD analyses could not be completed in an analytical batch due to insufficient sample volume; precision and accuracy were verified by the analysis of the laboratory control sample/laboratory control duplicate (LCS/LCD). The samples that should be qualified due to violation of MS/MSD percent recovery criteria and/or RPD are outlined in Table 4. The MS/MSD percent recoveries and associated RPD acceptance criteria were met in the remaining sample analyses.

Laboratory Control Sample/Laboratory Control Duplicate Analyses

The laboratory control sample and laboratory control duplicate (LCS/LCD) analyses serve as a monitor of the overall performance in all steps of the sample analysis and are analyzed with each sample batch. The LCS/LCD percent recoveries were evaluated against method and laboratory established control limits.

The LCS/LCD percent recoveries were within the laboratory control limits or did not warrant qualification, indicating that an acceptable level of overall performance was achieved with the exception of the qualified samples presented in Table 5.

Laboratory precision was verified by the relative percent difference (RPD) of the LCS/LCD when a matrix spike/matrix spike duplicate was not analyzed.

Laboratory Control Sample/Laboratory Control Duplicate Analyses (continued)

The RPDs were within the laboratory control limits, indicating that an acceptable level of overall laboratory precision was achieved.

Field Quality Assurance/Quality Control

The field quality assurance/quality control consisted of three (3) field duplicate sample sets and three (3) trip blank samples.

Field Duplicate Samples

Overall precision for the sampling event and laboratory procedures was monitored using the results of the field duplicate sample sets. The RPDs associated with these duplicate samples must be less than 50 percent for water samples. If the reported concentration in either the investigative sample or its duplicate is less than five times the RL, the evaluation criteria is one times the RL value for water samples.

Table 6 presents the RPDs of detected analytes in duplicate sample sets with qualifiers. The data indicate that an adequate level of precision was achieved for the sampling event with the exception of methane.

Trip Blank Samples

To monitor potential cross-contamination of VOC during aqueous sample transportation and storage, a trip blank was submitted to the laboratory for VOC analysis with each shipping cooler containing multiple samples.

The samples that should be qualified due to trip blank contamination are summarized in Table 7. No additional target analytes were reported as detected in the trip blank sample(s).

Overall Assessment

The data were found to exhibit acceptable levels of accuracy and precision, based on the provided information, and may be used with the qualifications noted.

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
GROUNDWATER MONITORING - MAY 2009
A-1 LANDFILL
OSTEGO, MICHIGAN

						Analysis/Parameters								
Sample Identification	*Location*	*Matrix*	*QC Samples*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*Alkalinity*	*Ammonia*	*Gases*	*Metals (Total)*	*Metals (Dissolved)*	*TCL VOCs*	*Sulfide*	*Gen Chem*	*TOC*
CRA SDG No.: 20	**TA-NC Lot No.: A9E190164**		**TA-NC SDG No.: 9E19164**											
GW-17178-051809-BW-001	CRA-MW-1S	water		5/18/2009	9:50:00 AM					X	X			
GW-17178-051809-BW-002	CRA-MW-1D	water		5/18/2009	10:25:00 AM				X		X			
GW-17178-051809-BW-003	RL-2	water		5/18/2009	10:40:00 AM						X			
GW-17178-051809-BW-004	MW-21	water		5/18/2009	11:10:00 AM	X	X	X			X	X	X	X
GW-17178-051809-BW-005	MW-26	water		5/18/2009	11:31:00 AM	X	X	X			X	X	X	X
GW-17178-051809-BW-006	MW-11	water		5/18/2009	12:30:00 PM	X	X	X			X	X	X	X
GW-17178-051809-BW-007	MW-11	water	Dup (006)	5/18/2009	12:40:00 PM	X	X	X			X	X	X	X
GW-17178-051809-BW-008	MW-12	water		5/18/2009	1:20:00 PM						X			
GW-17178-051809-BW-009	RL-5	water		5/18/2009	1:40:00 PM						X			
GW-17178-051809-BW-010	SEG-MW-3	water		5/18/2009	2:10:00 PM					X	X			
GW-17178-051809-BW-011	RL-3	water		5/18/2009	2:30:00 PM					X	X			
GW-17178-051809-BW-012	MW-27	water		5/18/2009	3:35:00 PM	X	X	X			X	X	X	X
GW-17178-051809-BW-013	MW-13	water		5/18/2009	4:10:00 PM					X	X			
GW-17178-051809-BW-014	MW-24	water		5/18/2009	4:50:00 PM					X	X			
TB-17178-015	TRIPBLANK	water	Trip Blank	5/18/2009	N/A						X			

