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CORRECTIVE MEASURE IMPLEMENTATION PLAN

NORTHEAST AREA
FORMER WILLOW RUN PLANT
MID 980 587 893

Prepared for: RACER

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September 2013 • #017358
Report Number:25

Based on my knowledge of the conditions of the property described in the remedial action plan and my inquiry of the person or persons who manage the system referenced in the operator's certification, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Grant R Trigger

9-11-13

Grant Trigger
Michigan Cleanup Manager
Revitalizing Auto Communities
Environmental Response Trust

Date

TABLE OF CONTENTS

		Page
1.0	INTRODUCTION	1
	1.1 SITE REGULATORY HISTORY	1
	1.2 LAND TRANSFER AREA HISTORY	2
2.0	ENVIRONMENTAL INVESTIGATIONS AND ACTIONS	3
	2.1 SCREENING CRITERIA	3
	2.2 HISTORICAL ACTIVITIES	3
	2.3 CURRENT ACTIVITIES	4
3.0	CONCLUSIONS AND RECOMMENDATIONS	6
4.0	REFERENCES	7

LIST OF FIGURES
(Following Text)

FIGURE 1.1 HISTORICAL AND CURRENT INVESTIGATION LOCATIONS

LIST OF TABLES
(Following Text)

TABLE 2.1 SOIL SCREENING CRITERIA

TABLE 2.2 GROUNDWATER SCREENING CRITERIA

TABLE 2.3 SOIL ANALYTICAL RESULTS - 1988

TABLE 2.4 GROUNDWATER ANALYTICAL RESULTS - 1989 - 1990

TABLE 2.5 GROUNDWATER ANALYTICAL RESULTS 2004 - 2013

TABLE 2.6 SOIL ANALYTICAL RESULTS – 2004 - 2012

LIST OF APPENDICES

APPENDIX A NORTHEAST AREA SUMMARY REPORT

APPENDIX B LEGAL SURVEY OF LAND TO BE TRANSFERRED

APPENDIX C LABORATORY REPORTS AND DATA VALIDATION MEMORANDA

APPENDIX D PROPOSED DEED RESTRICTION

1.0 INTRODUCTION

On June 14, 2012 Conestoga-Rovers & Associates (CRA) submitted the Northeast Area Summary Report (Appendix A) to the Michigan Department of Environmental Quality (MDEQ) for review. That report summarized the historical and current conditions for the Northeast Area of the former Willow Run Plant located at 2930 Ecorse Road in Ypsilanti, Michigan (Site).

RACER is in discussions with the Wayne County Airport Authority (WCAA) to transfer a portion of this Northeast Area to the adjacent Willow Run Airport. Since the Northeast Area Summary Report was submitted the area to be transferred from RACER to the WCAA has been further defined. The total area to be transferred is 21.26 acres. Figure 1.1 and Appendix B (legal survey) identifies the proposed portion of the Northeast Area to be transferred, herein referred to as the Land Transfer Area. This Corrective Measure Implementation Plan (CMIP) was prepared to summarize the investigation results and proposed final corrective measures within Land Transfer Area as identified in Figure 1.1 and Appendix B.

1.1 SITE REGULATORY HISTORY

The Site submitted an initial Notification of Hazardous Waste Activity to the U.S. EPA on July 19, 1980 and received United States Environmental Protection Agency (U.S. EPA) Identification No. MIT270012560 (temporary) and was subsequently given U.S. EPA Identification No. MID980587893.

The Site submitted a RCRA Hazardous Waste Part A Permit application to the U.S. EPA in November 1980. The permit was submitted for a drum pad located south of the main plant building. Revised Part A Permit applications were submitted to the U.S. EPA in February 1981 and February 1986. The Site filed a RCRA Hazardous Waste Part B Permit in February 1986 and subsequently petitioned to withdraw Part B Permit in June 1988. According to an undated Michigan Department of Natural Resources (MDNR) (MDEQ) RCRA/Act 64 Inspection report, the Site had recently changed from an interim status treatment, storage and disposal facility (TSDF) to generator status. The MDNR (MDEQ) approved closure of drum pad in October 1989.

A Preliminary Assessment/Visual Site Inspection (PA/VSI) conducted by PRC Environmental Management, Inc. (contactor for U.S. EPA) on January 29, 1992, with final report issued October 19, 1992. The PA/VSI did not identify any Solid Waste

Management Units (SWMU) or Areas of Concern (AOCs) within the Land Transfer Area.

1.2 LAND TRANSFER AREA HISTORY

The Current Conditions Report (CRA, 2011) identified Area of Interest (AOI) 12, the North Yard which is partially located within the Land Transfer Area. This area was used over a period of 30 years to store various pieces of production machinery and equipment on bare ground. Various investigations and a soil removal action were completed in the late 1980s. The results of these are discussed in Section 2 of this CMIP and in Appendix A.

The Land Transfer Area does include a small portion of the main Plant building. This portion is generally referred to as Building 95 and will be demolished within the next six months. Building 95 was constructed as an outbuilding to the original plant between 1949 and 1955, expanded between 1955 and 1956, and incorporated into the main plant building during a larger addition between 1969 and 1978. Building 95 was primarily used for packaging and shipping of parts.

The remainder of the Land Transfer Area was used for employee parking.

2.0 ENVIRONMENTAL INVESTIGATIONS AND ACTIONS

2.1 SCREENING CRITERIA

The soil and groundwater results were compared to Michigan Part 201 generic cleanup criteria developed by the Michigan Department of Environmental Quality (MDEQ) under the authority of the Natural Resources and Environmental Protection Act (1994 PA 451, as amended), and published under Remediation and Redevelopment Operational Memorandum No. 1, Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, as updated September 28, 2012 by the Remediation and Redevelopment Division. Due to the proximity to a property boundary, the results were compared to both residential and non-residential cleanup criteria. Tables 2.1 and 2.2 present the soil and groundwater screening criteria, respectively. Also included in Tables 2.1 and 2.2 are Site specific background metal concentrations for both soil and groundwater, respectively. Analytical results for both soil and groundwater that are above Part 201 criteria, but below Site specific background concentrations, are not flagged as exceedances in the remaining tables in this section.

2.2 HISTORICAL ACTIVITIES

In the late 1980s and early 1990s, General Motors Corporation (GM) conducted a soil and groundwater investigation and soil removal in the Northeast Area. The soil excavated was not within the proposed Land Transfer Area. The soil and groundwater analytical results from samples collected within the proposed Land Transfer Area are presented in Tables 2.3 and 2.4, respectively. The soil and groundwater sampling locations are presented on Figure 1.1. The soil results within the Land Transfer Area did not exhibit any exceedance of current screening criteria. Additional details on the investigation and soil removal are provided in the Northeast Area Summary Report (Appendix A).

The groundwater data generally indicated that metals were present at levels not uncommon for shallow groundwater in Michigan. Two locations exhibited concentrations of iron that were above the current residential and non-residential drinking water criteria. The 2012 results were below Part 201 criteria in samples collected from the same wells or replacement wells. All other metals analyzed for were generally not detected.

Site-related organic chemicals (including PCBs) were generally not identified during the monitoring period. However, in December 1989 and March 1990 PCB Aroclor 1248 was

detected in CRA-264M at extremely low concentrations. No PCBs were found in CRA-264M during subsequent sampling events (including in 2012). During the subsurface soil study, low concentrations of PCBs were found in shallow soils in two discrete areas of the site, but no PCBs above the limit of detection (0.2 mg/kg) were found in soil samples from the CRA-264M area. Also, PCBs are highly insoluble in water and tend to be found in the environment either adsorbed to soil particles or in soil. The historical reports indicate that the groundwater sample from this well was very silty. Therefore, it is likely that the PCBs observed in groundwater samples from CRA-264M were not indicative of actual groundwater conditions.

2.3 CURRENT ACTIVITIES

Various investigations were completed between 2004 and 2010 throughout the Site, with three locations located within the Land Transfer Area, including two monitoring wells and one test trench.

A Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) was initiated in 2012 at the Site. Some of the locations completed as part of this investigation fall within the Land Transfer Area. One soil boring and three monitoring wells were installed within this area, while one monitoring well was installed immediately adjacent to the area as a replacement for one of the historical wells within the proposed area. Soil and groundwater sampling locations are presented on Figure 1.1.

Tables 2.5 and 2.6 present the results of the groundwater and soil samples collected between 2004 and 2013 compared against the screening criteria.

Soil

No Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), or PCBs were detected at concentrations above the screening criteria. Various metals were detected above screening criteria.

Arsenic and manganese were detected in one sample from CRA-834M (3-5 feet bgs) and arsenic, cobalt, and vanadium were detected in one sample from CRA-342M (2.8-3.3 feet bgs) at concentrations above the screening criteria. The non-residential screening criteria exceeded are drinking water and groundwater surface water interface protection criteria.

In 2005 the MDEQ updated the document "Michigan Background Soil Survey" (MBSS). The MBSS is a compilation of soil sampling data that represents what is assumed to be

naturally occurring background concentrations of metals in Michigan soils. The data and statistical summaries in the MBSS are used for comparison purposes only and are meant to provide a resource for information regarding the concentrations of naturally occurring metals in various soil types and geographic areas of Michigan. The concentrations detected fall within the typical data range for these metals in Michigan as documented in the MBSS. Appendix C contains the laboratory reports and data validation memoranda for the soil sampling completed in January and February 2012.

Groundwater

The groundwater in the Northeast Area is fairly shallow. Water levels in the wells range from approximately 3 to 4 ft bgs. The general groundwater flow direction in this area is to the southeast (Figure 1.1).

No Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), or PCBs were detected at concentrations above the screening criteria. Various metals were detected above screening criteria.

In 2004 a Site utility investigation was conducted which included collecting groundwater samples from test pits within utility corridors. One sample was collected from a test pit located within the Land Transfer Area as identified on Figure 1.1. The groundwater results from this test pit are presented on Table 2.5. Aluminum was detected exceeding the residential and non-residential drinking water criteria.

Between 2004 and 2013 wells CRA-209M and CRA-342M were sampled six times, in 2004, 2007, 2008, 2010, 2012 and 2013. Well CRA-209M exhibited an exceedance for manganese above drinking water criteria in only the 2010 sample. CRA-342M had exceedances of several metals in the first sample in 2004 and then no exceedances in the subsequent samples. Appendix C contains the laboratory reports and data validation memoranda for the groundwater sampling completed in 2012 and 2013.

In the RFI investigation completed in 2012 and 2013 in the Land Transfer Area, aluminum was detected in one well above residential and non-residential drinking water criteria in a 2012 sample. The aluminum concentration in the same well sampled in 2013 was below screening criteria.

3.0 CONCLUSIONS AND RECOMMENDATIONS

The analytical results of the historical and current investigations indicate that the soil and groundwater are not impacted by organic parameters (i.e., VOCs, SVOCs, and PCBs) and that the detected metals may be attributable to naturally occurring concentrations. Although the concentrations of metals in soil and groundwater are maybe a result of background conditions, a deed restriction will be pursued to prohibit use of the groundwater and restrict the use of the property to non-residential use. A copy of the proposed deed restriction is provided in Appendix D.

4.0 REFERENCES

CRA. July 2011. Current Conditions Report, Former General Motors Powertrain Willow Run, Ypsilanti, Michigan.

CRA. 2012. Northeast Area Summary Report, Former Willow Run, Ypsilanti, Michigan, June 2012.

FIGURES

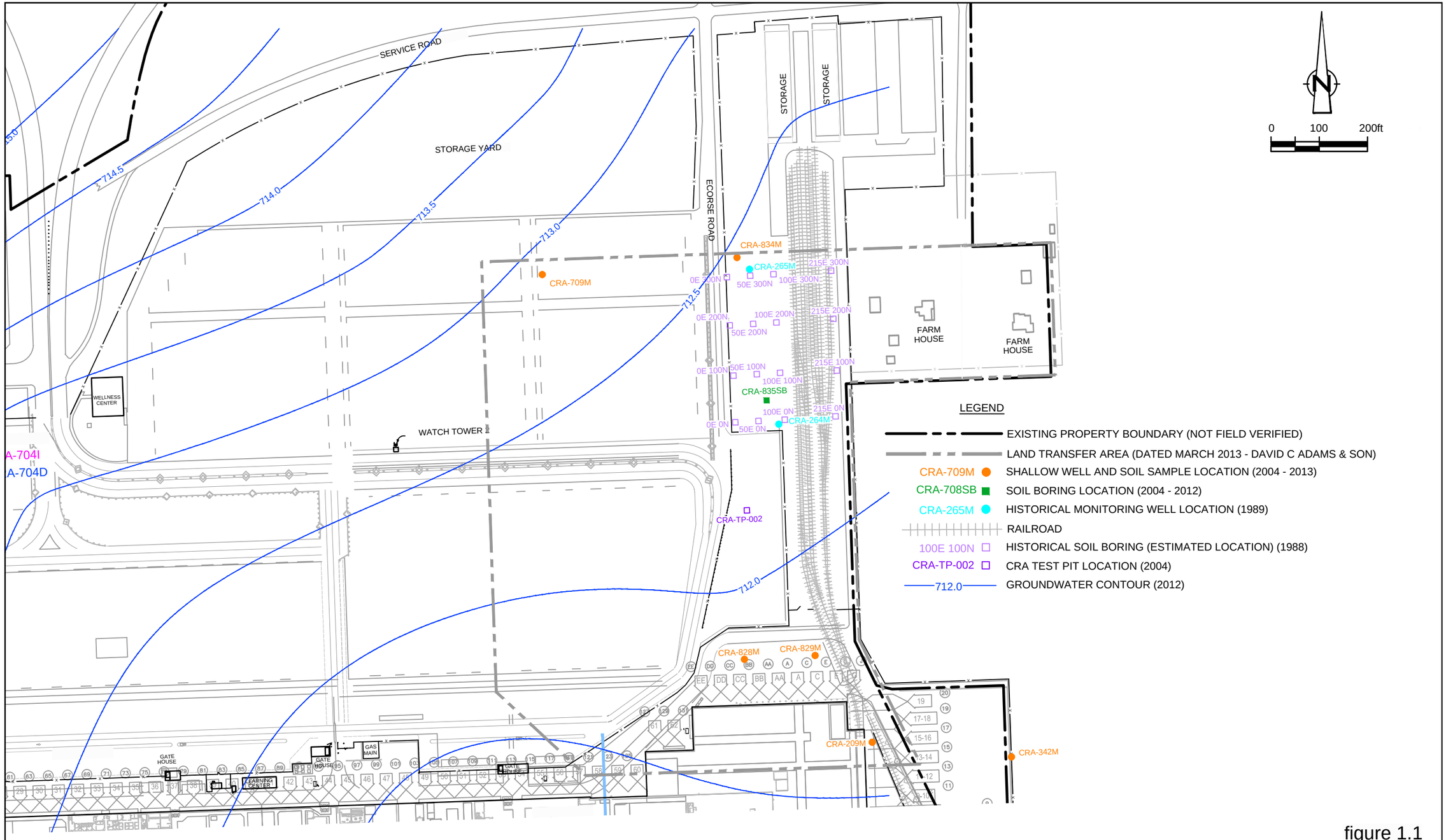


figure 1.1

HISTORICAL AND CURRENT INVESTIGATION LOCATIONS
CMIP - NORTHEAST AREA
FORMER WILLOW RUN PLANT
Ypsilanti, Michigan

017358-T01(025)GN-DE001 SEP 11/2013

TABLES

TABLE 2.1

SOIL SCREENING CRITERIA
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location Sample Identification Sample Date Sample Type Sample Depth	Statewide Default Background	Drinking Water Protection	Non-Residential Drinking Water Protection	Groundwater Surface Water Interface Protection	Groundwater Contact Protection	Soil Volatilization to Indoor Air Inhalation	Non-Residential Soil Volatilization to Indoor Air Inhalation	Infinite Source Volatile Soil Inhalation	Non-Residential Infinite Source Volatile Soil Inhalation	Finite VSIC for 5 Meter Source Thickness	Non-Residential Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Non-Residential Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation	Non-Residential Particulate Soil Inhalation	Direct Contact	Non-Residential Direct Contact	Soil Saturation Concentration Screening	Site Specific Background Metals Concentrations
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s
Inorganics (mg/kg)																			
Aluminum	6900	1	1	NA	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	50000	370000	NA	5788
Antimony	NA	4.3	4.3	94	49000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	13000	5900	180	670	NA	0.089
Arsenic	5.8	4.6	4.6	4.6	2000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	720	910	7.6	37	NA	7.26
Barium	75	1300	1300	1200	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	330000	150000	37000	130000	NA	25.6
Beryllium	NA	51	51	950	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1300	590	410	1600	NA	0.196
Cadmium	1.2	6	6	7.30	230000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1700	2200	550	2100	NA	0.098
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	152444
Chromium	18	30	30	3.3	140000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	260	240	2500	9200	NA	11.9
Chromium III (trivalent)	18	1000000	1000000	6600000	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	330000	150000	790000	1000000	NA	12.0
Chromium VI (hexavalent)	NA	30	30	3.3	140000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	260	240	2500	9200	NA	0.96 UJ
Cobalt	6.8	0.8	2	2	48000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	13000	5900	2600	9000	NA	4.38
Copper	32	5800	5800	170	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	130000	59000	20000	73000	NA	13.0
Iron	12000	6	6	NA	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	160000	580000	NA	13484
Lead	21	700	700	7700	ID	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	100000	44000	400	900	NA	7.14
Magnesium	NA	8000	22000	NA	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6700000	2900000	1000000	1000000	NA	25296
Manganese	440	1	1	130	180000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	3300	1500	25000	90000	NA	348
Mercury	0.13	1.7	1.7	0.05	47	48	89	52	62	52	62	52	62	20000	8800	160	580	NA	0.049 U
Nickel	20	100	100	170	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	13000	16000	40000	150000	NA	11.9
Potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	479
Selenium	0.41	4	4	0.4	78000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	130000	59000	2600	9600	NA	0.83
Silver	1	4.5	13	0.1	200000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6700	2900	2500	9000	NA	0.089 U
Sodium	NA	2500	7000	NA	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	1000000	1000000	NA	88 U
Thallium	NA	2.3	2.3	4.2	15000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	13000	5900	35	130	NA	0.12
Vanadium	NA	72	990	4.3	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	750	5500	NA	16.7
Zinc	47	2400	5000	380	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	170000	630000	NA	32
PCBs (mg/kg)																			
Aroclor-1016 (PCB-1016)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221 (PCB-1221)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232 (PCB-1232)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242 (PCB-1242)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248 (PCB-1248)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254 (PCB-1254)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260 (PCB-1260)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	NA	NLL	NLL	NLL	NLL	3000	16000	240	810	7900	28000	7900	28000	5200	6500	4	16	NA	NA
Semi-Volatile Organic Compounds (mg/kg)																			
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	39	110	NA	9100	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	23000000	10000000	23000	73000	NA	NA
2,4,6-Trichlorophenol	NA	2.4	9.4	0.33	200	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1000000	1300000	710	3300	NA	NA
2,4-Dichlorophenol	NA	1.5	4.2	0.33	960	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	5100000	2300000	660	1800	1800	NA
2,4-Dimethylphenol	NA	7.4	20	7.6	10000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	4700000	2100000	11000	36000	NA	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	0.43	0.64	NA	170	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	16000	20000	48	220	NA	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	620	1800	NA	2300	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	56000	180000	NA	NA
2-Chlorophenol	NA	0.9	2.6	0.36	1900	430	800	960	1100	960	1100	960	1100	1200000	530000	1400	4500	19000	NA
2-Methylnaphthalene	NA	57	170	4.2	5500	2700	4900	1500	1800	1500	1800	1500	1800	670000	290000	8100	26000	NA	NA
2-Methylphenol	NA	7.4	20	1	16000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6700000	2900000	11000	36000	NA	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	0.4	1.2	ID	1600	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	630	2000	NA	NA
3&4-Methylphenol	NA	7.4	20	1	16000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6700000	2900000	11000	36000	NA	NA
3,3'-Dichlorobenzidine	NA	2	2	2	4.6	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6500	8200	6.6	30	NA	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	0.83	0.83	NA	190	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	79	260	NA	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	5.8	16	0.28	3000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	4500	15000	NA	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	300	880	8.7	970	190000	350000	81000	97000	81000	97000	81000	97000	14000000	6200000	41000	130000	NA	NA
Acenaphthylene	NA	5.9	17	ID	440	1600	3000	2200	2700	2200	2700	2200	2700	2300000	1000000	1600	5200	NA	NA
Acetophenone	NA	30	88	ID	1100	1100	1100	44000	52000	44000	52000	44000	52000	33000000	14000000	1100	1100	1100	NA
Anthracene	NA	41	41	ID	41	1000000	1000000	1400000	1600000	1400000	1600000	1400000	1600000	67000000	29000000	230000	730000	NA	NA
Atrazine	NA	0.06	0.06	0.15	110	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	71	330	NA	NA
Benzaldehyde	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	20	80	NA	NA
Benzo(a)pyrene	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1500	1900	2	8	NA	NA