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
GROUNDWATER MONITORING - MAY 2009
A-1 LANDFILL
OSTEGO, MICHIGAN

						Analysis/Parameters								
Sample Identification	*Location*	*Matrix*	*QC Samples*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*Alkalinity*	*Ammonia*	*Gases*	*Metals (Total)*	*Metals (Dissolved)*	*TCL VOCs*	*Sulfide*	*Gen Chem*	*TOC*
CRA SDG No.: 21	**TA-NC Lot No.: A9E200123**		**TA-NC SDG No.: 9E19164**											
GW-17178-051809-BW-016	RL-8	water		5/18/2009	5:00:00 PM						X			
GW-17178-051809-BW-017	MW-14	water		5/18/2009	7:53:00 PM						X			
GW-17178-051809-BW-018	MW-28	water		5/18/2009	8:25:00 PM						X			
GW-17178-051909-BW-019	MW-29	water		5/19/2009	7:50:00 AM						X			
GW-17178-051909-BW-020	MW-25	water		5/19/2009	8:30:00 AM						X			
GW-17178-051909-BW-021	MW-25	water	Dup (020)	5/19/2009	8:35:00 AM						X			
GW-17178-051909-BW-022	MW-34	water		5/19/2009	9:40:00 AM					X	X			
GW-17178-051909-BW-023	MW-22	water		5/19/2009	10:25:00 AM				X		X			
GW-17178-051909-BW-024	MW-22	water	Dup (023)	5/19/2009	10:30:00 AM				X		X			
GW-17178-051909-BW-025	MW-30	water		5/19/2009	11:20:00 AM	X	X	X	X		X	X	X	X
GW-17178-051909-BW-026	MW-32	water	MS/MSD	5/19/2009	1:35:00 PM				X		X			
GW-17178-051909-BW-027	MW-33	water		5/19/2009	2:25:00 PM	X	X	X	X		X	X	X	X
GW-17178-051909-BW-028	MW-35	water		5/19/2009	3:25:00 PM				X		X			
GW-17178-051909-BW-029	MW-36	water	MS/MSD	5/19/2009	4:20:00 PM	X	X	X	X		X	X	X	X
TB-17178-030	TRIPBLANK	water	Trip Blank	5/19/2009	N/A						X			

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
GROUNDWATER MONITORING - MAY 2009
A-1 LANDFILL
OSTEGO, MICHIGAN

						Analysis/Parameters								
Sample Identification	*Location*	*Matrix*	*QC Samples*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*Alkalinity*	*Ammonia*	*Gases*	*Metals (Total)*	*Metals (Dissolved)*	*TCL VOCs*	*Sulfide*	*Gen Chem*	*TOC*
CRA SDG No.: 22	**TA-NC Lot No.: A9E210121**		**TA-NC SDG No.: 9E19164**											
GW-17178-052009-BW-031	MW-9	water		5/20/2009	8:15:00 AM						X			
GW-17178-052009-BW-032	RL-1	water		5/20/2009	9:00:00 AM						X			
GW-17178-052009-BW-033	RL-6	water		5/20/2009	10:30:00 AM	X	X	X		X	X	X	X	X
GW-17178-052009-BW-034	RL-4	water		5/20/2009	11:20:00 AM						X			
TB-17178-035	TRIPBLANK	water	Trip Blank	5/20/2009	N/A						X			

Notes:

Dup - Duplicate
Gases - Ethane, Ethene, Methane
Gen Chem - Chloride, Sulfate, Nitrate-N, Nitrite-N
MS/MSD - Matrix Spike/Matrix Spike Duplicate
QC - Quality Control
TCL - Target Compound List
TOC - Total Organic Carbon
VOC - Volatile Organic Compounds

TABLE 2

SUMMARY OF ANALYTICAL METHODS, HOLDING TIME PERIODS, AND PRESERVATIVES
GROUNDWATER MONITORING - MAY 2009
A-1 LANDFILL
OSTEGO, MICHIGAN

Parameter	*Method* [1]	*Matrix*	*Holding Time*	*Preservation*
TCL VOC	SW-846 8260	Water	- 14 days from sample collection to completion of analysis.	pH < 2 and Iced, 4 ± 2° C
Gases	EPA RSK-175	Water	- 14 days from sample collection to completion of analysis.	pH < 2 and Iced, 4 ± 2° C
		Water		
Metals		Water	- 180 days from sample collection to completion of analysis	pH < 2 and Iced, 4 ± 2° C
Iron	SW-846 6020			
Manganese	SW-846 6020			
General Chemistry				
Alkalinity	EPA-WW 310	Water	- 14 days from sample collection to analysis	Iced, 4 ± 2° C
Ammonia (nitrogen)	EPA-WW 350	Water	- 28 days from sample collection to completion of analysis.	pH < 2 and Iced, 4 ± 2° C
Sulfide	SW-846-9030	Water	- 7 days from sample collection to completion of analysis.	pH >9 and Iced, 4 ± 2° C
Chloride, Sulfate, and Nitrate-N	SW-846 9056	Water	- 28 days from sample collection to completion of analysis	Iced, 4 ± 2° C
Nitrite-N	SW-846-9056	Water	- 48 hours from sample collection to completion of analysis.	Iced, 4 ± 2° C
TOC	SW-846-9060	Water	- 28 days from sample collection to completion of analysis.	pH < 2 and Iced, 4 ± 2° C

Notes:

[1] Method References:

SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, 3rd Edition, and Promulgated updates, November 1986
EPA RSK-175-EPA Internal Standard Operating Procedure dated 8/11/94 by Bryan Newell at R.S. Kerr Laboratory in Oklahoma.
EPA-WW - USEPA Office of Water Method 01A-1677, EPA-821-F-98-001, January 1998.

TABLE 3

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
GROUNDWATER MONITORING - MAY 2009
A-1 LANDFILL
OSTEGO, MICHIGAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
TCL VOC	Methylene chloride	05/27/09	0.39	GW-17178-051809-BW-003	ND (10) U	µg/L
				GW-17178-051809-BW-004	ND (29) U	µg/L
				GW-17178-051809-BW-005	ND (14) U	µg/L
				GW-17178-051809-BW-006	ND (77) U	µg/L
				GW-17178-051809-BW-007	ND (71) U	µg/L
				GW-17178-051809-BW-010	ND (5.0) U	µg/L
				GW-17178-051809-BW-012	ND (25) U	µg/L
				GW-17178-051809-BW-013	ND (6.7) U	µg/L
				GW-17178-051809-BW-017	ND (6.7) U	µg/L
				GW-17178-051909-BW-023	ND (5.0) U	µg/L
				GW-17178-051909-BW-024	ND (5.0) U	µg/L
				GW-17178-051909-BW-027	ND (5.0) U	µg/L
Gases	Methane	05/22/09	0.23	GW-17178-051809-BW-004	ND (0.88) U	µg/L
				GW-17178-051809-BW-007	ND (0.69) U	µg/L
				GW-17178-051809-BW-012	ND (0.50) U	µg/L
Gases	Methane	05/28/09	0.42	GW-17178-052009-BW-033	ND (0.50) U	µg/L
Metals	Manganese (total)	05/27/09	1.2	GW-17178-051909-BW-023	ND (15.0) U	µg/L
				GW-17178-051909-BW-024	ND (15.0) U	µg/L