TABLE 2.1

SOIL SCREENING CRITERIA
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location Sample Identification Sample Date Sample Type Sample Depth	Statewide Default Background	Drinking Water Protection	Non-Residential Drinking Water Protection	Groundwater Surface Water Interface Protection	Groundwater Contact Protection	Soil Volatilization to Indoor Air Inhalation	Non-Residential Soil Volatilization to Indoor Air Inhalation	Infinite Source Volatile Soil Inhalation	Non-Residential Infinite Source Volatile Soil Inhalation	Finite VSIC for 5 Meter Source Thickness	Non-Residential Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Non-Residential Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation	Non-Residential Particulate Soil Inhalation	Direct Contact	Non-Residential Direct Contact	Soil Saturation Concentration Screening	Site Specific Background Metals Concentrations
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s
Benzo(b)fluoranthene	NA	NLL	NLL	NLL	NLL	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	20	80	NA	NA
Benzo(g,h,i)perylene	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	800000	350000	2500	7000	NA	NA
Benzo(k)fluoranthene	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	200	800	NA	NA
Biphenyl (1,1-Biphenyl)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NA	0.10	0.17	0.1	110	8.3	44	3.8	13	3.8	13	3.8	13	9400	12000	13	58	2200	NA
bis(2-Ethylhexyl)phthalate (DEHP)	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	700000	890000	2800	10000	10000	NA
Butyl benzylphthalate (BBP)	NA	310	310	120	310	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	47000000	21000000	310	310	310	NA
Caprolactam	NA	120	340	NA	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	670000	290000	53000	310000	NA	NA
Carbazole	NA	9.4	39	1.1	820	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	62000	78000	530	2400	NA	NA
Chrysene	NA	NLL	NLL	NLL	NLL	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	2000	8000	NA	NA
Dibenz(a,h)anthracene	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	2	8	NA	NA
Dibenzofuran	NA	ID	ID	1.7	ID	2000	3600	130	160	130	160	130	160	6700	2900	ID	ID	NA	NA
Diethyl phthalate	NA	110	320	2.2	740	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	3300000	1500000	740	740	740	NA
Dimethyl phthalate	NA	790	790	NA	790	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	3300000	1500000	790	790	790	NA
Di-n-butylphthalate (DBP)	NA	760	760	11	760	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	3300000	1500000	760	760	760	NA
Di-n-octyl phthalate (DnOP)	NA	100000	140000	ID	140000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	31000000	14000000	6900	20000	140000	NA
Fluoranthene	NA	730	730	5.5	730	1000000	1000000	740000	890000	740000	880000	740000	880000	9300000	4100000	46000	130000	NA	NA
Fluorene	NA	390	890	5.3	890	580000	1000000	130000	150000	130000	150000	130000	150000	9300000	4100000	27000	87000	NA	NA
Hexachlorobenzene	NA	1.8	1.8	0.35	8.2	41	220	17	56	17	56	17	56	6800	8500	8.9	37	NA	NA
Hexachlorobutadiene	NA	26	72	0.091	350	130	350	130	460	130	460	130	460	140000	180000	100	350	350	NA
Hexachlorocyclopentadiene	NA	320	320	ID	720	30	56	50	60	50	60	50	60	13000	5900	720	720	720	NA
Hexachloroethane	NA	0.43	1.2	1.8	110	40	79	550	660	930	1400	930	1400	230000	100000	230	730	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	20	80	NA	NA
Isophorone	NA	15	62	26	2400	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	12000000	8200000	2400	2400	2400	NA
Naphthalene	NA	35	100	0.73	2100	250	470	300	350	300	350	300	350	200000	88000	16000	52000	NA	NA
Nitrobenzene	NA	0.33	0.33	3.6	220	91	170	54	64	54	64	54	64	47000	21000	100	340	490	NA
N-Nitrosodi-n-propylamine	NA	0.33	0.33	NA	7.2	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1600	2000	1.2	5.4	1500	NA
N-Nitrosodiphenylamine	NA	5.4	22	NA	700	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	2200000	2800000	1700	7800	NA	NA
Pentachlorophenol	NA	0.022	0.022	27	4.3	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	100000	130000	90	320	NA	NA
Phenanthrene	NA	56	160	2.1	1100	2800	5100	160	190	160	190	160	190	6700	2900	1600	5200	NA	NA
Phenol	NA	88	260	9	12000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	40000000	18000000	12000	12000	12000	NA
Pyrene	NA	480	480	ID	480	1000000	1000000	650000	780000	650000	780000	650000	780000	6700000	2900000	29000	84000	NA	NA
Volatile Organic Compounds (mg/kg)																			
1,1,1-Trichloroethane	NA	4	4	1.8	460	250	460	3800	4500	12000	15000	28000	31000	67000000	29000000	460	460	460	NA
1,1,2,2-Tetrachloroethane	NA	0.17	0.7	1.6	94	4.3	23	10	34	10	34	14	34	54000	68000	53	240	870	NA
1,1,2-Trichloroethane	NA	0.1	0.1	6.6	420	4.6	24	17	57	21	57	44	120	190000	250000	180	840	920	NA
1,1-Dichloroethane	NA	18	50	15	890	230	430	2100	2500	5900	6000	14000	14000	33000000	15000000	890	890	890	NA
1,1-Dichloroethene	NA	0.14	0.14	2.6	220	0.062	0.33	1.1	3.7	5.3	15	13	37	62000	78000	200	570	570	NA
1,2,4-Trichlorobenzene	NA	4.2	4.2	5.9	1100	1100	1100	28000	34000	28000	34000	28000	34000	25000000	11000000	990	1100	1100	NA
1,2-Dibromo-3-chloropropane (DBCP)	NA	0.01	0.01	ID	1.2	1.2	1.2	13	15	13	15	13	15	13000	5900	1.2	1.2	1.2	NA
1,2-Dibromoethane (Ethylene dibromide)	NA	0.02	0.02	0.11	0.5	0.67	3.6	1.7	5.8	1.7	5.8	3.3	9.8	14000	18000	0.092	0.43	890	NA
1,2-Dichlorobenzene	NA	14	14	0.28	210	210	210	39000	46000	39000	46000	52000	55000	100000000	44000000	210	210	210	NA
1,2-Dichloroethane	NA	0.1	0.1	7.2	380	2.1	11	6.2	21	11	33	26	74	120000	150000	91	420	1200	NA
1,2-Dichloropropane	NA	0.1	0.1	4.6	320	4	7.4	25	30	50	51	110	120	270000	120000	140	550	550	NA
1,3-Dichlorobenzene	NA	0.17	0.48	0.68	51	26	48	79	94	79	94	110	110	200000	8800	170	170	170	NA
1,4-Dichlorobenzene	NA	1.7	1.7	0.36	140	19	100	77	260	77	260	110	340	450000	570000	400	1900	NA	NA
2-Butanone (Methyl ethyl ketone) (MEK)	NA	260	760	44	27000	27000	27000	29000	35000	29000	35000	35000	36000	67000000	29000000	27000	27000	27000	NA
2-Hexanone	NA	20	58	ID	2500	990	1800	1100	1300	1100	1300	1400	1500	2700000	1200000	2500	2500	2500	NA
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	NA	36	100	ID	2700	2700	2700	45000	53000	45000	53000	67000	70000	140000000	60000000	2700	2700	2700	NA
Acetone	NA	15	42	34	110000	110000	110000	130000	160000	130000	160000	190000	200000	390000000	170000000	23000	73000	110000	NA
Benzene	NA	0.1	0.1	4	220	1.6	8.4	13	45	34	99	79	230	380000	470000	180	400	400	NA
Bromodichloromethane	NA	1.6	1.6	ID	280	1.2	6.4	9.1	31	9.7	31	19	57	84000	110000	110	490	1500	NA
Bromoform	NA	1.6	1.6	ID	870	150	770	900	3100	900	3100	900	3100	2800000	3600000	820	870	870	NA
Bromomethane (Methyl bromide)	NA	0.2	0.58	0.7	1400	0.86	1.6	11	13	57	57	140	140	330000	150000	320	1000	2200	NA
Carbon disulfide	NA	16	46	ID	280	76	140	1300	1600	7900	8000	19000	19000	47000000	21000000	280	280	280	NA
Carbon tetrachloride	NA	0.1	0.1	0.9	92	0.19	0.99	3.5	12	12	34	28	79	130000	170000	96	390	390	NA
Chlorobenzene	NA	2	2	0.5	260	120	220	770	920	990	1100	2100	2100	4700000	2100000	260	260	260	NA
Chloroethane	NA	8.6	34	22	950	950	950	30000	36000	120000	120000	280000	280000	670000000	290000000	950	950	950	NA
Chloroform (Trichloromethane)	NA	1.6	1.6	7	1500	7.2	38	45	150	120	340	270	790	1300000	1600000	1200	1500	1500	NA
Chloromethane (Methyl chloride)	NA	5.2	22	ID	1100	2.3	10	40	120	410	1000	1000	2500	4900000	2600000	1100	1100	1100	NA
cis-1,2-Dichloroethene	NA	1.4	1.4	12	640	22	41	180	210	420	430	990	1000	2300000	1000000	640	640	640	NA
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	NA	1.6	1.6	ID	360	3.9	21	24	80	24	80	33	98	130000	160000	110	500	610	NA
Dichlorodifluoromethane (CFC-12)	NA	95	270	ID	1000	900	1700	53000	63000	550000	550000	1400000	1400000	3300000000	1500000000	1000	1000	1000	NA
Ethylbenzene	NA	1.5	1.5	0.36	140	87	140	720	2400	1000	3100	2200	6500	10000000	13000000	140	140	140	NA
Isopropyl benzene	NA	91	260	3.2	390	390	390	1700	2000	1700	2000	2800	3000	5800000	2600000	390	390	390	NA
Methyl acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl cyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert butyl ether (MTBE)	NA	0.8	0.8	140	5900	5900	5900	25000	30000	39000	41000	87000	89000	200000000	88000000	1500	5900	5900	NA
Methylene chloride	NA	0.1	0.1	30	2300	45	240	210	700	590	1700	1400	4000	6600000	8300000	1300	2300	2300	NA

TABLE 2.1

SOIL SCREENING CRITERIA
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location Sample Identification Sample Date Sample Type Sample Depth	Statewide Default Background	Drinking Water Protection	Non-Residential Drinking Water Protection	Groundwater Surface Water Interface Protection	Groundwater Contact Protection	Soil Volatilization to Indoor Air Inhalation	Non-Residential Soil Volatilization to Indoor Air Inhalation	Infinite Source Volatile Soil Inhalation	Non-Residential Infinite Source Volatile Soil Inhalation	Finite VSIC for 5 Meter Source Thickness	Non-Residential Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Non-Residential Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation	Non-Residential Particulate Soil Inhalation	Direct Contact	Non-Residential Direct Contact	Soil Saturation Concentration Screening	Site Specific Background Metals Concentrations
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s
Styrene	NA	2.7	2.7	2.1	270	250	520	970	3300	970	3300	1400	4200	5500000	6900000	400	520	520	NA
Tetrachloroethene	NA	0.1	0.1	1.2	88	11	21	170	210	480	490	1100	1100	2700000	1200000	88	88	88	NA
Toluene	NA	16	16	5.4	250	250	250	2800	3300	5100	36000	12000	36000	27000000	12000000	250	250	250	NA
trans-1,2-Dichloroethene	NA	2	2	30	1400	23	43	280	330	830	840	2000	2000	4700000	2100000	1400	1400	1400	NA
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	NA	0.1	0.1	4	440	1.0	1.9	11	14	25	25	57	58	130000	59000	500	500	500	NA
Trichlorofluoromethane (CFC-11)	NA	52	150	NA	560	560	560	92000	110000	630000	140000000	1500000	140000000	3800000000	1700000000	560	560	560	NA
Trifluorotrichloroethane (Freon 113)	NA	550	550	1.7	550	550	550	180000	210000	880000	890000	2100000	2100000	5100000000	2300000000	550	550	550	NA
Vinyl chloride	NA	0.04	0.04	0.26	20	0.27	2.8	4.2	29	30	170	73	420	350000	890000	3.8	34	490	NA
Xylenes (total)	NA	5.6	5.6	0.82	150	150	150	46000	54000	61000	65000	130000	130000	290000000	130000000	150	150	150	NA

Notes
Michigan Part 201 generic clean up criteria (updated September 28, 2012)

ID Insufficient data to develop criterion
NLL Hazardous substance is not likely to leach under most soil conditions.
NLV Hazardous substance is not likely to volatilize under most conditions
NA Criterion or value is not available
VSIC Volatile Soil Inhalation Criteria

TABLE 2.2

GROUNDWATER SCREENING CRITERIA
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

	Residential Drinking Water	Non-Residential Drinking Water	Groundwater Surface Water Interface	Residential Groundwater Volatilization to Indoor Air Inhalation	Non-Residential Groundwater Volatilization to Indoor Air Inhalation	Groundwater Contact	Water Solubility	Flammability and Explosivity Screening Levels	Acute Inhalation Screening Levels	Site Specific Background Metals Concentrations
	a	b	c	d	e	f	g	h	i	j
Inorganics (mg/L)										
Aluminum	0.05	0.05	NA	NLV	NLV	64000	NA	ID	ID	0.59
Antimony	0.006	0.006	0.13	NLV	NLV	68	NA	ID	ID	0.002 U
Arsenic	0.01	0.01	0.01	NLV	NLV	4.3	NA	ID	ID	0.025
Barium	2	2	1.87	NLV	NLV	14000	NA	ID	ID	0.661
Beryllium	0.004	0.004	0.075	NLV	NLV	290	NA	ID	ID	0.001 U
Cadmium	0.005	0.005	0.006	NLV	NLV	190	NA	ID	ID	0.001 U
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	217
Chromium	0.1	0.1	0.011	NLV	NLV	460	NA	ID	ID	0.01 U
Chromium III (trivalent)	0.1	0.1	0.23	NLV	NLV	290000	NA	ID	ID	0.01 U
Chromium VI (hexavalent)	0.1	0.1	0.011	NLV	NLV	460	NA	ID	ID	0.01 U
Cobalt	0.04	0.1	0.1	NLV	NLV	2400	NA	ID	ID	0.02 U
Copper	1	1	0.029	NLV	NLV	7400	NA	ID	ID	0.010
Cyanide (total)	0.2	0.2	0.0052	NLV	NLV	57	NA	ID	ID	NA
Iron	0.3	0.3	NA	NLV	NLV	58000	NA	ID	ID	9.59
Lead	0.004	0.004	0.044	NLV	NLV	ID	NA	ID	ID	0.006
Magnesium	400	1100	NA	NLV	NLV	1000000	NA	ID	ID	53.9
Manganese	0.05	0.05	6.40	NLV	NLV	9100	NA	ID	ID	0.701
Mercury	0.002	0.002	0.0000013	0.056	0.056	0.056	0.056	ID	ID	0.04 U
Nickel	0.1	0.1	0.16	NLV	NLV	74000	NA	ID	ID	0.011
Potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.73
Selenium	0.05	0.05	0.005	NLV	NLV	970	NA	ID	ID	0.005 U
Silver	0.034	0.098	0.0002	NLV	NLV	1500	NA	ID	ID	0.0002 U
Sodium	120	350	NA	NLV	NLV	1000000	NA	ID	ID	390
Thallium	0.002	0.002	0.0037	NLV	NLV	13	NA	ID	ID	0.002 U
Vanadium	0.0045	0.062	0.027	NLV	NLV	970	NA	ID	ID	0.014
Zinc	2.4	5	0.38	NLV	NLV	110000	NA	ID	ID	0.05 U
Aluminum (dissolved)	0.05	0.05	NA	NLV	NLV	64000	NA	ID	ID	NA
Antimony (dissolved)	0.006	0.006	0.13	NLV	NLV	68	NA	ID	ID	NA
Arsenic (dissolved)	0.01	0.01	0.01	NLV	NLV	4.3	NA	ID	ID	NA
Barium (dissolved)	2	2	1.87	NLV	NLV	14000	NA	ID	ID	NA
Beryllium (dissolved)	0.004	0.004	0.075	NLV	NLV	290	NA	ID	ID	NA
Cadmium (dissolved)	0.005	0.005	0.006	NLV	NLV	190	NA	ID	ID	NA
Chromium (dissolved)	0.1	0.1	0.011	NLV	NLV	460	NA	ID	ID	NA
Cobalt (dissolved)	0.04	0.1	0.1	NLV	NLV	2400	NA	ID	ID	NA
Copper (dissolved)	1	1	0.029	NLV	NLV	7400	NA	ID	ID	NA
Iron (dissolved)	0.3	0.3	NA	NLV	NLV	58000	NA	ID	ID	NA
Lead (dissolved)	0.004	0.004	0.044	NLV	NLV	ID	NA	ID	ID	NA
Manganese (dissolved)	0.05	0.05	6.40	NLV	NLV	9100	NA	ID	ID	NA
Mercury (dissolved)	0.002	0.002	0.0000013	0.056	0.056	0.056	0.056	ID	ID	NA
Nickel (dissolved)	0.1	0.1	0.16	NLV	NLV	74000	NA	ID	ID	NA
Selenium (dissolved)	0.05	0.05	0.005	NLV	NLV	970	NA	ID	ID	NA
Silver (dissolved)	0.034	0.098	0.0002	NLV	NLV	1500	NA	ID	ID	NA
Thallium (dissolved)	0.002	0.002	0.0037	NLV	NLV	13	NA	ID	ID	NA
Vanadium (dissolved)	0.0045	0.062	0.012	NLV	NLV	970	NA	ID	ID	NA
Zinc (dissolved)	2.4	5	0.38	NLV	NLV	110000	NA	ID	ID	NA
PCBs (mg/L)										
Aroclor-1016 (PCB-1016)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221 (PCB-1221)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232 (PCB-1232)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242 (PCB-1242)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248 (PCB-1248)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254 (PCB-1254)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260 (PCB-1260)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.0005	0.0005	0.0002	0.045	0.045	0.0033	0.0447	ID	ID	NA
Semi-Volatile Organic Compounds (mg/L)										
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	0.73	2.1	NA	NLV	NLV	170	1200	ID	ID	NA
2,4,6-Trichlorophenol	0.12	0.47	0.005	NLV	NLV	10	800	ID	ID	NA
2,4-Dichlorophenol	0.073	0.21	0.011	NLV	NLV	48	4500	ID	ID	NA
2,4-Dimethylphenol	0.37	1	0.38	NLV	NLV	520	7870	ID	ID	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	0.0077	0.032	NA	NLV	NLV	8.6	270	ID	ID	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	1.8	5.2	NA	ID	ID	6.7	6.74	ID	ID	NA
2-Chlorophenol	0.045	0.13	0.018	ID	ID	94	22000	ID	ID	NA
2-Methylnaphthalene	0.26	0.75	0.019	25	25	25	24.6	ID	ID	NA
2-Methylphenol	0.37	1	0.03	NLV	NLV	810	28000	NA	ID	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	0.02	0.058	ID	NLV	NLV	79	2500	ID	ID	NA
3&4-Methylphenol	0.37	1	0.03	NLV	NLV	810	28000	NA	ID	NA
3,3'-Dichlorobenzidine	0.0011	0.0043	0.0003	NLV	NLV	0.18	3.11	ID	ID	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	0.02	0.02	NA	NLV	NLV	9.5	200	ID	ID	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	0.15	0.42	0.0074	NLV	NLV	79	3900	ID	ID	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	0.37	1	0.03	NLV	NLV	810	28000		ID	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	1.3	3.8	0.038	4.2	4.2	4.2	4.24	ID	ID	NA
Acenaphthylene	0.052	0.15	ID	3.9	3.9	3.9	3.93	ID	ID	NA
Acetophenone	1.5	4.4	NA	6100	6100	6100	6100	ID	ID	NA
Anthracene	0.043	0.043	ID	0.043	0.043	0.043	0.0434	ID	ID	NA
Atrazine	0.003	0.003	0.0073	NLV	NLV	5.4	70	ID	ID	NA
Benzaldehyde	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.0021	0.0085	ID	NLV	NLV	0.0094	0.0094	ID	ID	NA
Benzo(a)pyrene	0.005	0.005	ID	NLV	NLV	0.001	0.00162	ID	ID	NA
Benzo(b)fluoranthene	0.0015	0.0015	ID	ID	ID	0.0015	0.0015	ID	ID	NA
Benzo(g,h,i)perylene	0.001	0.001	NA	NLV	NLV	0.001	0.00026	ID	ID	NA
Benzo(k)fluoranthene	0.001	0.001	NA	NLV	NLV	0.001	0.0008	ID	ID	NA
Biphenyl (1,1-Biphenyl)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	0.002	0.0083	0.001	38	210	5.7	17200	17000	17000	NA
bis(2-Ethylhexyl)phthalate (DEHP)	0.006	0.006	0.025	NLV	NLV	0.32	0.34	NA	0.34	NA
Butyl benzylphthalate (BBP)	1.2	2.7	0.067	NLV	NLV	2.7	2.69	ID	ID	NA
Caprolactam	5.8	17	NA	NLV	NLV	390000	5250000	NA	1000000	NA