Notes:

ND ( ) U - Qualified as Not Detected at the report limit
TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 4

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE
GROUNDWATER MONITORING - MAY 2009
A-1 LANDFILL
OSTEGO, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
TCL VOC	cis-1,3-Dichloropropene	57	56	1.8	82-130	30	GW-17178-051909-BW-026	ND (1.0) UJ	µg/L
	trans-1,3-Dichloropropene	59	60	0.77	73-147	30		ND (1.0) UJ	µg/L
	4-Methyl-2-Pentanone	73	73	0.91	82-135	30		ND (10) UJ	µg/L
	Methyl cyclohexane	55	54	1.4	70-130	30		ND (1.0) UJ	µg/L
	Cyclohexane	60	60	1.4	70-130	30		ND (1.0) UJ	µg/L
	Vinyl chloride	80	78	1.5	88-126	30		ND (1.0) UJ	µg/L
	Methyl acetate	68	68	0.11	70-130	30		ND (10) UJ	µg/L
TCL VOC	cis-1,3-Dichloropropene	62	60	3.0	82-130	30	GW-17178-051909-BW-029	ND (1.0) UJ	µg/L
	trans-1,3-Dichloropropene	65	60	9.1	73-147	30		ND (1.0) UJ	µg/L
	4-Methyl-2-Pentanone	65	67	3.6	82-135	30		ND (10) UJ	µg/L
	2-Hexanone	71	78	10.0	81-128	30		ND (10) UJ	µg/L
	Vinyl chloride	83	85	2.0	88-126	30		ND (1.0) UJ	µg/L
	Methyl acetate	60	66	8.8	70-130	30		ND (10) UJ	µg/L
Gases	Methane	95	143	33.0	75-127	30	GW-17178-051909-BW-029	20 J	µg/L
	Ethane	68	111	48	74-138	30		0.50 J	µg/L
	Ethene	75	120	46	73-140	30		0.39 J	µg/L

Notes:

J - Estimated Concentration
ND ( ) UJ - Non-detect with an Estimated Report Limit

MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 5

SUMMARY OF QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE / LABORATORY CONTROL SAMPLE DUPLICATE RESULTS
GROUNDWATER MONITORING - MAY 2009
A-1 LANDFILL
OSTEGO, MICHIGAN

Parameter	*Analyte*	*LCS Date*	*LCS %Rec*	*LCD %Rec*	*RPD (percent)*	*Control Limits %Rec*	*Control Limits RPD*	*Associated Sample ID*	*Qualified Result*	*Units*
TCL VOC	cis-1,3-Dichloropropene	05/28/09	83	87	4.1	84-130	30	GW-17178-052009-BW-031	ND (1.0) UJ	µg/L
	Methyl cyclohexane		64	66	2.1	70-130	30		ND (1.0) UJ	µg/L
	Cyclohexane		65	66	2.4	70-130	30		ND (1.0) UJ	µg/L
	Dichlorodifluoromethane (CFC-12)		59	60	1.7	70-130	30		1.5 J	µg/L
TCL VOC	cis-1,3-Dichloropropene	05/28/09	83	87	4.1	84-130	30	GW-17178-052009-BW-032	ND (1.0) UJ	µg/L
	Methyl cyclohexane		64	66	2.1	70-130	30	GW-17178-052009-BW-033	ND (1.0) UJ	µg/L
	Cyclohexane		65	66	2.4	70-130	30	TB-17178-035	ND (1.0) UJ	µg/L
	Dichlorodifluoromethane (CFC-12)		59	60	1.7	70-130	30		ND (1.0) UJ	µg/L
TCL VOC	cis-1,3-Dichloropropene	05/28/09	83	87	4.1	84-130	30	GW-17178-052009-BW-034	ND (1.0) UJ	µg/L
	Methyl cyclohexane		64	66	2.1	70-130	30		ND (1.0) UJ	µg/L
	Cyclohexane		65	66	2.4	70-130	30		ND (1.0) UJ	µg/L
	Chloroethane		122	128	4.6	66-126	30		1.3 J	µg/L
	Dichlorodifluoromethane (CFC-12)		59	60	1.7	70-130	30		ND (1.0) UJ	µg/L
TCL VOC	cis-1,3-Dichloropropene	05/27/09	82	81	0.86	84-130	30	GW-17178-051809-BW-001	ND (1.0) UJ	µg/L
	Methyl cyclohexane		65	81	22	70-130	30	GW-17178-051809-BW-002	ND (1.0) UJ	µg/L
	Cyclohexane		65	78	17	70-130	30	GW-17178-051809-BW-009	ND (1.0) UJ	µg/L
								GW-17178-051809-BW-011		
								GW-17178-051809-BW-014		
								GW-17178-051809-BW-016		
								GW-17178-051809-BW-018		
								GW-17178-051909-BW-019		
								GW-17178-051909-BW-020		
								GW-17178-051909-BW-021		
								GW-17178-051909-BW-022		
								GW-17178-051909-BW-025		
								GW-17178-051909-BW-026		
								GW-17178-051909-BW-028		
								TB-17178-015		

TABLE 5

SUMMARY OF QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE / LABORATORY CONTROL SAMPLE DUPLICATE RESULTS
GROUNDWATER MONITORING - MAY 2009
A-1 LANDFILL
OSTEGO, MICHIGAN

Parameter	*Analyte*	*LCS Date*	*LCS %Rec*	*LCD %Rec*	*RPD (percent)*	*Control Limits %Rec*	*Control Limits RPD*	*Associated Sample ID*	*Qualified Result*	*Units*
TCL VOC	cis-1,3-Dichloropropene	05/27/09	82	81	0.86	84-130	30	GW-17178-051809-BW-008	ND (1.0) UJ	µg/L
	Methyl cyclohexane		65	81	22	70-130	30		0.67 J	µg/L
	Cyclohexane		65	78	17	70-130	30		0.56 J	µg/L
TCL VOC	cis-1,3-Dichloropropene	05/27/09	84	81	3.3	84-130	30	GW-17178-051809-BW-003	ND (10) UJ	µg/L
	Methyl cyclohexane		65	76	16	70-130	30		ND (10) UJ	µg/L
	Cyclohexane		68	76	11	70-130	30		ND (10) UJ	µg/L
TCL VOC	cis-1,3-Dichloropropene	05/27/09	84	81	3.3	84-130	30	GW-17178-051809-BW-004	ND (29) UJ	µg/L
	Methyl cyclohexane		65	76	16	70-130	30		ND (29) UJ	µg/L
	Cyclohexane		68	76	11	70-130	30		ND (29) UJ	µg/L
TCL VOC	cis-1,3-Dichloropropene	05/27/09	84	81	3.3	84-130	30	GW-17178-051809-BW-005	ND (14) UJ	µg/L
	Methyl cyclohexane		65	76	16	70-130	30		ND (14) UJ	µg/L
	Cyclohexane		68	76	11	70-130	30		ND (14) UJ	µg/L
TCL VOC	cis-1,3-Dichloropropene	05/27/09	84	81	3.3	84-130	30	GW-17178-051809-BW-006	ND (77) UJ	µg/L
	Methyl cyclohexane		65	76	16	70-130	30		ND (77) UJ	µg/L
	Cyclohexane		68	76	11	70-130	30		ND (77) UJ	µg/L
TCL VOC	cis-1,3-Dichloropropene	05/27/09	84	81	3.3	84-130	30	GW-17178-051809-BW-007	ND (71) UJ	µg/L
	Methyl cyclohexane		65	76	16	70-130	30		ND (71) UJ	µg/L
	Cyclohexane		68	76	11	70-130	30		ND (71) UJ	µg/L
TCL VOC	cis-1,3-Dichloropropene	05/27/09	84	81	3.3	84-130	30	GW-17178-051809-BW-010	ND (5.0) UJ	µg/L
	Methyl cyclohexane		65	76	16	70-130	30	GW-17178-051909-BW-023	ND (5.0) UJ	µg/L
	Cyclohexane		68	76	11	70-130	30	GW-17178-051909-BW-024	ND (5.0) UJ	µg/L
								GW-17178-051909-BW-027		
TCL VOC	cis-1,3-Dichloropropene	05/27/09	84	81	3.3	84-130	30	GW-17178-051809-BW-012	ND (25) UJ	µg/L
	Methyl cyclohexane		65	76	16	70-130	30		ND (25) UJ	µg/L
	Cyclohexane		68	76	11	70-130	30		ND (25) UJ	µg/L