TABLE 2.2

GROUNDWATER SCREENING CRITERIA
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

	Residential Drinking Water	Non-Residential Drinking Water	Groundwater Surface Water Interface	Residential Groundwater Volatilization to Indoor Air Inhalation	Non-Residential Groundwater Volatilization to Indoor Air Inhalation	Groundwater Contact	Water Solubility	Flammability and Explosivity Screening Levels	Acute Inhalation Screening Levels	Site Specific Background Metals Concentrations
	a	b	c	d	e	f	g	h	i	j
Carbazole	0.085	0.35	0.01	NLV	NLV	7.4	7.48	ID	ID	NA
Chrysene	0.0016	0.0016	ID	ID	ID	0.0016	0.0016	ID	ID	NA
Dibenz(a,h)anthracene	0.002	0.002	ID	NLV	NLV	0.002	0.00249	ID	ID	NA
Dibenzofuran	ID	ID	0.004	10	10	ID	10	ID	ID	NA
Diethyl phthalate	5.5	16	0.11	NLV	NLV	1100	1080	NA	ID	NA
Dimethyl phthalate	73	210	NA	NLV	NLV	4200	4190	NA	ID	NA
Di-n-butylphthalate (DBP)	0.88	2.5	0.0097	NLV	NLV	11	11.2	NA	ID	NA
Di-n-octyl phthalate (DnOP)	0.13	0.38	ID	NLV	NLV	0.4	3	ID	ID	NA
Fluoranthene	0.21	0.21	0.0016	0.21	0.21	0.21	0.206	ID	ID	NA
Fluorene	0.88	2	0.012	2	2	2	1.98	ID	ID	NA
Hexachlorobenzene	0.001	0.001	0.0002	0.44	3	0.0046	6.2	ID	ID	NA
Hexachlorobutadiene	0.015	0.042	0.000053	1.6	3.2	0.4	3.23	ID	ID	NA
Hexachlorocyclopentadiene	0.05	0.05	ID	0.13	0.42	1.6	1.8	ID	ID	NA
Hexachloroethane	0.0073	0.021	0.0067	27	50	1.9	50	ID	ID	NA
Indeno(1,2,3-cd)pyrene	0.002	0.002	ID	NLV	NLV	0.002	0.000022	ID	ID	NA
Isophorone	0.77	3.1	1.3	NLV	NLV	990	12000	NA	12000	NA
Naphthalene	0.52	1.5	0.011	31	31	31	31	NA	31	NA
Nitrobenzene	0.0034	0.0096	0.18	280	550	11	2090	NA	ID	NA
N-Nitrosodi-n-propylamine	0.005	0.005	NA	NLV	NLV	0.36	9890	ID	ID	NA
N-Nitrosodiphenylamine	0.27	1.1	NA	NLV	NLV	35	35.1	ID	ID	NA
Pentachlorophenol	0.001	0.001	0.0028	NLV	NLV	0.2	1850	ID	ID	NA
Phenanthrene	0.052	0.15	0.002	1	1	1	1	ID	ID	NA
Phenol	4.4	13	0.45	NLV	NLV	29000	82800	NA	ID	NA
Pyrene	0.14	0.14	ID	0.14	0.14	0.14	0.135	ID	ID	NA
Volatile Organic Compounds (mg/L)										
1,1,1-Trichloroethane	0.2	0.2	0.089	660	1300	1300	1330	ID	1300	NA
1,1,2,2-Tetrachloroethane	0.0085	0.035	0.078	12	77	4.7	2970	ID	ID	NA
1,1,2-Trichloroethane	0.005	0.005	0.33	17	110	21	4420	NA	ID	NA
1,1-Dichloroethane	0.88	2.5	0.74	1000	2300	2400	5060	380	ID	NA
1,1-Dichloroethene	0.007	0.007	0.13	0.2	1.3	11	2250	97	140	NA
1,2,4-Trichlorobenzene	0.07	0.07	0.099	300	300	19	300	NA	300	NA
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0.0002	NA	1.2	1.2	0.39	1.23	NA	ID	NA
1,2-Dibromoethane (Ethylene dibromide)	0.00005	0.00005	0.0057	2.4	15	0.025	4200	ID	ID	NA
1,2-Dichlorobenzene	0.6	0.6	0.013	160	160	160	156	NA	160	NA
1,2-Dichloroethane	0.005	0.005	0.36	9.6	59	19	8520	2500	ID	NA
1,2-Dichloropropane	0.005	0.005	0.23	16	36	16	2800	550	2800	NA
1,3-Dichlorobenzene	0.0066	0.019	0.028	18	41	2	111	ID	ID	NA
1,4-Dichlorobenzene	0.075	0.075	0.017	16	74	6.4	73.8	NA	ID	NA
2-Butanone (Methyl ethyl ketone) (MEK)	13	38	2.2	240000	240000	240000	240000	ID	240000	NA
2-Hexanone	1	2.9	ID	4200	8700	5200	16000	NA	ID	NA
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	1.8	5.2	ID	20000	20000	13000	20000	ID	20000	NA
Acetone	0.73	2.1	1.7	1000000	1000000	31000	1000000	15000	1000000	NA
Benzene	0.005	0.005	0.2	5.6	35	11	1750	68	67	NA
Bromodichloromethane	0.08	0.08	ID	4.8	37	14	6740	ID	ID	NA
Bromoform	0.08	0.08	ID	470	3100	140	3100	ID	ID	NA
Bromomethane (Methyl bromide)	0.01	0.029	0.035	4	9	70	14500	ID	ID	NA
Carbon disulfide	0.8	2.3	ID	250	550	1200	1190	13	ID	NA
Carbon tetrachloride	0.005	0.005	0.045	0.37	2.4	4.6	793	ID	96	NA
Chlorobenzene	0.1	0.1	0.025	210	470	86	472	160	ID	NA
Chloroethane	0.43	1.7	1.1	5700	5700	440	5740	110	ID	NA
Chloroform (Trichloromethane)	0.08	0.08	0.35	28	180	150	7920	ID	ID	NA
Chloromethane (Methyl chloride)	0.26	1.1	ID	8.6	45	490	6340	36	210	NA
cis-1,2-Dichloroethene	0.07	0.07	0.62	93	210	200	3500	530	ID	NA
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	0.08	0.08	ID	14	110	18	2600	ID	ID	NA
Dichlorodifluoromethane (CFC-12)	1.7	4.8	ID	220	300	300	300	ID	ID	NA
Ethylbenzene	0.074	0.074	0.018	110	170	170	169	43	170	NA
Isopropyl benzene	0.8	2.3	0.028	56	56	56	56	29	ID	NA
Methyl acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl cyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert butyl ether (MTBE)	0.04	0.04	7.1	47000	47000	610	46800	ID	ID	NA
Methylene chloride	0.005	0.005	1.5	220	1400	220	17000	ID	ID	NA
Styrene	0.1	0.1	0.08	170	310	9.7	310	140	310	NA
Tetrachloroethene	0.005	0.005	0.06	25	170	12	200	ID	200	NA
Toluene	0.79	0.79	0.27	530	530	530	526	61	ID	NA
trans-1,2-Dichloroethene	0.1	0.1	1.5	85	200	220	6300	230	ID	NA
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	0.005	0.005	0.2	2.2	4.9	22	1100	ID	1100	NA
Trichlorofluoromethane (CFC-11)	2.6	7.3	NA	1100	1100	1100	1100	ID	1100	NA
Trifluorotrichloroethane (Freon 113)	170	170	0.032	170	170	170	170	ID	170	NA
Vinyl chloride	0.002	0.002	0.013	1.1	13	1	2760	33	ID	NA
Xylenes (total)	0.28	0.28	0.041	190	190	190	186	70	190	NA

Notes
Michigan Part 201 generic clean up criteria (updated September 28, 2012)

ID Insufficient data to develop criterion
NLV Hazardous substance is not likely to volatilize under most conditions
NA Criterion or value is not available

TABLE 2.3

SOIL ANALYTICAL RESULTS - 1988
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*0E0N*	*0E100N*	*0E200N*	*0E300N*	*100E0N*	*100E100N*	*100E200N*	*100E300N*
Sample Identification	*0E0N*	*0E100N*	*0E200N*	*0E300N*	*100E0N*	*100E100N*	*100E200N*	*100E300N*
Sample Date	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*
Sample Type								
Sample Depth (bgs)	*(0-1) ft*	*(0-1) ft*	*(0-1) ft*	*(0-1) ft*	*(0-1) ft*	*(0-1) ft*	*(0-1) ft*	*(0-1) ft*
AOI	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*
Metals (mg/kg)								
Cadmium	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chromium*	4.8	4.8	4.3	8.5	4.8	6.5	15	4.3
Iron	0.0039	0.005	0.0049	0.0071	0.0039	0.0045	0.0063	0.006
Lead	15	8.8	7.4	8.1	6.7	4.5	54	7.9
Nickel	7.8	5.4	5.8	7.4	5.7	6.5	6.6	6.6
Zinc	23	21	19	25	19	17	34	20
PCBs (mg/kg)								
Total PCBs	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Petrl Prod (mg/kg)								
Total Petroleum Hydrocarbons	300	200	300	100	100	100	50 U	800

Sample Location	*215E0N*	*215E100N*	*215E200N*	*215E300N*	*50E0N*	*50E100N*	*50E200N*	*50E300N*
Sample Identification	*215E0N*	*215E100N*	*215E200N*	*215E300N*	*50E0N*	*50E100N*	*50E200N*	*50E300N*
Sample Date	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*
Sample Type								
Sample Depth (bgs)	*(0-1) ft*	*(0-1) ft*	*(0-1) ft*	*(0-1) ft*	*(0-1) ft*	*(0-1) ft*	*(0-1) ft*	*(0-1) ft*
AOI	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*
Metals (mg/kg)								
Cadmium	1.6	1.2	1 U	1 U	1 U	1.1	1 U	1 U
Chromium*	14	11	6.7	5.1	5.8	6.3	5.3	5.5
Iron	0.015	0.0097	0.0064	0.003	0.0056	0.0097	0.0054	0.0051
Lead	9.9	5	2.1	3.6	7.7	6.1	6.3	5.1
Nickel	18	13	7.4	5.5	8	11	5.5	5.5
Zinc	35	27	20	12	23	16	16	13
PCBs (mg/kg)								
Total PCBs	0.4	0.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Petrl Prod (mg/kg)								
Total Petroleum Hydrocarbons	7000	14000	1900	50 U	50 U	50 U	200	50 U

Notes:

bgs below ground surface

[b] Drinking Water Protection Criteria

[c] Non-Residential Drinking Water Protection Criteria

[d] Groundwater Surface Water Interface Criteria

U Not present at or above the associated value

-- Parameter not analyzed

* Based on chromium speciation completed (Spring 2012) on a Site-wide basis, chromium VI is not prevalent at the Site and, therefore chromium III criteria is used.

TABLE 2.4

GROUNDWATER ANALYTICAL RESULTS - 1989 -1990
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

AOI	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*
Sample Location	*CRA-265M*	*CRA-265M*	*CRA-265M*	*CRA-265M*	*CRA-265M*	*CRA-265M*	*CRA-265M*	*CRA-265M*	*CRA-265M*	*CRA-265M*	*CRA-265M*
Sample Identification	*MW302*	*MW302*	*MW302*	*MW302*	*MW302*	*MW302*	*MW302*	*MW302*	*MW302*	*MW302*	*MW302*
Sample Date	*3/1/1989*	*6/1/1989*	*9/1/1989*	*9/1/1989*	*12/1/1989*	*3/1/1990*	*3/1/1990*	*7/1/1990*	*9/1/1990*	*12/1/1990*	*12/1/1990*
Sample Type				*Duplicate*			*Duplicate*				*Duplicate*
Inorganics (mg/L)											
Cadmium (dissolved)	--	U	U	U	U	U	U	U	U	U	U
Chromium (dissolved)	U	U	U	U	U	U	U	U	U	U	U
Copper (dissolved)	U	U	0.02	0.02	U	--	--	U	U	U	U
Iron (dissolved)	2.8	2	5.9	5.9	8.9	5.1	4.9	5.3	4.7	4.3	**12**[ab]
Lead (dissolved)	U	U	U	U	U	U	U	U	U	U	U
Nickel (dissolved)	U	U	U	U	U	U	U	U	U	U	U
Zinc (dissolved)	U	U	0.03	0.02	U	U	U	0.11	U	U	U
PCBs (mg/L)											
Aroclor-1248 (PCB-1248)	--	--	--	--	U	U	U	U	U	U	U
Volatile Organic Compounds (mg/L)											
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U	U	U	U
Chloroform (Trichloromethane)	U	U	U	U	U	U	U	U	U	U	U

AOI	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*
Sample Location	*CRA-264M*	*CRA-264M*	*CRA-264M*	*CRA-264M*	*CRA-264M*	*CRA-264M*	*CRA-264M*	*CRA-264M*	*CRA-264M*	*CRA-264M*	*CRA-264M*
Sample Identification	*MW303*	*MW303*	*MW303*	*MW303*	*MW303*	*MW303*	*MW303*	*MW303*	*MW303*	*MW-303*	*MW303*
Sample Date	*3/1/1989*	*6/1/1989*	*9/1/1989*	*12/1/1989*	*12/1/1989*	*3/1/1990*	*7/1/1990*	*7/1/1990*	*9/1/1990*	*9/1/1990*	*12/1/1990*
Sample Type					*Duplicate*			*Duplicate*		*Duplicate*	
Inorganics (mg/L)											
Cadmium (dissolved)	--	U	U	U	U	U	U	U	U	U	U
Chromium (dissolved)	U	U	U	U	U	U	U	U	U	U	U
Copper (dissolved)	U	U	U	U	U	--	U	U	U	U	U
Iron (dissolved)	8.1	2	7.9	7.2	7.3	7.5	**11**[ab]	**10**[ab]	4.7	**10**[ab]	3.7
Lead (dissolved)	U	U	U	U	U	U	U	U	U	U	U
Nickel (dissolved)	U	U	U	U	U	U	U	U	U	U	U
Zinc (dissolved)	U	U	0.03	U	U	U	U	U	U	U	U
PCBs (mg/L)											
Aroclor-1248 (PCB-1248)	--	--	--	**0.0031**[abc]	**0.006**[abcf]	**0.00077**[abc]	U	U	U	U	U
Volatile Organic Compounds (mg/L)											
1,1,1-Trichloroethane	U	0.002	U	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U	U	U	U
Chloroform (Trichloromethane)	U	U	U	U	U	U	U	U	U	U	U

Notes:

[a] Residential Drinking Water Criteria
[b] Non-Residential Drinking Water Criteria
[c] Groundwater Surface Water Interface Criteria
[f] Groundwater Contact Criteria

U Not present at or above the associated value
-- Parameter not analyzed

TABLE 2.5

GROUNDWATER ANALYTICAL RESULTS - 2004 - 2013
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	CRA-TP-002	CRA-209M	CRA-209M	CRA-209M	CRA-209M	CRA-209M	CRA-209M	CRA-342M	CRA-342M	CRA-342M	CRA-342M	CRA-342M	CRA-342M	CRA-264M	CRA-264M	CRA-264M	CRA-709M	CRA-709M	CRA-828M	CRA-828M	CRA-828M	CRA-829M	CRA-829M	CRA-829M	CRA-834M	CRA-834M
Sample Identification	GW-17358-110304-DCR-756	GW-17358-081804-CB-721	WG-17358-012207-EV-038	GW-17358-032008-DR-014	GW-17358-091610-JY-037	GW-17358-041712-DR-1046	GW-17358-040213-CT-010	GW-17358-082504-CB-741	WG-17358-012307-DR-041	GW-17358-031708-DR-001	GW-17358-091410-DR-027	GW-17358-041712-DR-1047	GW-17358-040213-CT-011	GW-17358-012312-DR-027	GW-17358-012312-DR-028	GW-17358-041713-DR-116	GW-17358-012312-DR-026	GW-17358-041613-DR-112	GW-17358-012312-DR-023	GW-017358-020712-SK-036	GW-17358-040213-CT-008	GW-17358-012312-DR-024	GW-017358-020712-SK-037	GW-17358-040213-CT-009	GW-17358-012412-DR-033	GW-17358-041713-DR-117
Sample Date	11/3/2004	8/18/2004	1/22/2007	3/20/2008	9/16/2010	4/17/2012	4/2/2013	8/25/2004	1/23/2007	3/17/2008	9/14/2010	4/17/2012	4/2/2013	1/23/2012	1/23/2012	4/17/2013	1/23/2012	4/16/2013	1/23/2012	2/7/2012	4/2/2013	1/23/2012	2/7/2012	4/2/2013	1/24/2012	4/17/2013
Sample Type															Duplicate											
Inorganics (mg/L)																										
Aluminum	--	0.05 U	0.0503	0.0332 J	0.0243 J	0.05 U	0.036 J	**20.9**[ab]	0.05 U	0.0389 J	0.0617	0.023 J	0.051	0.027 J	0.02 J	0.05 U	0.33	0.14 J	**1.4**[ab]	--	0.039 J	0.35	--	0.11	0.1	0.019 J
Antimony	--	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0009 J	0.0008 J	0.002 U	0.00046 J	0.00028 J	0.002 U	0.00014 J	0.00013 J	0.002 U	0.00029 J	0.002 U	0.00042 J	--	0.002 U	0.0002 J	--	0.002 U	0.00084 J	0.002 U
Arsenic	--	0.0094 J	0.0045 J	0.005 U	0.0085	0.0075	0.0052	**0.033**[abc]	0.005 U	0.005 U	0.005 U	0.0011 J	0.00092 J	0.00088 J	0.00081 J	0.005 U	0.0026 J	0.0017 J	0.0016 J	--	0.00094 J	0.0012 J	--	0.001 J	0.003 J	0.0011 J
Barium	--	0.3	0.181	0.156	0.331	0.25	0.19	0.14	0.0313 J	0.0475 J	0.115	0.05 J	0.038 J	0.058 J	0.064 J	0.081 J	0.14	0.16	0.079 J	--	0.087 J	0.075 J	--	0.087 J	0.062 J	0.084 J
Beryllium	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0019 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Cadmium	--	0.0005 U	0.0005 U	0.0005 U	0.0005 U	0.001 U	0.001 U	0.00073	0.0005 U	0.0005 U	0.0005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.000053 J
Calcium	--	--	--	--	--	--	-	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	--	0.005 U	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.039	0.005 U	0.005 U	0.005 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0021 J	--	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Chromium III (trivalent)	--	--	--	--	--	--	-	--	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	--	--	--	--	--	--	-	--	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt	--	0.0018 J	0.007 U	0.007 U	0.002 J	0.001 J	0.00059 J	0.017	0.007 U	0.007 U	0.007 U	0.00025 J	0.00026 J	0.0004 J	0.0004 J	0.02 U	0.0019 J	0.0012 J	0.0012 J	--	0.00027 J	0.00099 J	--	0.0012 J	0.00055 J	0.00026 J
Copper	--	0.002 U	0.002 U	0.002 U	0.002 U	0.004 U	0.001 J	**0.093**[c]	0.001 J	0.002 U	0.002 U	0.004 U	0.0017 J	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	--	0.00059 J	0.004 U	--	0.0012 J	0.004 U	0.004 U
Cyanide (total)	0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	5.7	2.56	2.84	4.34	3.6	2	**27.2**[ab]	0.1 U	0.1 U	0.163	0.2 U	0.2 U	0.54	0.54	0.44	0.84	0.96	1.1	--	0.23	0.46	--	0.34	0.15 J	0.21
Lead	--	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.00049 J	**0.023**[ab]	0.003 U	0.003 U	0.003 U	0.003 U	0.00019 J	0.003 U	0.003 U	0.003 U	0.00036 J	0.00034 J	0.00069 J	--	0.003 U	0.00032 J	--	0.00024 J	0.00033 J	0.00026 J
Manganese	--	0.7	0.326	0.503	**0.702**[ab]	0.6	0.35	0.57	0.052	0.137	0.129	0.066	0.073	0.2	0.2	0.19	0.28	0.28	0.1	--	0.072	0.23	--	0.41	0.051	0.016 J
Mercury	--	0.0002 U	0.0002 U	0.00014 J	0.0002 U	0.04 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.04 U	0.0002 U	0.04 U	0.04 U	0.0002 U	0.04 U	0.0002 U	0.04 U	--	0.0002 U	0.04 U	--	0.0002 U	0.04 U	0.0002 U
Nickel	--	0.025 U	0.02 U	0.02 U	0.02 U	0.0017 J	0.0016 J	0.046	0.02 U	0.02 U	0.02 U	0.0018 J	0.0022 J	0.0012 J	0.0012 J	0.02 U	0.0026 J	0.0021 J	0.011 J	--	0.0014 J	0.0021 J	--	0.0022 J	0.0029 J	0.0028 J
Potassium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	--	0.0013 J	0.0013 J	0.002 U	0.002 U	0.005 U	0.005 U	0.0028 U	0.0025	0.002 U	0.002 U	0.00057 J	0.0011 J	0.0014 J	0.00097 J	0.0013 J	0.005 U	0.005 U	0.0008 J	--	0.005 U	0.005 U	--	0.005 U	0.005 U	0.00072 J
Silver	--	0.0005 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00015 J	0.0002 UJ	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	0.0002 U
Sodium	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	--	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.00071 J	0.000062 J	0.001 U	0.001 U	0.002 U	0.002 U	0.00016 J	0.00014 J	0.002 U	0.00018 J	0.002 U	0.00069 J	--	0.002 U	0.00036 J	--	0.002 U	0.002 U	0.002 U
Vanadium	--	0.007 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.078**[abc]	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.001 J	0.0005 J	0.0033 J	--	0.004 U	0.0011 J	--	0.00055 J	0.0015 J	0.00039 J
Zinc	--	0.015 U	0.0102 U	0.01 U	0.01 U	0.05 U	0.05 U	0.14	0.01 U	0.01 U	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	--	0.05 U	0.05 U	--	0.05 U	0.05 U	0.05 U
Aluminum (dissolved)	**1.3**[ab]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony (dissolved)	0.00093 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic (dissolved)	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium (dissolved)	0.025 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium (dissolved)	0.001 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium (dissolved)	0.0005 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium (dissolved)	0.0028 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt (dissolved)	0.0057 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper (dissolved)	0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	1.6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead (dissolved)	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese (dissolved)	0.036	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury (dissolved)	0.000056 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel (dissolved)	0.0026 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium (dissolved)	0.002 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver (dissolved)	0.0005 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium (dissolved)	0.001 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium (dissolved)	0.0046 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc (dissolved)	0.0089 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs (mg/L)																										
Aroclor-1016 (PCB-1016)	0.0002 U	0.0002 U	0.0001 U	0.0001 U	--	0.000099 U	0.000095 U	0.0002 UJ	0.0001 U	0.0001 U	--	0.000098 U	0.000096 U	0.00011 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U	--	0.000095 U	0.000095 U	--	0.000095 U	0.000095 U	0.0001 U	0.0001 U
Aroclor-1221 (PCB-1221)	0.0002 U	0.0002 U	0.0001 U	0.0001 U	--	0.000099 U	0.000095 U	0.0002 UJ	0.0001 U	0.0001 U	--	0.000098 U	0.000096 U	0.00011 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U	--	0.000095 U	0.000095 U	--	0.000095 U	0.000095 U	0.0001 U	0.0001 U
Aroclor-1232 (PCB-1232)	0.0004 U	0.0004 U	0.0001 U	0.0001 U	--	0.000099 U	0.000095 U	0.0004 UJ	0.0001 U	0.0001 U	--	0.000098 U	0.000096 U	0.00011 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U	--	0.000095 U	0.000095 U	--	0.000095 U	0.000095 U	0.0001 U	0.0001 U
Aroclor-1242 (PCB-1242)	0.0002 U	0.0002 U	0.0001 U	0.0001 U	--	0.000099 U	0.000095 U	0.0002 UJ	0.0001 U	0.0001 U	--	0.000098 U	0.000096 U	0.00011 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U	--	0.000095 U	0.000095 U	--	0.000095 U	0.000095 U	0.0001 U	0.0001 U
Aroclor-1248 (PCB-1248)	0.0002 U	0.0002 U	0.0001 U	0.0001 U	--	0.000099 U	0.000095 U	0.0002 UJ	0.0001 U	0.0001 U	--	0.000098 U	0.000096 U	0.00011 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U	--	0.000095 U	0.000095 U	--	0.000095 U	0.000095 U	0.0001 U	0.0001 U
Aroclor-1254 (PCB-1254)	0.0002 U	0.0002 U	0.0001 U	0.0001 UJ	--	0.000099 U	0.000095 U	0.0002 UJ	0.0001 U	0.0001 UJ	--	0.000098 U	0.000096 U	0.00011 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U	--	0.000095 U	0.000095 U	--	0.000095 U	0.000095 U	0.0001 U	0.0001 U
Aroclor-1260 (PCB-1260)	0.0002 U	0.0002 U	0.0001 U	0.0001 UJ	--	0.000099 U	0.000095 U	0.0002 UJ	0.0001 U	0.0001 UJ	--	0.000098 U	0.000096 U	0.00011 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U	--	0.000095 U	0.000095 U	--	0.000095 U	0.000095 U	0.0001 U	0.0001 U
Aroclor-1262 (PCB-1262)		--	--	--	--	0.000099 U	0.000095 U	--	--	--	--	0.000098 U	0.000096 U	--	--	0.0001 U	--	0.0001 U	--	--	0.000095 U	--	--	0.000095 U	--	0.0001 U
Aroclor-1268 (PCB-1268)		--	--	--	--	0.000099 U	0.000095 U	--	--	--	--	0.000098 U	0.000096 U	--	--	0.0001 U	--	0.0001 U	--	--	0.000095 U	--	--	0.000095 U	--	0.0001 U
Total PCBs	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	--	ND	ND	ND	ND	ND	ND	ND	--	ND	ND	--	ND	ND	ND	ND
Semi-Volatile Organic Compounds (mg/L)																										
2,2'-Oxybis(1-chloropropane) (bis(2-	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
2,4,5-Trichlorophenol	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
2,4,6-Trichlorophenol	0.004 U	0.004 U	0.004 U	0.004 U	--	0.0039 U	0.0039 U	0.004 U	0.004 U	0.004 U	--	0.004 U	0.0038 U	0.0043 U	0.0043 U	0.004 U	0.0042 U	0.0041 U	0.0041 U	--	0.0038 U	0.0041 U	--	0.0038 U	0.0038 U	0.0041 U
2,4-Dichlorophenol	0.01 U	0.01 U	0.01 U	0.01 U	--	0.0098 U	0.0097 U	0.01 U	0.01 U	0.01 U	--	0.0099 U	0.0095 U	0.011 U	0.011 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.0095 U	0.01 U	--	0.0095 U	0.0095 U	0.01 U
2,4-Dimethylphenol	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
2,4-Dinitrophenol	0.02 U	0.02 U	0.02 UJ	0.02 U	--	0.02 U	0.019 U	0.02 U	0.02 UJ	0.02 U	--	0.02 U	0.019 U	0.022 U	0.021 U	0.02 U	0.021 U	0.02 U	0.02 U	--	0.019 U	0.021 U	--	0.019 U	0.019 U	0.02 U
2,4-Dinitrotoluene	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
2,6-Dinitrotoluene	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
2-Chloronaphthalene	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
2-Chlorophenol	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
2-Methylnaphthalene	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
2-Methylphenol	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U

TABLE 2.5

GROUNDWATER ANALYTICAL RESULTS - 2004 - 2013
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*CRA-TP-002*	*CRA-209M*	*CRA-209M*	*CRA-209M*	*CRA-209M*	*CRA-209M*	*CRA-209M*	*CRA-342M*	*CRA-342M*	*CRA-342M*	*CRA-342M*	*CRA-342M*	*CRA-342M*	*CRA-264M*	*CRA-264M*	*CRA-264M*	*CRA-709M*	*CRA-709M*	*CRA-828M*	*CRA-828M*	*CRA-828M*	*CRA-829M*	*CRA-829M*	*CRA-829M*	*CRA-834M*	*CRA-834M*
Sample Identification	*GW-17358-110304-DCR-756*	*GW-17358-081804-CB-721*	*WG-17358-012207-EV-038*	*GW-17358-032008-DR-014*	*GW-17358-091610-JY-037*	*GW-17358-041712-DR-1046*	*GW-17358-040213-CT-010*	*GW-17358-082504-CB-741*	*WG-17358-012307-DR-041*	*GW-17358-031708-DR-001*	*GW-17358-091410-DR-027*	*GW-17358-041712-DR-1047*	*GW-17358-040213-CT-011*	*GW-17358-012312-DR-027*	*GW-17358-012312-DR-028*	*GW-17358-041713-DR-116*	*GW-17358-012312-DR-026*	*GW-17358-041613-DR-112*	*GW-17358-012312-DR-023*	*GW-017358-020712-SK-036*	*GW-17358-040213-CT-008*	*GW-17358-012312-DR-024*	*GW-017358-020712-SK-037*	*GW-17358-040213-CT-009*	*GW-17358-012412-DR-033*	*GW-17358-041713-DR-117*
Sample Date	*11/3/2004*	*8/18/2004*	*1/22/2007*	*3/20/2008*	*9/16/2010*	*4/17/2012*	*4/2/2013*	*8/25/2004*	*1/23/2007*	*3/17/2008*	*9/14/2010*	*4/17/2012*	*4/2/2013*	*1/23/2012*	*1/23/2012*	*4/17/2013*	*1/23/2012*	*4/16/2013*	*1/23/2012*	*2/7/2012*	*4/2/2013*	*1/23/2012*	*2/7/2012*	*4/2/2013*	*1/24/2012*	*4/17/2013*
Sample Type															*Duplicate*											
2-Nitroaniline	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.019 U	0.022 U	0.021 U	0.02 U	0.021 U	0.02 U	0.02 U	--	0.019 U	0.021 U	--	0.019 U	0.019 U	0.02 U
2-Nitrophenol	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
3&4-Methylphenol	--	--	--	--	--	0.0049 U	0.0049 U	--	--	--	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
3,3'-Dichlorobenzidine	0.004 U	0.004 U	0.004 U	0.001 U	--	0.00098 U	0.00097 U	0.004 U	0.004 U	0.001 U	--	0.00099 U	0.00095 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.00095 U	0.001 U	--	0.00095 U	0.00095 U	0.001 U
3-Nitroaniline	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.019 U	0.022 U	0.021 U	0.02 U	0.021 U	0.02 U	0.02 U	--	0.019 U	0.021 U	--	0.019 U	0.019 U	0.02 U
4,6-Dinitro-2-methylphenol	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.019 U	0.022 U	0.021 U	0.02 U	0.021 U	0.02 U	0.02 U	--	0.019 U	0.021 U	--	0.019 U	0.019 U	0.02 U
4-Bromophenyl phenyl ether	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
4-Chloro-3-methylphenol	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
4-Chloroaniline	0.02 U	0.02 U	0.01 U	0.01 U	--	0.0098 U	0.0097 U	0.02 UJ	0.01 U	0.01 U	--	0.0099 U	0.0095 U	0.011 U	0.011 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.0095 U	0.01 U	--	0.0095 U	0.0095 U	0.01 U
4-Chlorophenyl phenyl ether	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 UJ	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
4-Methylphenol	0.005 U	0.005 U	0.005 U	0.005 U	--	--	--	0.005 U	0.005 U	0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.019 U	0.022 U	0.021 U	0.02 U	0.021 U	0.02 U	0.02 U	--	0.019 U	0.021 U	--	0.019 U	0.019 U	0.02 U
4-Nitrophenol	0.02 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.019 U	0.02 U	0.02 U	0.02 U	--	0.02 U	0.019 U	0.022 U	0.021 U	0.02 U	0.021 U	0.02 U	0.02 U	--	0.019 U	0.021 U	--	0.019 U	0.019 U	0.02 U
Acenaphthene	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Acenaphthylene	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Acetophenone	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Anthracene	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Atrazine	0.005 U	0.005 U	0.003 U	0.003 U	--	0.0029 U	0.0029 U	0.005 U	0.003 U	0.003 U	--	0.003 U	0.0029 U	0.0032 U	0.0032 U	0.003 U	0.0031 U	0.0031 U	0.0031 U	--	0.0029 U	0.0031 U	--	0.0029 U	0.0029 U	0.0031 U
Benzaldehyde	0.01 U	0.01 U	0.01 U	0.01 U	--	0.0049 U	0.0049 U	0.01 U	0.01 U	0.01 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Benzo(a)anthracene	0.004 U	0.004 U	0.001 U	0.001 U	--	0.00098 U	0.00097 U	0.004 U	0.001 U	0.001 U	--	0.00099 U	0.00095 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.00095 U	0.001 U	--	0.00095 U	0.00095 U	0.001 U
Benzo(a)pyrene	0.004 U	0.004 U	0.001 U	0.001 U	--	0.00098 U	0.00097 U	0.004 U	0.001 U	0.001 U	--	0.00099 U	0.00095 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.00095 U	0.001 U	--	0.00095 U	0.00095 U	0.001 U
Benzo(b)fluoranthene	0.004 U	0.004 U	0.001 U	0.001 U	--	0.00098 U	0.00097 U	0.004 U	0.001 U	0.001 U	--	0.00099 U	0.00095 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.00095 U	0.001 U	--	0.00095 U	0.00095 U	0.001 U
Benzo(g,h,i)perylene	0.005 U	0.005 U	0.001 U	0.001 U	--	0.00098 U	0.00097 U	0.005 U	0.001 U	0.001 U	--	0.00099 U	0.00095 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.00095 U	0.001 U	--	0.00095 U	0.00095 U	0.001 U
Benzo(k)fluoranthene	0.005 U	0.005 U	0.001 U	0.001 U	--	0.00098 U	0.00097 U	0.005 U	0.001 U	0.001 U	--	0.00099 U	0.00095 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.00095 U	0.001 U	--	0.00095 U	0.00095 U	0.001 U
Biphenyl (1,1-Biphenyl)	0.01 U	0.01 U	0.01 U	0.01 U	--	0.0049 U	0.0049 U	0.01 U	0.01 U	0.01 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
bis(2-Chloroethoxy)methane	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
bis(2-Chloroethyl)ether	0.004 U	0.004 U	0.001 U	0.001 U	--	0.00098 U	0.00097 U	0.004 U	0.001 U	0.001 U	--	0.00099 U	0.00095 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.00095 U	0.001 U	--	0.00095 U	0.00095 U	0.001 U
bis(2-Ethylhexyl)phthalate (DEHP)	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0011 J	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Butyl benzylphthalate (BBP)	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Caprolactam	0.01 U	0.01 U	0.01 U	0.01 U	--	0.0098 U	0.0097 U	0.01 U	0.01 U	0.01 U	--	0.0099 U	0.0095 U	0.011 U	0.011 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.0095 U	0.01 U	--	0.0095 U	0.0095 U	0.01 U
Carbazole	0.01 U	0.01 U	0.01 U	0.01 U	--	0.0098 U	0.0097 U	0.01 U	0.01 U	0.01 U	--	0.0099 U	0.0095 U	0.011 U	0.011 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.0095 U	0.01 U	--	0.0095 U	0.0095 U	0.01 U
Chrysene	0.005 U	0.005 U	0.001 U	0.001 U	--	0.00098 U	0.00097 U	0.005 U	0.001 U	0.001 U	--	0.00099 U	0.00095 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.00095 U	0.001 U	--	0.00095 U	0.00095 U	0.001 U
Dibenz(a,h)anthracene	0.004 U	0.004 U	0.002 U	0.002 U	--	0.002 U	0.0019 U	0.004 U	0.002 U	0.002 U	--	0.002 U	0.0019 U	0.0022 U	0.0021 U	0.002 U	0.0021 U	0.002 U	0.002 U	--	0.0019 U	0.0021 U	--	0.0019 U	0.0019 U	0.002 U
Dibenzofuran	0.005 U	0.005 U	0.004 U	0.004 U	--	0.0039 U	0.0039 U	0.005 U	0.004 U	0.004 U	--	0.004 U	0.0038 U	0.0043 U	0.0043 U	0.004 U	0.0042 U	0.0041 U	0.0041 U	--	0.0038 U	0.0041 U	--	0.0038 U	0.0038 U	0.0041 U
Diethyl phthalate	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Dimethyl phthalate	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Di-n-butylphthalate (DBP)	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Di-n-octyl phthalate (DnOP)	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Fluoranthene	0.005 U	0.005 U	0.001 U	0.001 U	--	0.00098 U	0.00097 U	0.005 U	0.001 U	0.001 U	--	0.00099 U	0.00095 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.00095 U	0.001 U	--	0.00095 U	0.00095 U	0.001 U
Fluorene	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Hexachlorobenzene	0.005 U	0.005 U	0.0002 U	0.0002 U	--	0.0002 U	0.00019 U	0.005 U	0.0002 U	0.0002 U	--	0.0002 U	0.00019 U	0.00022 U	0.00021 U	0.0002 U	0.00021 U	0.0002 U	0.0002 U	--	0.00019 U	0.00021 U	--	0.00019 U	0.00019 U	0.0002 U
Hexachlorobutadiene	0.005 U	0.005 U	0.001 U	0.001 U	--	0.00098 U	0.00097 U	0.005 U	0.001 U	0.001 U	--	0.00099 U	0.00095 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.00095 U	0.001 U	--	0.00095 U	0.00095 U	0.001 U
Hexachlorocyclopentadiene	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	R	0.0052 U	R	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	R
Hexachloroethane	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Indeno(1,2,3-cd)pyrene	0.004 U	0.004 U	0.002 U	0.002 U	--	0.002 U	0.0019 U	0.004 U	0.002 U	0.002 U	--	0.002 U	0.0019 U	0.0022 U	0.0021 U	0.002 U	0.0021 U	0.002 U	0.002 U	--	0.0019 U	0.0021 U	--	0.0019 U	0.0019 U	0.002 U
Isophorone	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Naphthalene	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Nitrobenzene	0.004 U	0.004 U	0.003 U	0.003 U	--	0.0029 U	0.0029 U	0.004 U	0.003 U	0.003 U	--	0.003 U	0.0029 U	0.0032 U	0.0032 U	0.003 U	0.0031 U	0.0031 U	0.0031 U	--	0.0029 U	0.0031 U	--	0.0029 U	0.0029 U	0.0031 U
N-Nitrosodi-n-propylamine	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
N-Nitrosodiphenylamine	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Pentachlorophenol	0.02 U	0.02 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.02 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Phenanthrene	0.005 U	0.005 U	0.002 U	0.002 U	--	0.002 U	0.0019 U	0.005 U	0.002 U	0.002 U	--	0.002 U	0.0019 U	0.0022 U	0.0021 U	0.002 U	0.0021 U	0.002 U	0.002 U	--	0.0019 U	0.0021 U	--	0.0019 U	0.0019 U	0.002 U
Phenol	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U
Pyrene	0.005 U	0.005 U	0.005 U	0.005 U	--	0.0049 U	0.0049 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.0048 U	0.0054 U	0.0053 U	0.0051 U	0.0052 U	0.0051 U	0.0051 U	--	0.0048 U	0.0052 U	--	0.0048 U	0.0048 U	0.0051 U