TABLE 5

SUMMARY OF QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE / LABORATORY CONTROL SAMPLE DUPLICATE RESULTS GROUNDWATER MONITORING - MAY 2009 A-1 LANDFILL OSTEGO, MICHIGAN

Parameter	*Analyte*	*LCS Date*	*LCS %Rec*	*LCD %Rec*	*RPD (percent)*	*Control Limits %Rec*	*Control Limits RPD*	*Associated Sample ID*	*Qualified Result*	*Units*
TCL VOC	cis-1,3-Dichloropropene	05/27/09	84	81	3.3	84-130	30	GW-17178-051809-BW-013	ND (6.7) UJ	µg/L
	Methyl cyclohexane		65	76	16	70-130	30	GW-17178-051809-BW-017	ND (6.7) UJ	µg/L
	Cyclohexane		68	76	11	70-130	30		ND (6.7) UJ	µg/L
TCL VOC	cis-1,3-Dichloropropene	05/27/09	84	81	3.3	84-130	30	GW-17178-051909-BW-029	ND (1.0) UJ	µg/L
	Methyl cyclohexane		65	76	16	70-130	30	TB-17178-030	ND (1.0) UJ	µg/L
	Cyclohexane		68	76	11	70-130	30		ND (1.0) UJ	µg/L

Notes:

J - Estimated Concentration
ND ( ) UJ - Non-detect with an Estimated Report Limit

LCS - Laboratory Control Spike
LCD - Laboratory Control Spike Duplicate
%Rec - Percent Recovery
RPD - Relative Percent Difference
TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 6

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO VARIABILITY IN FIELD DUPLICATE RESULTS
GROUNDWATER MONITORING - MAY 2009
A-1 LANDFILL
OSTEGO, MICHIGAN

Parameter	*Analyte*	*Criteria*	*Diff*	*Sample ID*	*Qualified Result*	*Field Duplicate Sample ID*	*Qualified Result*	*Units*
Gases	Methane	Diff	1.2	GW-17178-051809-BW-006	1.9 J	GW-17178-051809-BW-007	ND (0.69) UJ	µg/L

Notes:

J - Estimated Concentration
ND ( ) UJ - Non-detect with an Estimated Report Limit

RPD - Relative Percent Difference
Diff - Difference

TABLE 7

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO TRIP BLANK CONTAMINATION
GROUNDWATER MONITORING - MAY 2009
A-1 LANDFILL
OSTEGO, MICHIGAN

Parameter	*Analyte*	*Blank Date*	*Blank Result*	*Associated Sample ID*	*Qualified Result*	*Units*
TCL VOC	Acetone	05/20/09	1.6	GW-17178-052009-BW-032	ND (10) U	µg/L

Notes:

ND ( ) UJ - Non-detect with an Estimated Report Limit

TCL - Target Compound List
VOC - Volatile Organic Compounds