TABLE 2.5

GROUNDWATER ANALYTICAL RESULTS - 2004 - 2013
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*CRA-TP-002*	*CRA-209M*	*CRA-209M*	*CRA-209M*	*CRA-209M*	*CRA-209M*	*CRA-209M*	*CRA-342M*	*CRA-342M*	*CRA-342M*	*CRA-342M*	*CRA-342M*	*CRA-342M*	*CRA-264M*	*CRA-264M*	*CRA-264M*	*CRA-709M*	*CRA-709M*	*CRA-828M*	*CRA-828M*	*CRA-828M*	*CRA-829M*	*CRA-829M*	*CRA-829M*	*CRA-834M*	*CRA-834M*
Sample Identification	*GW-17358-110304-DCR-756*	*GW-17358-081804-CB-721*	*WG-17358-012207-EV-038*	*GW-17358-032008-DR-014*	*GW-17358-091610-JY-037*	*GW-17358-041712-DR-1046*	*GW-17358-040213-CT-010*	*GW-17358-082504-CB-741*	*WG-17358-012307-DR-041*	*GW-17358-031708-DR-001*	*GW-17358-091410-DR-027*	*GW-17358-041712-DR-1047*	*GW-17358-040213-CT-011*	*GW-17358-012312-DR-027*	*GW-17358-012312-DR-028*	*GW-17358-041713-DR-116*	*GW-17358-012312-DR-026*	*GW-17358-041613-DR-112*	*GW-17358-012312-DR-023*	*GW-017358-020712-SK-036*	*GW-17358-040213-CT-008*	*GW-17358-012312-DR-024*	*GW-017358-020712-SK-037*	*GW-17358-040213-CT-009*	*GW-17358-012412-DR-033*	*GW-17358-041713-DR-117*
Sample Date	*11/3/2004*	*8/18/2004*	*1/22/2007*	*3/20/2008*	*9/16/2010*	*4/17/2012*	*4/2/2013*	*8/25/2004*	*1/23/2007*	*3/17/2008*	*9/14/2010*	*4/17/2012*	*4/2/2013*	*1/23/2012*	*1/23/2012*	*4/17/2013*	*1/23/2012*	*4/16/2013*	*1/23/2012*	*2/7/2012*	*4/2/2013*	*1/23/2012*	*2/7/2012*	*4/2/2013*	*1/24/2012*	*4/17/2013*
Sample Type															*Duplicate*											
Volatile Organic Compounds (mg/L)																										
1,1,1-Trichloroethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001 U	0.001 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
1,2,4-Trimethylbenzene	--	--	0.001 U	0.001 U	0.001 U	--	--	--	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane (DBC	0.001 U	0.001 U	--	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibro	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
1,3,5-Trimethylbenzene	--	--	0.001 U	0.001 U	0.001 U	--	--	--	0.001 U	0.001 U	0.001 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1,3-Dichlorobenzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
2-Butanone (Methyl ethyl ketone) (I	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.0017 J	0.01 U	0.025 U	0.025 U	0.025 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
2-Hexanone	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone (Methyl isob	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	0.01 U	0.05 U	0.05 U	0.05 U	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Acetone	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	0.01 U	0.01 U	0.025 U	0.025 U	0.025 UJ	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Benzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Bromodichloromethane	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Bromoform	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Bromomethane (Methyl bromide)	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Carbon disulfide	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.00034 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Chlorobenzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Chloroethane	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Chloroform (Trichloromethane)	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Chloromethane (Methyl chloride)	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Cyclohexane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Dibromochloromethane	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane (CFC-12)	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Ethylbenzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Isopropyl benzene	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001 U	0.001 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Methyl acetate	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	0.01 U	0.01 U	--	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.001 U	0.005 U	0.005 U	0.001 U	0.005 U	0.001 U	0.005 U	--	0.001 U	0.005 U	--	0.001 U	0.005 U	0.001 U
Methylene chloride	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	0.005 U	0.005 U	--	0.005 U	0.005 U	0.005 U
Styrene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Tetrachloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane (CFC-11)	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane (Freon 113	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Vinyl chloride	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	0.001 U	0.001 U	--	0.001 U	0.001 U	0.001 U
Xylenes (total)	0.003 U	0.003 U	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U	0.003 U	0.002 UJ	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	0.002 U	0.002 U	--	0.002 U	0.002 U	0.002 U

Notes:

[a] Residential Drinking Water Criteria
[b] Non-Residential Drinking Water Criteria
[c] Groundwater Surface Water Interface Criteria
B Compound wad detected in the blank and sample
J Estimated concentration.
ND Non detect
U Not present at or above the associated value
UJ Estimated reporting limit
* Data validation has not been completed on this sample.
-- Parameter not analyzed.

TABLE 2.6

SOIL ANALYTICAL RESULTS - 2004 - 2012
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*CRA-709M*	*CRA-709M*	*CRA-828M*	*CRA-828M*	*CRA-829M*	*CRA-829M*	*CRA-834M*	*CRA-834M*	*CRA-835-SB*	*CRA-835-SB*	*CRA-342M*
Sample Identification	*SO-17358-011712-DR-005*	*SO-17358-011712-DR-006*	*SO-17358-011712-DR-003*	*SO-17358-011712-DR-004*	*SO-17358-011712-DR-001*	*SO-17358-011712-DR-002*	*SO-17358-011812-DR-017*	*SO-17358-011812-DR-018*	*SO-17358-011912-DR-019*	*SO-17358-011912-DR-020*	*S-17358-082304-MM-715*
Sample Date	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/18/2012*	*1/18/2012*	*1/19/2012*	*1/19/2012*	*8/23/2004*
Sample Depth	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2.5-4.5) ft BGS*	*(0-2) ft BGS*	*(3-5) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(2.8-3.3) ft BGS*
Sample Type											
Inorganics (mg/kg)											
Aluminum	2700	4600	4500	2100	1900	3100	3400	2900	3900	4100	3240
Antimony	0.18 J	0.031 J	0.038 J	0.056 J	0.039 J	0.084 J	0.07 J	0.071 J	0.042 J	0.037 J	0.58 UJ
Arsenic	5.9	4.1	3.8	2.9	3.5	3.4	3.7	**7.7**[bcdp]	3.1	3	**7.3**[bcd]
Barium	19	20	17	8.1	7.3	11	31	47	19	16	11.4
Beryllium	0.071 J	0.17 U	0.047 J	0.17 U	0.13 U	0.15 U	0.16 U	0.07 J	0.17 U	0.16 U	0.074 J
Cadmium	0.082	0.085 U	0.075 U	0.086 U	0.068	0.075	0.1	0.15	0.087 U	0.082 U	0.15
Chromium	6.3	9.3	10	4.6	4.2	8.5	9.6	6.6	6.5	9.7	12.1 J
Chromium III (trivalent)	5.5	8.9	9.5	3.9	4.2	8.1	--	--	--	--	--
Chromium VI (hexavalent)	0.76 J	0.38 J	0.74 J	0.65 J	0.85 U	0.35 J	--	--	--	--	--
Cobalt	2.2	3	3.2	3.4	1.7	3.9	3.3	6.3	1.6	2.7	**6.9**[bcd]
Copper	8.8	4.4	8.8	13	5.8	15	18	7.7	2.8	3.3	20.7 J
Iron	7100	10000	9100	7500	5200	8100	7700	12000	7000	8600	11600
Lead	6.1	5.8	4.1	3.1	2.4	4.5	14	4.9	4.5	4.7	4.6
Manganese	220 J	95 J	66 J	170 J	200 J	210 J	190 J	**710 J**[bcd]	54 J	59 J	178 J
Mercury	0.026 J	0.016 J	0.027 J	0.026 J	0.04 U	0.02 J	0.026 J	0.035 U	0.041 U	0.043 U	0.12 U
Nickel	6.5	7.5	9	6.6	5	13	8.2	9.7	4.2	7	14.1
Selenium	0.44	0.62	0.71	0.35	0.34	0.7	0.48	0.73	0.36	0.44	0.23 U
Silver	0.022 J	0.085 U	0.075 U	0.086 U	0.067 U	0.074 U	0.033 J	0.078 U	0.087 U	0.082 U	0.58 U
Thallium	0.074	0.095	0.075 U	0.24	0.11	0.14	0.088	0.075 J	0.11	0.13	0.14
Vanadium	9	14	13	12	6.8	9.8	9.7	17	13	13	**21.9 J**[d]
Zinc	18	32	19	18	12	27	26	19	12	18	26.7 J
PCBs (mg/kg)											
Aroclor-1016 (PCB-1016)	0.036 U	0.036 U	0.036 U	0.036 U	0.035 U	0.035 U	0.037 U	0.035 U	0.036 U	0.037 U	0.38 U
Aroclor-1221 (PCB-1221)	0.036 U	0.036 U	0.036 U	0.036 U	0.035 U	0.035 U	0.037 U	0.035 U	0.036 U	0.037 U	0.38 U
Aroclor-1232 (PCB-1232)	0.036 U	0.036 U	0.036 U	0.036 U	0.035 U	0.035 U	0.037 U	0.035 U	0.036 U	0.037 U	0.38 U
Aroclor-1242 (PCB-1242)	0.036 U	0.036 U	0.036 U	0.036 U	0.035 U	0.035 U	0.037 U	0.035 U	0.036 U	0.037 U	0.38 U
Aroclor-1248 (PCB-1248)	0.036 U	0.036 U	0.036 U	0.036 U	0.035 U	0.035 U	0.037 U	0.035 U	0.036 U	0.037 U	0.38 U
Aroclor-1254 (PCB-1254)	0.036 U	0.036 U	0.036 U	0.036 U	0.035 U	0.035 U	0.037 U	0.035 U	0.036 U	0.037 U	0.38 U
Aroclor-1260 (PCB-1260)	0.036 U	0.036 U	0.036 U	0.036 U	0.035 U	0.035 U	0.079	0.035 U	0.036 U	0.037 U	0.38 U
Total PCBs	ND	ND	ND	ND	ND	ND	0.079	ND	ND	ND	ND
Semi-Volatile Organic Compounds (mg/kg)											
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
2,4,5-Trichlorophenol	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
2,4,6-Trichlorophenol	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
2,4-Dichlorophenol	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
2,4-Dimethylphenol	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
2,4-Dinitrophenol	0.65 U	0.17 U	0.16 U	0.16 U	0.16 U	0.16 U	0.42 U	0.16 U	0.41 U	0.17 U	2 U
2,4-Dinitrotoluene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
2,6-Dinitrotoluene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
2-Chloronaphthalene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
2-Chlorophenol	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U

TABLE 2.6

SOIL ANALYTICAL RESULTS - 2004 - 2012
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*CRA-709M*	*CRA-709M*	*CRA-828M*	*CRA-828M*	*CRA-829M*	*CRA-829M*	*CRA-834M*	*CRA-834M*	*CRA-835-SB*	*CRA-835-SB*	*CRA-342M*
Sample Identification	*SO-17358-011712-DR-005*	*SO-17358-011712-DR-006*	*SO-17358-011712-DR-003*	*SO-17358-011712-DR-004*	*SO-17358-011712-DR-001*	*SO-17358-011712-DR-002*	*SO-17358-011812-DR-017*	*SO-17358-011812-DR-018*	*SO-17358-011912-DR-019*	*SO-17358-011912-DR-020*	*S-17358-082304-MM-715*
Sample Date	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/18/2012*	*1/18/2012*	*1/19/2012*	*1/19/2012*	*8/23/2004*
Sample Depth	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2.5-4.5) ft BGS*	*(0-2) ft BGS*	*(3-5) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(2.8-3.3) ft BGS*
Sample Type											
2-Methylnaphthalene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.042 J	0.28 U	0.73 U	0.29 U	0.38 U
2-Methylphenol	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
2-Nitroaniline	0.86 U	0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.56 U	0.21 U	0.55 U	0.22 U	2 U
2-Nitrophenol	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
3&4-Methylphenol	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	2.3 U
3,3'-Dichlorobenzidine	6.9 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	4.5 U	1.7 U	4.4 U	1.8 U	2 U
3-Nitroaniline	0.86 U	0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.56 U	0.21 U	0.55 U	0.22 U	2 U
4,6-Dinitro-2-methylphenol	0.65 U	0.17 U	0.16 U	0.16 U	0.16 U	0.16 U	0.42 U	0.16 U	0.41 U	0.17 U	0.38 U
4-Bromophenyl phenyl ether	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
4-Chloro-3-methylphenol	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	2 U
4-Chloroaniline	0.86 U	0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.56 U	0.21 U	0.55 U	0.22 U	0.38 U
4-Chlorophenyl phenyl ether	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
4-Nitroaniline	0.86 U	0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.56 U	0.21 U	0.55 U	0.22 U	2 U
4-Nitrophenol	1.4 U	0.37 U	0.36 U	0.36 U	0.35 U	0.35 U	0.92 U	0.35 U	0.91 U	0.37 U	2 U
Acenaphthene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.043 J	0.28 U	0.73 U	0.29 U	0.38 U
Acenaphthylene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Acetophenone	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Anthracene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.13 J	0.28 U	0.73 U	0.29 U	0.38 U
Atrazine	0.17 U	0.044 U	0.044 U	0.044 U	0.043 U	0.043 U	0.11 U	0.043 U	0.11 U	0.044 U	0.38 U
Benzaldehyde	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Benzo(a)anthracene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.39 J	0.28 U	0.73 U	0.29 U	0.38 U
Benzo(a)pyrene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.4 J	0.28 U	0.73 U	0.29 U	0.38 U
Benzo(b)fluoranthene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.5 J	0.28 U	0.025 J	0.29 U	0.38 U
Benzo(g,h,i)perylene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.37 J	0.28 U	0.73 U	0.29 U	0.38 U
Benzo(k)fluoranthene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.23 J	0.28 U	0.73 U	0.29 U	0.38 U
Biphenyl (1,1-Biphenyl)	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
bis(2-Chloroethoxy)methane	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
bis(2-Chloroethyl)ether	0.34 U	0.089 U	0.087 U	0.087 U	0.085 U	0.085 U	0.22 U	0.086 U	0.22 U	0.089 U	0.38 U
bis(2-Ethylhexyl)phthalate (DEHP)	1.1 U	0.29 U	0.041 J	0.29 U	0.034 J	0.041 J	0.086 J	0.038 J	0.73 U	0.29 U	0.023 J
Butyl benzylphthalate (BBP)	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Caprolactam	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Carbazole	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.083 J	0.28 U	0.73 U	0.29 U	0.38 U
Chrysene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.4 J	0.28 U	0.73 U	0.29 U	0.38 U
Dibenz(a,h)anthracene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.054 J	0.28 U	0.73 U	0.29 U	0.38 U
Dibenzofuran	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.031 J	0.28 U	0.73 U	0.29 U	0.38 U
Diethyl phthalate	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Dimethyl phthalate	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Di-n-butylphthalate (DBP)	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Di-n-octyl phthalate (DnOP)	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Fluoranthene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.89	0.28 U	0.01 J	0.29 U	0.38 U
Fluorene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.04 J	0.28 U	0.73 U	0.29 U	0.38 U
Hexachlorobenzene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Hexachlorobutadiene	0.17 U	0.044 U	0.044 U	0.044 U	0.043 U	0.043 U	0.11 U	0.043 U	0.11 U	0.044 U	0.38 U
Hexachlorocyclopentadiene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Hexachloroethane	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Indeno(1,2,3-cd)pyrene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.26 J	0.28 U	0.73 U	0.29 U	0.38 U
Isophorone	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Naphthalene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.033 J	0.28 U	0.73 U	0.29 U	0.38 U

TABLE 2.6

SOIL ANALYTICAL RESULTS - 2004 - 2012
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*CRA-709M*	*CRA-709M*	*CRA-828M*	*CRA-828M*	*CRA-829M*	*CRA-829M*	*CRA-834M*	*CRA-834M*	*CRA-835-SB*	*CRA-835-SB*	*CRA-342M*
Sample Identification	*SO-17358-011712-DR-005*	*SO-17358-011712-DR-006*	*SO-17358-011712-DR-003*	*SO-17358-011712-DR-004*	*SO-17358-011712-DR-001*	*SO-17358-011712-DR-002*	*SO-17358-011812-DR-017*	*SO-17358-011812-DR-018*	*SO-17358-011912-DR-019*	*SO-17358-011912-DR-020*	*S-17358-082304-MM-715*
Sample Date	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/18/2012*	*1/18/2012*	*1/19/2012*	*1/19/2012*	*8/23/2004*
Sample Depth	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2.5-4.5) ft BGS*	*(0-2) ft BGS*	*(3-5) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(2.8-3.3) ft BGS*
Sample Type											
Nitrobenzene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
N-Nitrosodi-n-propylamine	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
N-Nitrosodiphenylamine	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Pentachlorophenol	0.65 U	0.17 U	0.16 U	0.16 U	0.16 U	0.16 U	0.42 U	0.16 U	0.41 U	0.17 U	0.93 U
Phenanthrene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.52 J	0.28 U	0.73 U	0.29 U	0.38 U
Phenol	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.74 U	0.28 U	0.73 U	0.29 U	0.38 U
Pyrene	1.1 U	0.29 U	0.29 U	0.29 U	0.28 U	0.28 U	0.67 J	0.28 U	0.0094 J	0.29 U	0.38 U
Volatile Organic Compounds (mg/kg)											
1,1,1-Trichloroethane	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
1,1,2,2-Tetrachloroethane	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.13 U
1,1,2-Trichloroethane	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
1,1-Dichloroethane	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
1,1-Dichloroethene	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
1,2,4-Trichlorobenzene	0.22 U	0.22 U	0.2 U	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U	0.33 U
1,2-Dibromo-3-chloropropane (DBCP)	0.22 U	0.22 U	0.2 U	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U	0.33 U
1,2-Dibromoethane (Ethylene dibromide)	0.22 U	0.22 U	0.2 U	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U	0.33 U
1,2-Dichlorobenzene	0.086 U	0.088 U	0.081 U	0.082 U	0.087 U	0.086 U	0.089 U	0.08 U	0.091 U	0.089 U	0.13 U
1,2-Dichloroethane	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
1,2-Dichloropropane	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
1,3-Dichlorobenzene	0.086 U	0.088 U	0.081 U	0.082 U	0.087 U	0.086 U	0.089 U	0.08 U	0.091 U	0.089 U	0.13 U
1,4-Dichlorobenzene	0.086 U	0.088 U	0.081 U	0.082 U	0.087 U	0.086 U	0.089 U	0.08 U	0.091 U	0.089 U	0.13 U
2-Butanone (Methyl ethyl ketone) (MEK)	0.65 U	0.66 U	0.61 U	0.62 U	0.65 U	0.64 U	0.67 U	0.6 U	0.68 U	0.67 U	0.98 U
2-Hexanone	2.2 U	2.2 U	2 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2.3 U	2.2 U	3.3 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	2.2 U	2.2 U	2 U	2.1 U	2.2 U	2.1 U	2.2 U	2 U	2.3 U	2.2 U	3.3 U
Acetone	0.65 U	0.66 U	0.61 U	0.62 U	0.65 U	0.64 U	0.67 U	0.6 U	0.68 U	0.67 U	0.13 J
Benzene	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
Bromodichloromethane	0.086 U	0.088 U	0.081 U	0.082 U	0.087 U	0.086 U	0.089 U	0.08 U	0.091 U	0.089 U	0.13 U
Bromoform	0.086 U	0.088 U	0.081 U	0.082 U	0.087 U	0.086 U	0.089 U	0.08 U	0.091 U	0.089 U	0.13 U
Bromomethane (Methyl bromide)	0.22 U	0.22 U	0.2 U	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U	0.33 U
Carbon disulfide	0.22 U	0.22 U	0.2 U	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U	0.33 U
Carbon tetrachloride	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
Chlorobenzene	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
Chloroethane	0.22 U	0.22 U	0.2 U	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U	0.33 U
Chloroform (Trichloromethane)	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
Chloromethane (Methyl chloride)	0.22 U	0.22 U	0.2 U	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U	0.33 U
cis-1,2-Dichloroethene	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
cis-1,3-Dichloropropene	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
Cyclohexane	1 U	1.1 U	0.97 U	0.99 U	1 U	1 U	1.1 U	0.96 U	1.1 U	1.1 U	1.6 U
Dibromochloromethane	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
Dichlorodifluoromethane (CFC-12)	0.086 U	0.088 U	0.081 U	0.082 U	0.087 U	0.086 U	0.089 U	0.08 U	0.091 U	0.089 U	0.13 U
Ethylbenzene	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
Isopropyl benzene	0.22 U	0.22 U	0.2 U	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U	0.33 U
Methyl acetate	1 U	1.1 U	0.97 U	0.99 U	1 U	1 U	0.089 J	0.96 U	1.1 U	1.1 U	0.11 J
Methyl cyclohexane	1 U	1.1 U	0.97 U	0.99 U	1 U	1 U	1.1 U	0.96 U	1.1 U	1.1 U	1.6 U
Methyl tert butyl ether (MTBE)	0.22 U	0.22 U	0.2 U	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U	0.33 U
Methylene chloride	0.22 U	0.22 U	0.2 U	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U	0.33 U

TABLE 2.6

SOIL ANALYTICAL RESULTS - 2004 - 2012
CORRECTIVE MEASURES IMPLEMENTATION PLAN - NORTHEAST AREA
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*CRA-709M*	*CRA-709M*	*CRA-828M*	*CRA-828M*	*CRA-829M*	*CRA-829M*	*CRA-834M*	*CRA-834M*	*CRA-835-SB*	*CRA-835-SB*	*CRA-342M*
Sample Identification	*SO-17358-011712-DR-005*	*SO-17358-011712-DR-006*	*SO-17358-011712-DR-003*	*SO-17358-011712-DR-004*	*SO-17358-011712-DR-001*	*SO-17358-011712-DR-002*	*SO-17358-011812-DR-017*	*SO-17358-011812-DR-018*	*SO-17358-011912-DR-019*	*SO-17358-011912-DR-020*	*S-17358-082304-MM-715*
Sample Date	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/18/2012*	*1/18/2012*	*1/19/2012*	*1/19/2012*	*8/23/2004*
Sample Depth	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2.5-4.5) ft BGS*	*(0-2) ft BGS*	*(3-5) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(2.8-3.3) ft BGS*
Sample Type											
Styrene	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
Tetrachloroethene	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
Toluene	0.086 U	0.088 U	0.081 U	0.082 U	0.087 U	0.086 U	0.089 U	0.08 U	0.091 U	0.089 U	0.13 U
trans-1,2-Dichloroethene	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
trans-1,3-Dichloropropene	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
Trichloroethene	0.043 U	0.044 U	0.041 U	0.041 U	0.043 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U	0.065 U
Trichlorofluoromethane (CFC-11)	0.086 U	0.088 U	0.081 U	0.082 U	0.087 U	0.086 U	0.089 U	0.08 U	0.091 U	0.089 U	0.13 U
Trifluorotrichloroethane (Freon 113)	0.22 U	0.22 U	0.2 U	0.21 U	0.22 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U	0.33 U
Vinyl chloride	0.034 U	0.035 U	0.032 U	0.033 U	0.035 U	0.034 U	0.036 U	0.032 U	0.036 U	0.036 U	0.13 U
Xylenes (total)	0.13 U	0.13 U	0.12 U	0.12 U	0.13 U	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U	0.2 U
Cyanide (total)	--	--	--	--	--	--	--	--	--	--	0.23 U
Total organic carbon (TOC)	--	--	--	--	--	--	--	--	--	--	--

Notes:

bgs below ground surface
[b] Drinking Water Protection Criteria
[c] Non-Residential Drinking Water Protection Criteria
[d] Groundwater Surface Water Interface Criteria
[p] Direct Contact (Residential)
U Not present at or above the associated value
-- Parameter not analyzed
J Estimated concentration.
* Based on chromium speciation completed (Spring 2012) on a Site-wide basis, chromium VI is not prevalent at the Site and, therefore chromium III criteria is used.

APPENDIX A

NORTHEAST AREA SUMMARY REPORT

NORTHEAST AREA SUMMARY REPORT

FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Prepared For:

Revitalizing Auto Communities Environmental Response Trust (RACER)

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JUNE 2012
REF. NO. 017358 (22)

NORTHEAST AREA SUMMARY REPORT

FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Prepared For:

Revitalizing Auto Communities Environmental Response Trust (RACER)

JUNE 2012
REF. NO. 017358 (22)
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TABLE OF CONTENTS

		Page
1.0	INTRODUCTION	1
1.1	GENERAL	1
1.2	REPORT ORGANIZATION	2
2.0	SITE SETTING	3
2.1	SITE LAND USE	3
2.2	GEOLOGY	3
2.3	HYDROGEOLOGY	3
2.4	GROUNDWATER USE	3
3.0	ENVIRONMENTAL INVESTIGATIONS AND ACTIONS	5
3.1	SCREENING CRITERIA	5
3.2	HISTORICAL ACTIVITIES	5
3.2.1	SUBSURFACE SOIL STUDY	5
3.2.2	SOIL EXCAVATION	6
3.2.3	GROUNDWATER MONITORING PROGRAM	7
3.2.4	TEST PIT SAMPLE	8
3.2.5	CONCLUSIONS	8
3.3	CURRENT ACTIVITIES	9
3.3.1	SOIL RESULTS	9
3.3.2	GROUNDWATER RESULTS	10
3.3.4	CONCLUSIONS	10
4.0	CONCLUSIONS AND RECOMMENDATIONS	11
5.0	REFERENCES	12

LIST OF FIGURES
(Following Text)

FIGURE 1.1 SITE LOCATION

FIGURE 1.2 SITE PLAN

FIGURE 2.1 GROUNDWATER CONTOUR - APRIL 26, 2012

FIGURE 3.1 HISTORICAL AND CURRENT INVESTIGATIONS

LIST OF TABLES
(Following Text)

TABLE 3.1 SOIL SCREENING CRITERIA

TABLE 3.2 GROUNDWATER SCREENING CRITERIA

TABLE 3.3 SOIL ANALYTICAL RESULTS (1988)

TABLE 3.4 GROUNDWATER ANALYTICAL RESULTS (1989 -1990)

TABLE 3.5 GROUNDWATER ANALYTICAL RESULTS (2004 – 2012)

TABLE 3.6 SOIL ANALYTICAL RESULTS (2012)

LIST OF APPENDICES
(Following Text)

APPENDIX A STRATIGRAPHIC LOGS

APPENDIX B HISTORICAL REPORTS

LIST OF ACRONYMS

AOI	Area of Interest
bgs	Below ground surface
CRA	Conestoga-Rovers & Associates
EDR	Environment Data Resources Inc.
ft	Feet
ft^2	Square feet
GM	General Motors Corporation
GM LLC	General Motors LLC
GME	General Motors Environmental Science Department
MBSS	Michigan Background Soil Survey
MDEQ	Michigan Department of Environmental Quality
MDNR	Michigan Department of Natural Resources
mg/kg	Milligram/kilogram
mg/L	Milligram/liter
MLC	Motors Liquidation Company
PCBs	Polychlorinated Biphenyls
PID	Photoionization Detector
Plant	Willow Run Plant
RACER	Revitalizing Auto Communities Environmental Response Trust
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
Site	Former Willow Run Plant
SVOCs	Semi-Volatile Organic Compounds
U.S. EPA	United States Environmental Protection Agency
µg/L	Microgram/liter
VOCs	Volatile Organic Compounds

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) has prepared this report to summarize the historical and current conditions for a portion of the former General Motors Corporation (GM) Willow Run Plant (Plant) located at 2930 Ecorse Road in Ypsilanti, Michigan (United States Environmental Protection Agency [U.S. EPA] ID MID 980 587 893) (Site). The portion this report focuses on is the Northeast corner of the property, north of the Plant building, currently consisting of vacant land or parking lot. For the purposes of this report, this area will be referred to as the Northeast Area. The Site location and the Northeast Area are shown on Figures 1.1 and 1.2.

As a result of GM's recent bankruptcy, certain operating assets of GM were sold on July 10, 2009 to a newly formed company which is now known as General Motors LLC (GM LLC). Existing, non-conforming assets remained the property of GM, which was renamed Motors Liquidation Company (MLC). On October 20, 2010, MLC entered into a settlement agreement with federal and state governmental authorities regarding MLC's environmental obligations at its owned real property, including this Site (Settlement Agreement). On March 3, 2011, this Settlement Agreement was approved by the United States Bankruptcy Court for the Southern District of New York as part of MLC's Chapter 11 Plan of Liquidation. According to the terms of the Settlement Agreement, MLC transferred its interests in this Site to the Revitalizing Auto Communities Environmental Response Trust (RACER) on March 31, 2011, the effective date of MLC's Chapter 11 Plan of Liquidation. As such, the Site is now operated by RACER and this summary of the current and historical conditions in the Northeast Area has been prepared on RACER's behalf.

1.1 GENERAL

The Site is located at Ecorse and Wiard Roads in Ypsilanti, Michigan as shown on Figure 1.1. The Site consists of approximately 315 acres of land and is surrounded by industrial, commercial, and residential development. Operations began at the Site in 1941 and currently consist of 4.8 million square feet of manufacturing area having housed various process operations over the years. These operations have primarily included machining, cleaning, painting and assembly of metal parts and products.

Although the Northeast Area was never used for manufacturing; the Current Conditions Report (CRA, 2011) for the Site identified one Area of Interest (AOI) within the area. AOI 12, the North Yard, is an outdoor area, approximately 800 by 200 ft, and was used for approximately 30 years to store various pieces of production machinery and

equipment. Some of the machinery was not properly drained and it is likely that operating fluids (e.g. organic and inorganic oils) leaked into the soil.

This report has been prepared to summarize historical and current conditions in the Northeast Area in support of transferring a portion of this area to the Willow Run Airport. The approximate area that is expected to be transferred is shown on Figure 1.2.

1.2 REPORT ORGANIZATION

This report is organized as follows:

- Section 1.0 – Introduction
- Section 2.0 – Site Setting
- Section 3.0 – Environmental Investigations and Actions
- Section 4.0 – Conclusions and Recommendations
- Section 5.0 – References

2.0 SITE SETTING

2.1 SITE LAND USE

The Site is zoned for Industrial use. The areas to the north, northeast, west-northwest, and south of the Site are zoned Industrial. The property closest to the Northeast Area, the Willow Run Airport, is zoned Airport.

2.2 GEOLOGY

The Site geology and hydrogeology described in Sections 2.2 and 2.3 are defined based on a review of the stratigraphic and instrumentation logs from historical investigations.

The geology for the eastern portion of the Site consists of two units. A poorly graded sand extends from the surface to approximately 15 feet (ft) below ground surface (bgs), thickening to the east. This sand is underlain by a clay unit that appears to be the regionally extensive clay unit. Stratigraphic logs from the Northeast Area are presented in Appendix A. The Current Conditions Report (CRA, 2011), includes several cross-sections across the site detailing the Site geology.

2.3 HYDROGEOLOGY

The saturated zone for the eastern portion of the Site consists of a poorly graded sand that extends to approximately 15 ft bgs as described in Section 2.2. The depth to groundwater for the eastern portion of the Site varies from approximately 4 to 8 ft bgs beneath the Plant and in the Northeast Area is shallower. The saturated thickness increases from approximately 5 ft beneath the Plant to 10 ft at the eastern property boundary.

A Groundwater contour map was generated from groundwater levels collected on April 26, 2012 (Figure 2.1). The April 2012 groundwater contour map is generally consistent with historical groundwater contour maps. Groundwater generally flows to the southeast.

2.4 GROUNDWATER USE

The Ypsilanti Community Utilities Authority provides potable water to the Site and adjacent properties.

According to Site personnel, no water supply or irrigation wells are currently present on the Site. No evidence of any water supply or irrigation wells was observed by CRA during the Site inspection. Numerous monitoring wells, which were installed during ongoing and historical subsurface investigations, are present at the Site.

As discussed in The Current Conditions Report (CRA, 2011), well information provided in an Environment Data Resources Inc. (EDR) report indicates that there are three wells located on the west side of the Site and are identified as household wells. It is unknown if these wells are drinking water wells or are monitoring wells. The wells were installed October 30, 1984, February 2, 1985, and October 30, 1985, and are 15 ft deep.

3.0 ENVIRONMENTAL INVESTIGATIONS AND ACTIONS

3.1 SCREENING CRITERIA

The soil and groundwater results were compared to Michigan Part 201 generic cleanup criteria developed by the Michigan Department of Environmental Quality (MDEQ) under the authority of the Natural Resources and Environmental Protection Act (1994 PA 451, as amended), and published under Remediation and Redevelopment Operational Memorandum No. 1, Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, as updated March 25, 2011 by the Remediation Division. Due to the proximity to a property boundary, the results were compared to both residential and non residential cleanup criteria. Tables 3.1 and 3.2 present the soil and groundwater screening criteria, respectively.

3.2 HISTORICAL ACTIVITIES

An August 6, 1987 letter from Charles San Juan of the Michigan Department of Natural Resources (MDNR) summarized the findings of a site inspection, including observation of leaking, pooling, and staining of soils related to hydraulic oil and other lubricating liquids draining from stored machinery.

As a result, Hydramatic and the General Motors Environmental Science Department (GME) conducted an investigation and remediation program of the Northeast Area from 1987 to 1990. This included an investigation of a grid of surficial soil between 1 and 4 ft bgs, a limited excavation of the surficial soil (1 to 2 ft) in two discreet areas and the installation of 3 monitoring wells followed by a groundwater monitoring program. The investigation and excavation areas are included on Figure 3.1. Historical reports detailing these investigations are included in Appendix B.

3.2.1 SUBSURFACE SOIL STUDY

To determine the extent of contamination in the Northeast Area, GM conducted a subsurface soil study, using a phased approach, which was completed in April 1988. The following four phases were to be implemented sequentially and the implementation of each phase depended on finding contamination in all the preceding phases:

- Phase 1: Organic and Inorganic constituents in the surface material
- Phase 2: Constituents and characterization of the unsaturated zone

- Phase 3: Constituents and characterization of the saturated zone
- Phase 4: Delineation of vapor phase constituents

In Phase 1, completed surface soil sampling was used to define the lateral extent of contamination. A total of 42 soil samples, from 0 to 12 inches, were collected and analyzed for Polychlorinated Biphenyls (PCBs) (Aroclors 1221, 1248, 1254, 1260), heavy metals (chromium, lead, cadmium, zinc, nickel and iron) and total hydrocarbons. Analytical results are included in Table 3.3 and are compared against the current screening criteria described in Section 3.1.

The results demonstrated that the foreign constituents measured in the soil were mostly concentrated horizontally in an approximately 100 by 200 foot central region of the yard. The maximum concentrations of hydrocarbons and PCBs in the surface soils were 14,000 milligram/kilogram (mg/kg) and 4 mg/kg, respectively. Other parts of the storage area generally had lower concentrations, mostly background levels.

Chromium was the only constituent analyzed for that exceeds current screening criteria. These chromium detections exceed chromium VI criteria but do not exceed chromium III screening levels. Based on chromium speciation recently completed (Spring 2012) on a Site-wide basis, chromium VI is not prevalent at the Site and, therefore chromium III criteria should be used.

In Phase 2, 21 soil cores were collected using a specially designed coring device to adequately define the vertical spread of contaminants. The results showed that, in all areas, the unsaturated soil zone below the upper 22 inches was not impacted. Therefore, an investigation of the deeper perched aquifer system (Phase 3), which would have began at about 6 ft bgs, was unnecessary. Since no vapor-phase organics were detected in the soil samples, delineation of vapor contaminants (Phase 4) was unnecessary. GME concluded that retardation processes such as adsorption, cation exchange, and low contaminant solubility, prevented contaminant migration beyond the storage area or into the aquifer. Furthermore, environmental regulations at the time of the investigation did not require cleanup action. Therefore, the investigation concluded that no remedial action was necessary in the area.

3.2.2 SOIL EXCAVATION

Due to the low concentrations and limited vertical migration of the contaminants and their insignificant potential for future migration, as discussed in the previous section, the area could have been left in its then current state. However, plant management decided

to excavate the surface soil in PCB-containing areas, prior to grading the site. With the agreement of the MDNR, an area of about 27,000 square feet (ft^2), which included the central zone of higher contaminant concentrations, was excavated to a depth of 2 ft bgs. Another more lightly affected area about 5,000 ft^2 was excavated to 1 foot bgs. The approximate 32,000 ft^2 of soil was excavated and disposed of as nonhazardous waste. The limited extent of the excavation was completed only because of the precise delineation of the shallow contaminated zone demonstrated by the phased soil-coring investigated at the site. This excavation was completed in August 1988 and the approximate areas are shown on Figure 3.1.

3.2.3 GROUNDWATER MONITORING PROGRAM

As part of the Northeast Area remediation program, a quarterly groundwater monitoring program was implemented for a 2-year period beginning in March 1989. The primary objective of the study was to sample and analyze shallow groundwater in the Northeast Area for organic chemicals and inorganic constituents. Analytical results are summarized in Table 3.4 and are compared against the screening criteria described in Section 3.1.

Three monitoring wells (MW-301, MW-302 and MW-303, renamed CRA-266M, CRA-265M and CRA-264M, respectively) were installed on February 14, 1989. The locations of the monitoring wells are shown on Figure 3.1. Eight quarterly groundwater sampling events were conducted in March 1989, June 1989, September 1989, December 1989, March 1990, July 1990, September 1990 and December 1990. In each monitoring event, groundwater samples were collected from the three monitoring wells and analyzed for dissolved metals (chromium, lead, cadmium, zinc, nickel and iron), purgeable halocarbons, purgeable aromatic hydrocarbons, and PCBs.

The groundwater data generally indicated that metals were present at levels not uncommon for shallow groundwater in Michigan. Iron was detected in all samples at CRA-264M and CRA-265M and two samples at CRA-266M at concentrations that exceed the current residential and non-residential drinking water criteria. These concentrations are expected to be related to background or naturally occurring metals concentrations in groundwater. All other metals were generally undetected. Copper and lead were detected once at concentrations that exceeded screening criteria at CRA-266M; however, it is unlikely that these isolated detections were Site-related.

Site-related organic chemicals (including PCBs) were generally not identified during the monitoring period. However, in December 1989, PCB Aroclor 1248 was detected in

CRA-264M at extremely low concentrations of 0.0031 milligram/liter (mg/L) and 0.0060 mg/L (duplicate sample). In March 1990, the concentration of Aroclor 1248 decreased to 0.00077 mg/L in CRA-264M. No PCBs were found in CRA-264M during subsequent sampling events. During the subsurface soil study, low concentrations of PCBs were found in shallow soils in two discrete areas of the site, but no PCBs above the limit of detection (0.2 mg/kg) were found in soil samples from the CRA-264M area. Also, PCBs are highly insoluble in water and tend to be found in the environment either adsorbed to soil particles or in soil. The historical reports indicate that the groundwater sample from this well was very silty. Therefore, it is likely that the PCBs observed in groundwater samples from CRA-264M were not indicative of actual groundwater conditions.

3.2.4 TEST PIT SAMPLE

A groundwater sample was collected from a test pit in the Northeast Area in November 2004 during a Site utility investigation. The sample was analyzed for dissolved metals, PCBs, Semi-Volatile Organic Compounds (SVOCs) and Volatile Organic Compounds (VOCs). Table 3.5 summarizes the results of the groundwater samples compared against the screening criteria described in Section 3.1. The location of the test pit sample is shown on Figure 3.1.

No VOCs, SVOCs, or PCBs were detected at concentrations above the screening criteria. Various metals were detected above screening criteria. Mercury was detected at 0.056 microgram/liter (µg/L) which exceeds the groundwater surface water interface (GSI) criteria of 0.0013 µg/L. Detections of aluminum, 1.3 mg/L, and iron, 1.6 mg/L, exceeded both the residential and non-residential drinking water criteria. The vanadium concentration of 0.0046 mg/L exceeded the residential drinking water criteria of 0.0045 mg/L.

3.2.5 CONCLUSIONS

The results of the historical study indicate that the fluids and oils from the stored machinery in the North Yard were confined within the upper 24 inches of soil. The areas of soil with greatest impact were removed by excavation and subsequent groundwater monitoring indicated that past activities in this area have not impacted the groundwater quality.

3.3 CURRENT ACTIVITIES

A Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) is currently being completed at the Site. This report discusses a subset of the RFI Work Plan activities that were completed to facilitate a property transfer with neighboring Willow Run Airport. The investigation included the collection of soil samples from 11 soil borings, the installation of 8 monitoring wells (CRA-705M, CRA-706M, CRA-709M, CRA-710M, CRA-828M, CRA-829M, CRA-833M, CRA-834M), development of the wells and the collection of groundwater samples from the 8 new wells and 2 existing wells. The work was completed between January 17, 2012 and February 7, 2012. Monitoring well and soil boring locations are shown on Figure 3.1. At the time this field work was completed, the area to be included in the property transfer was unclear, so a large area was investigated. The two most upgradient wells (CRA 705M and CRA-706M) were installed as background wells for evaluating background concentrations of metals at the Site.

Continuous soil samples were collected from each location to record soil stratigraphy and to screen for organic vapors using a photoionization detector (PID). The stratigraphic and instrumentation logs are presented in Appendix A. Soil samples were collected for laboratory analysis from 0 to 2 ft bgs, the interval 2 ft above the water table, and from a maximum of one additional interval that is deemed significantly impacted in the field (elevated PID readings, odors, staining, etc.). Soil and groundwater samples were collected for laboratory analysis for VOCs, SVOCs, PCBs, and metals.

3.3.1 SOIL RESULTS

No additional soils samples were required due to elevated PID readings, odors, staining, etc. Table 3.6 summarizes the results of the soil samples compared against the screening criteria described in Section 3.1. No VOCs, SVOCs, or PCBs were detected at concentrations above the screening criteria. Various metals were detected above screening criteria.

Arsenic, iron, manganese, magnesium, and selenium were detected in at least one sample at concentrations above the screening criteria. These concentrations are likely the result of background levels of metals in soils.

In 2005 the MDEQ updated the document "*Michigan Background Soil Survey*" (MBSS). The MBSS is a compilation of soil sampling data that represents what is assumed to be naturally occurring background concentrations of metals in Michigan soils. The data

and statistical summaries in the MBSS are used for comparison purposes only and are meant to provide a resource for information regarding the concentrations of naturally occurring metals in various soil types and geographic areas of Michigan. The concentrations detected fall within the typical data range for these metals in Michigan as documented in the MBSS.

3.3.2 GROUNDWATER RESULTS

The groundwater in the Northeast Area is fairly shallow. Water levels in the wells range from approximately 1.5 to 4 ft bgs. The general groundwater flow direction in this area is to the southeast (Figure 2.1).

Table 3.5 summarizes the results of the groundwater samples compared against the screening criteria described in Section 3.1. No VOCs, SVOCs, or PCBs were detected at concentrations above the screening criteria. Various metals were detected above screening criteria.

Arsenic, chromium, copper, lead, and vanadium were only detected at concentrations that exceed screening criteria in one sample collected from CRA-710M on January 23, 2012. The sample collected from this well was very turbid (667 NTU). A subsequent sample was collected from this well on April 12, 2012 and analyzed for metals. The turbidity of this sample was 0.95 NTU. The only metal detected above screening criteria was manganese. This confirms that the elevated concentrations of metals detected in the January sample are related to the particulates in the groundwater, rather than actual groundwater conditions. This well is located west of the probable new property boundary and is expected to remain RACER property.

Aluminum, iron, and manganese were detected in all or almost all samples above drinking water and or groundwater surface water interface criteria. These concentrations are expected to be related to background or naturally occurring metals concentrations in groundwater. As part of the overall Site investigation, a background metals concentration in groundwater analysis is being completed.

3.3.4 CONCLUSIONS

The analytical results from the investigation indicate that the soil and groundwater are not impacted by organic parameters (i.e., VOCs, SVOCs, and PCBs) and that the detected metals are likely attributable to naturally occurring background concentrations.

4.0 CONCLUSIONS AND RECOMMENDATIONS

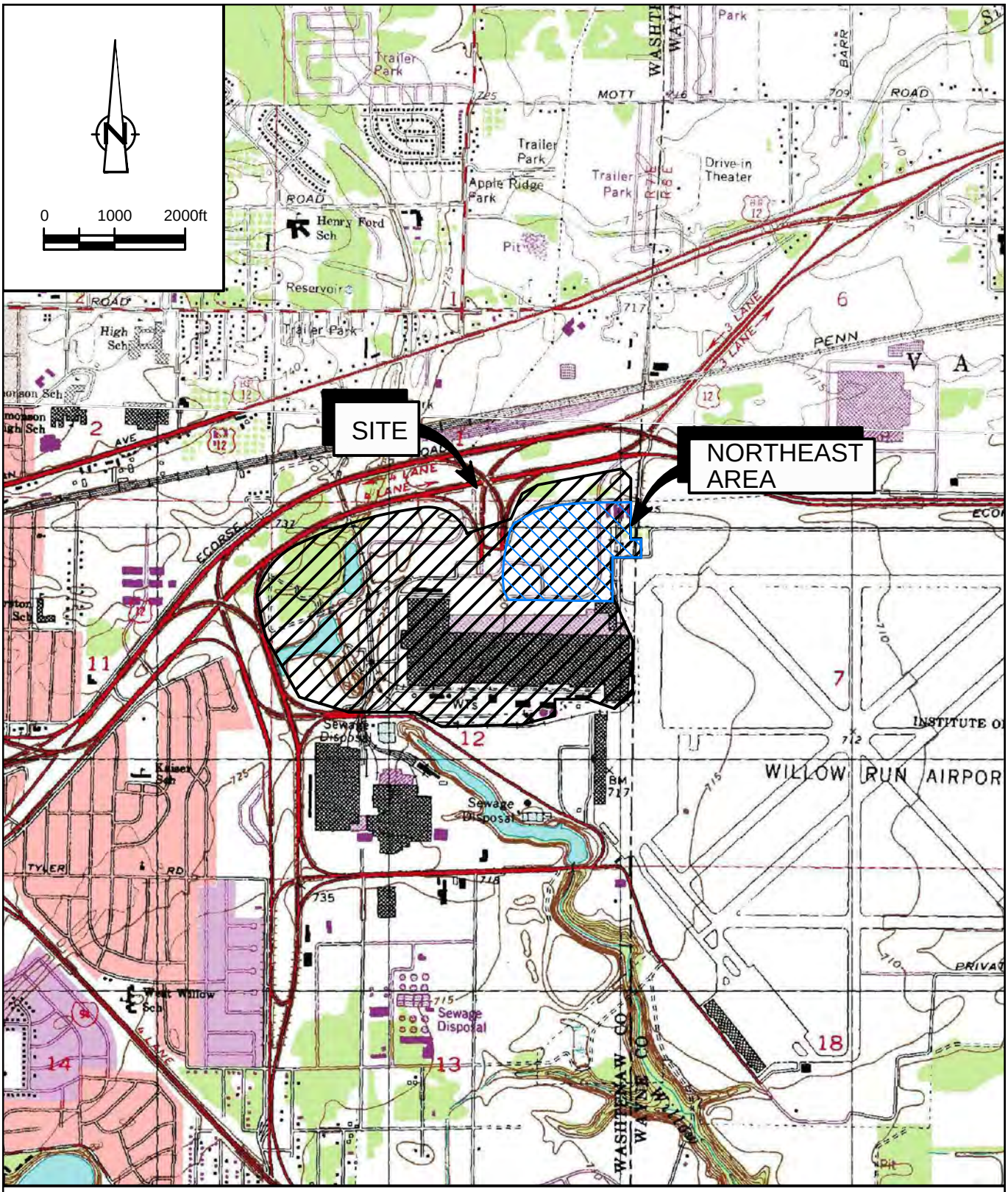
This report summarizes the historical and current conditions of the Northeast Area of the former Willow Run Plant. The analytical results of the historical and current investigations indicate that the soil and groundwater are not impacted by organic parameters (i.e., VOCs, SVOCs, and PCBs) and that the detected metals are likely attributable to naturally occurring background concentrations.

Based on the information provided in this report, it is anticipated that a no further action request will be submitted for the Northeast Area.

5.0 REFERENCES

CRA. 2011. Current Conditions Report, Former General Motors Powertrain Willow Run, Ypsilanti, Michigan, July 2011.

FIGURES



SOURCE: USGS QUADRANGLE MAP;
EAST YPSILANTI, MICHIGAN
DATE: 1996
EAST DENTON, MICHIGAN
DATE: 1969; REVISED: 1980

YPSILANTI

NOTE:
SITE BOUNDARY IS ESTIMATED

figure 1.1

SITE LOCATION
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
Ypsilanti, Michigan

017358-T01(022)GN-DE002 JUN 01/2012

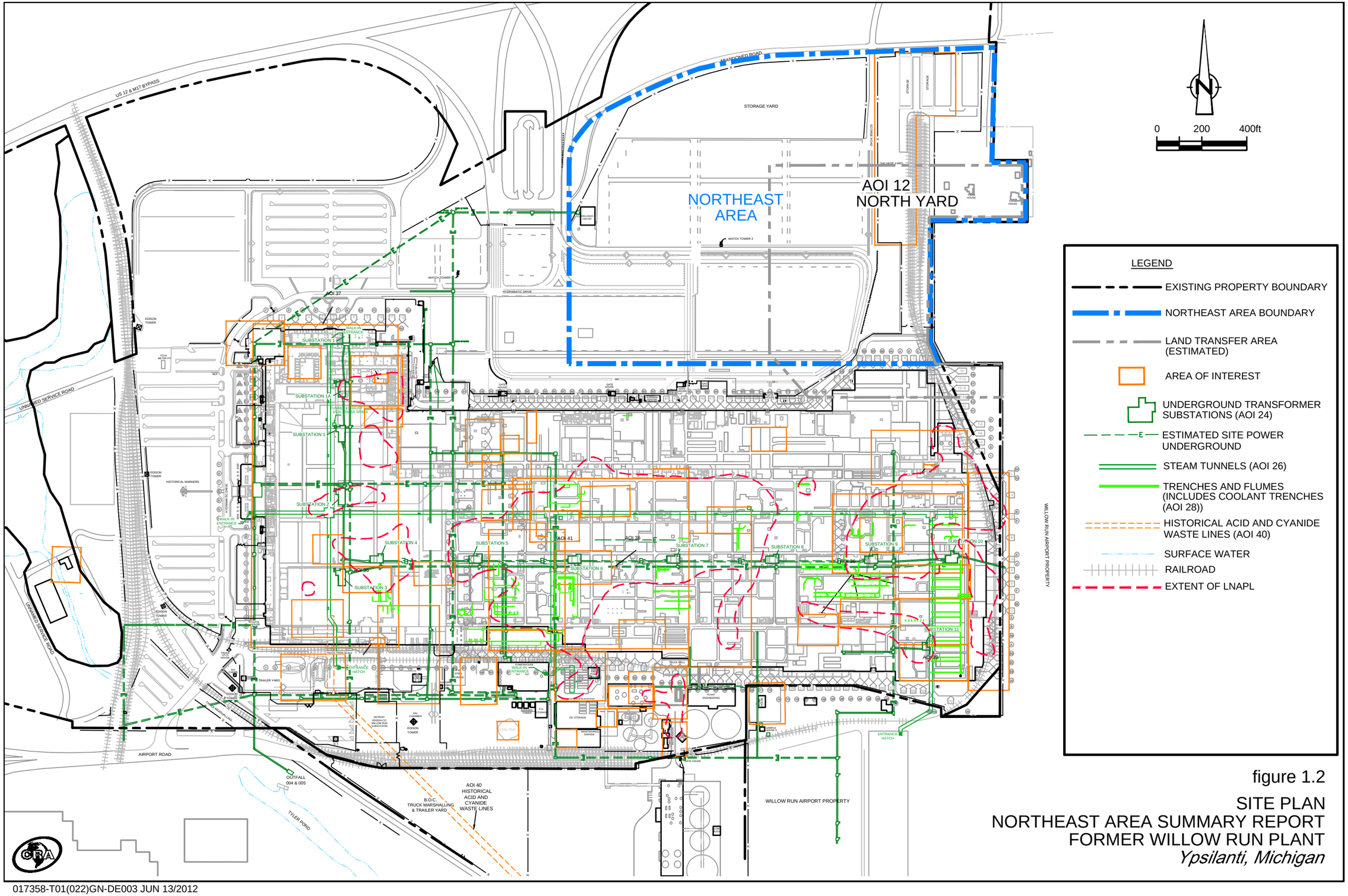


figure 1.2

SITE PLAN
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
Ypsilanti, Michigan

017358-T01(022)GN-DE003 JUN 13/2012

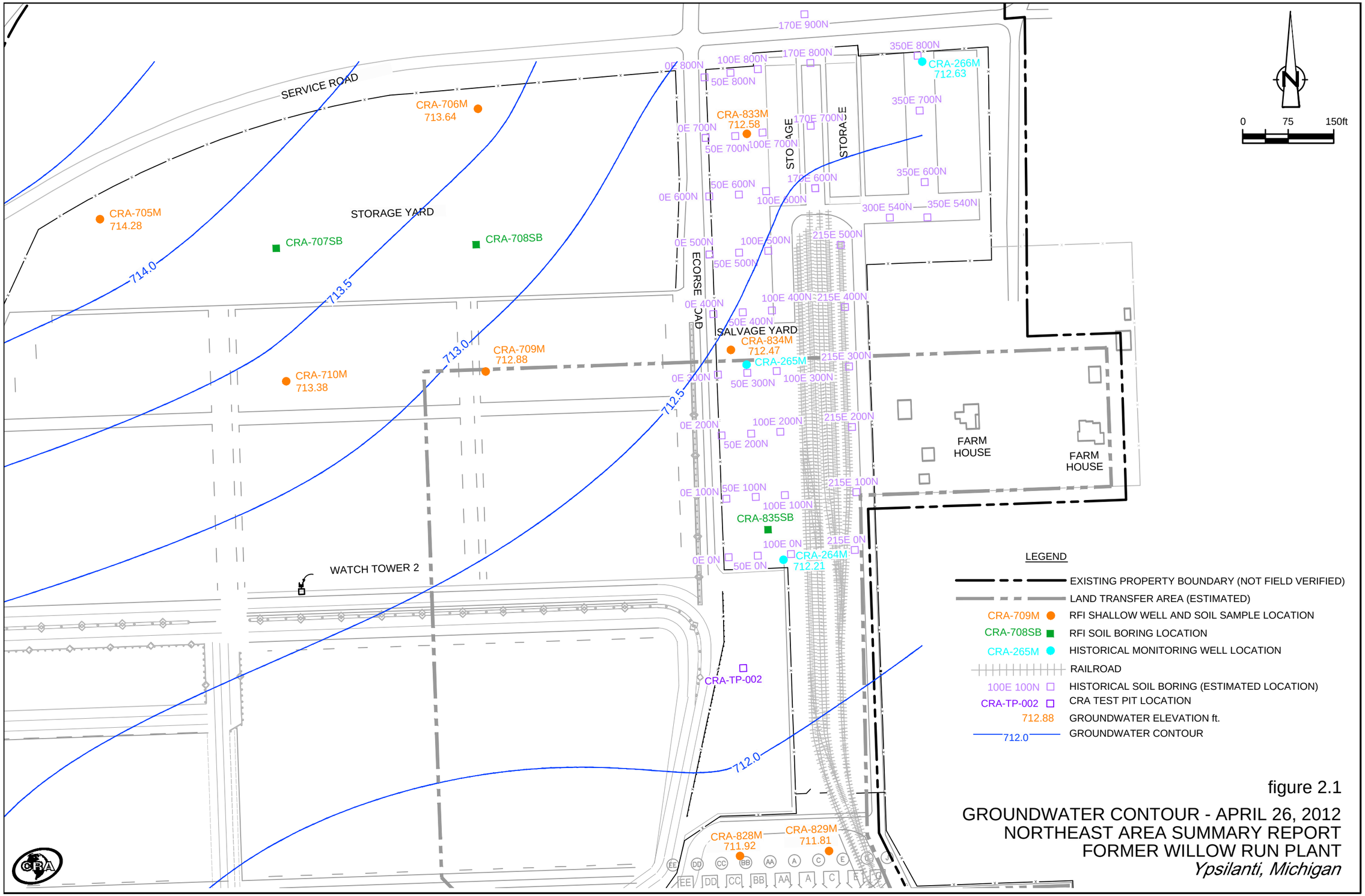


figure 2.1

GROUNDWATER CONTOUR - APRIL 26, 2012
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
Ypsilanti, Michigan

017358-T01(022)GN-DE005 JUN 13/2012

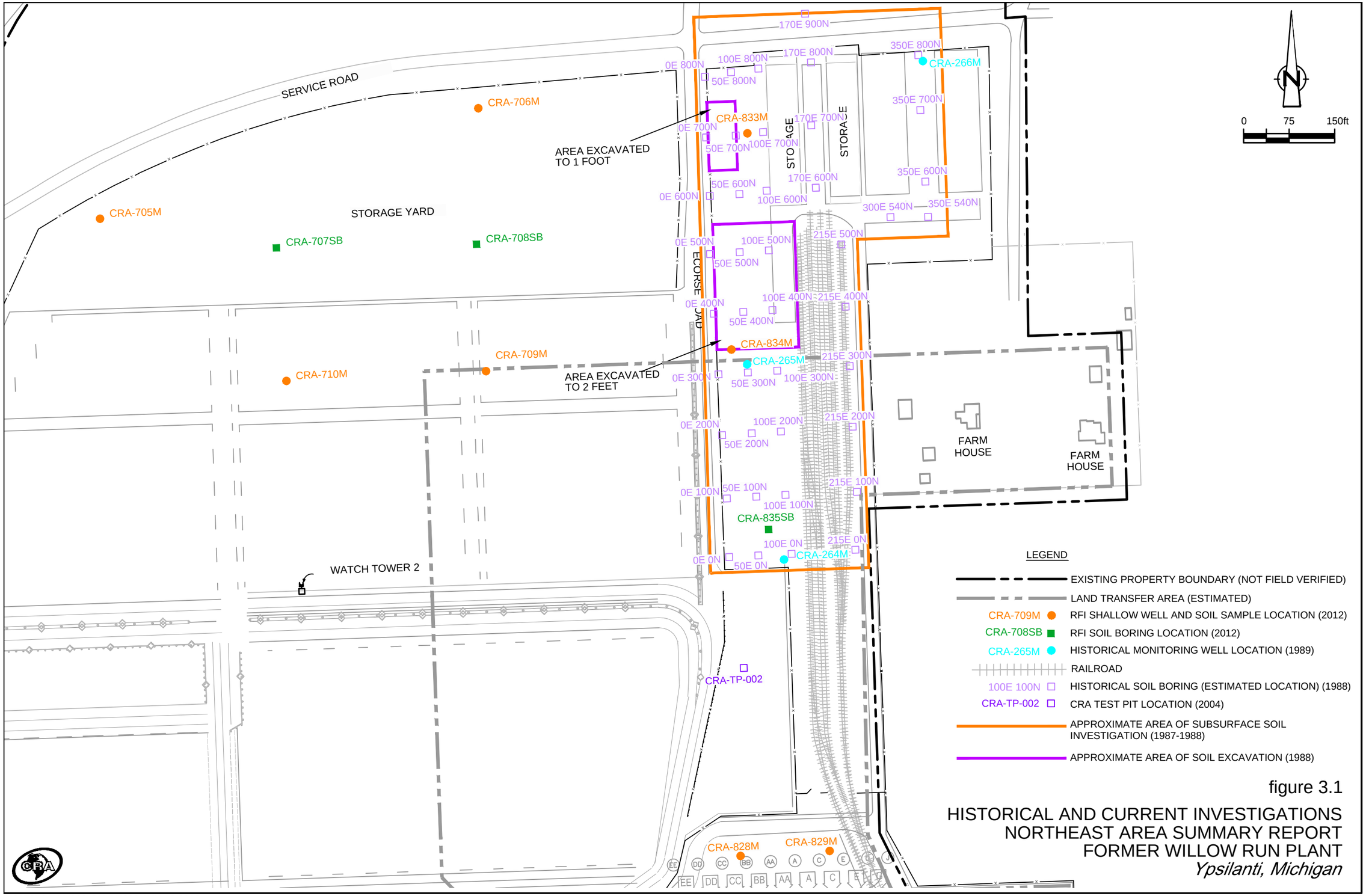


figure 3.1

HISTORICAL AND CURRENT INVESTIGATIONS NORTHEAST AREA SUMMARY REPORT FORMER WILLOW RUN PLANT

Ypsilanti, Michigan

017358-T01(022)GN-DE006 JUN 13/2012

TABLES

TABLE 3.1

SOIL SCREENING CRITERIA
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location Sample Identification Sample Date Sample Type Sample Depth	Statewide Default Background	Drinking Water Protection	Non-Residential Drinking Water Protection	Groundwater Surface Water Interface Protection	Groundwater Contact Protection	Soil Volatilization to Indoor Air Inhalation	Non-Residential Soil Volatilization to Indoor Air Inhalation	Infinite Source Volatile Soil Inhalation	Non-Residential Infinite Source Volatile Soil Inhalation	Finite VSIC for 5 Meter Source Thickness	Non-Residential Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Non-Residential Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation	Non-Residential Particulate Soil Inhalation	Direct Contact	Non-Residential Direct Contact	Soil Saturation Concentration Screening
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r
Inorganics (mg/kg)																		
Aluminum	6900	1	1	NA	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	50000	370000	NA
Antimony	NA	4.3	4.3	94	49000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	13000	5900	180	670	NA
Arsenic	5.8	4.6	4.6	4.6	2000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	720	910	7.6	37	NA
Barium	75	1300	1300	1200	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	330000	150000	37000	130000	NA
Beryllium	NA	51	51	950	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1300	590	410	1600	NA
Cadmium	1.2	6	6	7.30	230000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1700	2200	550	2100	NA
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	18	30	30	3.3	140000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	260	240	2500	9200	NA
Chromium III (trivalent)	18	1000000	1000000	6600000	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	330000	150000	790000	1000000	NA
Chromium VI (hexavalent)	NA	30	30	3.3	140000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	260	240	2500	9200	NA
Cobalt	6.8	0.8	2	2	48000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	13000	5900	2600	9000	NA
Copper	32	5800	5800	170	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	130000	59000	20000	73000	NA
Iron	12000	6	6	NA	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	160000	580000	NA
Lead	21	700	700	7700	ID	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	100000	44000	400	900	NA
Magnesium	NA	8000	22000	NA	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6700000	2900000	1000000	1000000	NA
Manganese	440	1	1	130	180000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	3300	1500	25000	90000	NA
Mercury	0.13	1.7	1.7	0.05	47	48	89	52	62	52	62	52	62	20000	8800	160	580	NA
Nickel	20	100	100	170	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	13000	16000	40000	150000	NA
Potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.41	4	4	0.4	78000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	130000	59000	2600	9600	NA
Silver	1	4.5	13	0.1	200000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6700	2900	2500	9000	NA
Sodium	NA	2500	7000	NA	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	1000000	1000000	NA
Thallium	NA	2.3	2.3	4.2	15000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	13000	5900	35	130	NA
Vanadium	NA	72	990	190	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	750	5500	NA
Zinc	47	2400	5000	380	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	170000	630000	NA
PCBs (mg/kg)																		
Aroclor-1016 (PCB-1016)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221 (PCB-1221)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232 (PCB-1232)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242 (PCB-1242)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248 (PCB-1248)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254 (PCB-1254)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260 (PCB-1260)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	NA	NLL	NLL	NLL	NLL	3000	16000	240	810	7900	28000	7900	28000	5200	6500	4	16	NA
Semi-Volatile Organic Compounds (mg/kg)																		
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	NA	39	110	NA	9100	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	23000000	10000000	23000	73000	NA
2,4,6-Trichlorophenol	NA	2.4	9.4	0.33	200	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1000000	1300000	710	3300	NA
2,4-Dichlorophenol	NA	1.5	4.2	0.33	960	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	5100000	2300000	660	1800	1800
2,4-Dimethylphenol	NA	7.4	20	7.6	10000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	4700000	2100000	11000	36000	NA
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NA	0.43	0.64	NA	170	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	16000	20000	48	220	NA
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	NA	620	1800	NA	2300	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	56000	180000	NA
2-Chlorophenol	NA	0.9	2.6	0.36	1900	430	800	960	1100	960	1100	960	1100	1200000	530000	1400	4500	19000
2-Methylnaphthalene	NA	57	170	4.2	5500	2700	4900	1500	1800	1500	1800	1500	1800	670000	290000	8100	26000	NA
2-Methylphenol	NA	7.4	20	1	16000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6700000	2900000	11000	36000	NA
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NA	0.4	1.2	ID	1600	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	630	2000	NA
3&4-Methylphenol	NA	7.4	20	1	16000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6700000	2900000	11000	36000	NA
3,3'-Dichlorobenzidine	NA	2	2	2	4.6	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	6500	8200	6.6	30	NA
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NA	0.83	0.83	NA	190	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	79	260	NA
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NA	5.8	16	0.28	3000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	4500	15000	NA
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	300	880	8.7	970	190000	350000	81000	97000	81000	97000	81000	97000	14000000	6200000	41000	130000	NA
Acenaphthylene	NA	5.9	17	ID	440	1600	3000	2200	2700	2200	2700	2200	2700	2300000	1000000	1600	5200	NA
Acetophenone	NA	30	88	ID	1100	1100	1100	44000	52000	44000	52000	44000	52000	33000000	14000000	1100	1100	1100
Anthracene	NA	41	41	ID	41	1000000	1000000	1400000	1600000	1400000	1600000	1400000	1600000	67000000	29000000	230000	730000	NA
Atrazine	NA	0.06	0.06	0.15	110	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	71	330	NA
Benzaldehyde	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	20	80	NA
Benzo(a)pyrene	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1500	1900	2	8	NA

TABLE 3.1

SOIL SCREENING CRITERIA
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location Sample Identification Sample Date Sample Type Sample Depth	Statewide Default Background	Drinking Water Protection	Non-Residential Drinking Water Protection	Groundwater Surface Water Interface Protection	Groundwater Contact Protection	Soil Volatilization to Indoor Air Inhalation	Non-Residential Soil Volatilization to Indoor Air Inhalation	Infinite Source Volatile Soil Inhalation	Non-Residential Infinite Source Volatile Soil Inhalation	Finite VSIC for 5 Meter Source Thickness	Non-Residential Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Non-Residential Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation	Non-Residential Particulate Soil Inhalation	Direct Contact	Non-Residential Direct Contact	Soil Saturation Concentration Screening
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r
Benzo(b)fluoranthene	NA	NLL	NLL	NLL	NLL	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	20	80	NA
Benzo(g,h,i)perylene	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	800000	350000	2500	7000	NA
Benzo(k)fluoranthene	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	200	800	NA
Biphenyl (1,1-Biphenyl)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	NA	0.10	0.17	0.1	110	8.3	44	3.8	13	3.8	13	3.8	13	9400	12000	13	58	2200
bis(2-Ethylhexyl)phthalate (DEHP)	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	700000	890000	2800	10000	10000
Butyl benzylphthalate (BBP)	NA	310	310	120	310	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	47000000	21000000	310	310	310
Caprolactam	NA	120	340	NA	1000000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	670000	290000	53000	310000	NA
Carbazole	NA	9.4	39	1.1	820	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	62000	78000	530	2400	NA
Chrysene	NA	NLL	NLL	NLL	NLL	ID	ID	ID	ID	ID	ID	ID	ID	ID	ID	2000	8000	NA
Dibenz(a,h)anthracene	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	2	8	NA
Dibenzofuran	NA	ID	ID	1.7	ID	2000	3600	130	160	130	160	130	160	6700	2900	ID	ID	NA
Diethyl phthalate	NA	110	320	2.2	740	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	3300000	1500000	740	740	740
Dimethyl phthalate	NA	790	790	NA	790	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	3300000	1500000	790	790	790
Di-n-butylphthalate (DBP)	NA	760	760	11	760	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	3300000	1500000	760	760	760
Di-n-octyl phthalate (DnOP)	NA	100000	140000	ID	140000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	31000000	14000000	6900	20000	140000
Fluoranthene	NA	730	730	5.5	730	1000000	1000000	740000	890000	740000	880000	740000	880000	9300000	4100000	46000	130000	NA
Fluorene	NA	390	890	5.3	890	580000	1000000	130000	150000	130000	150000	130000	150000	9300000	4100000	27000	87000	NA
Hexachlorobenzene	NA	1.8	1.8	0.35	8.2	41	220	17	56	17	56	17	56	6800	8500	8.9	37	NA
Hexachlorobutadiene	NA	26	72	0.091	350	130	350	130	460	130	460	130	460	140000	180000	100	350	350
Hexachlorocyclopentadiene	NA	320	320	ID	720	30	56	50	60	50	60	50	60	13000	5900	720	720	720
Hexachloroethane	NA	0.43	1.2	1.8	110	40	79	550	660	930	1400	930	1400	230000	100000	230	730	NA
Indeno(1,2,3-cd)pyrene	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	ID	ID	20	80	NA
Isophorone	NA	15	62	26	2400	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	12000000	8200000	2400	2400	2400
Naphthalene	NA	35	100	0.73	2100	250	470	300	350	300	350	300	350	200000	88000	16000	52000	NA
Nitrobenzene	NA	0.33	0.33	3.6	220	91	170	54	64	54	64	54	64	47000	21000	100	340	490
N-Nitrosodi-n-propylamine	NA	0.33	0.33	NA	7.2	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	1600	2000	1.2	5.4	1500
N-Nitrosodiphenylamine	NA	5.4	22	NA	700	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	2200000	2800000	1700	7800	NA
Pentachlorophenol	NA	0.022	0.022	27	4.3	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	100000	130000	90	320	NA
Phenanthrene	NA	56	160	2.1	1100	2800	5100	160	190	160	190	160	190	6700	2900	1600	5200	NA
Phenol	NA	88	260	9	12000	NLV	NLV	NLV	NLV	NLV	NLV	NLV	NLV	40000000	18000000	12000	12000	12000
Pyrene	NA	480	480	ID	480	1000000	1000000	650000	780000	650000	780000	650000	780000	6700000	2900000	29000	84000	NA
Volatile Organic Compounds (mg/kg)																		
1,1,1-Trichloroethane	NA	4	4	1.8	460	250	460	3800	4500	12000	15000	28000	31000	67000000	29000000	460	460	460
1,1,2,2-Tetrachloroethane	NA	0.17	0.7	1.6	94	4.3	23	10	34	10	34	14	34	54000	68000	53	240	870
1,1,2-Trichloroethane	NA	0.1	0.1	6.6	420	4.6	24	17	57	21	57	44	120	190000	250000	180	840	920
1,1-Dichloroethane	NA	18	50	15	890	230	430	2100	2500	5900	6000	14000	14000	33000000	15000000	890	890	890
1,1-Dichloroethene	NA	0.14	0.14	2.6	220	0.062	0.33	1.1	3.7	5.3	15	13	37	62000	78000	200	570	570
1,2,4-Trichlorobenzene	NA	4.2	4.2	5.9	1100	1100	1100	28000	34000	28000	34000	28000	34000	25000000	11000000	990	1100	1100
1,2-Dibromo-3-chloropropane (DBCP)	NA	0.01	0.01	ID	1.2	1.2	1.2	13	15	13	15	13	15	13000	5900	1.2	1.2	1.2
1,2-Dibromoethane (Ethylene dibromide)	NA	0.02	0.02	0.11	0.5	0.67	3.6	1.7	5.8	1.7	5.8	3.3	9.8	14000	18000	0.092	0.43	890
1,2-Dichlorobenzene	NA	14	14	0.28	210	210	210	39000	46000	39000	46000	52000	55000	100000000	44000000	210	210	210
1,2-Dichloroethane	NA	0.1	0.1	7.2	380	2.1	11	6.2	21	11	33	26	74	120000	150000	91	420	1200
1,2-Dichloropropane	NA	0.1	0.1	4.6	320	4	7.4	25	30	50	51	110	120	270000	120000	140	550	550
1,3-Dichlorobenzene	NA	0.17	0.48	0.68	51	26	48	79	94	79	94	110	110	200000	8800	170	170	170
1,4-Dichlorobenzene	NA	1.7	1.7	0.36	140	19	100	77	260	77	260	110	340	450000	570000	400	1900	NA
2-Butanone (Methyl ethyl ketone) (MEK)	NA	260	760	44	27000	27000	27000	29000	35000	29000	35000	35000	36000	67000000	29000000	27000	27000	27000
2-Hexanone	NA	20	58	ID	2500	990	1800	1100	1300	1100	1300	1400	1500	2700000	1200000	2500	2500	2500
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	NA	36	100	ID	2700	2700	2700	45000	53000	45000	53000	67000	70000	140000000	60000000	2700	2700	2700
Acetone	NA	15	42	34	110000	110000	110000	130000	160000	130000	160000	190000	200000	390000000	170000000	23000	73000	110000
Benzene	NA	0.1	0.1	4	220	1.6	8.4	13	45	34	99	79	230	380000	470000	180	400	400
Bromodichloromethane	NA	1.6	1.6	ID	280	1.2	6.4	9.1	31	9.7	31	19	57	84000	110000	110	490	1500
Bromoform	NA	1.6	1.6	ID	870	150	770	900	3100	900	3100	900	3100	2800000	3600000	820	870	870
Bromomethane (Methyl bromide)	NA	0.2	0.58	0.7	1400	0.86	1.6	11	13	57	57	140	140	330000	150000	320	1000	2200
Carbon disulfide	NA	16	46	ID	280	76	140	1300	1600	7900	8000	19000	19000	47000000	21000000	280	280	280
Carbon tetrachloride	NA	0.1	0.1	0.9	92	0.19	0.99	3.5	12	12	34	28	79	130000	170000	96	390	390
Chlorobenzene	NA	2	2	0.5	260	120	220	770	920	990	1100	2100	2100	4700000	2100000	260	260	260
Chloroethane	NA	8.6	34	22	950	950	950	30000	36000	120000	120000	280000	280000	670000000	290000000	950	950	950
Chloroform (Trichloromethane)	NA	1.6	1.6	7	1500	7.2	38	45	150	120	340	270	790	1300000	1600000	1200	1500	1500
Chloromethane (Methyl chloride)	NA	5.2	22	ID	1100	2.3	10	40	120	410	1000	1000	2500	4900000	2600000	1100	1100	1100
cis-1,2-Dichloroethene	NA	1.4	1.4	12	640	22	41	180	210	420	430	990	1000	2300000	1000000	640	640	640
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	NA	1.6	1.6	ID	360	3.9	21	24	80	24	80	33	98	130000	160000	110	500	610
Dichlorodifluoromethane (CFC-12)	NA	95	270	ID	1000	900	1700	53000	63000	550000	550000	1400000	1400000	3300000000	1500000000	1000	1000	1000
Ethylbenzene	NA	1.5	1.5	0.36	140	87	140	720	2400	1000	3100	2200	6500	10000000	13000000	140	140	140
Isopropyl benzene	NA	91	260	3.2	390	390	390	1700	2000	1700	2000	2800	3000	5800000	2600000	390	390	390
Methyl acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl cyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert butyl ether (MTBE)	NA	0.8	0.8	140	5900	5900	5900	25000	30000	39000	41000	87000	89000	200000000	88000000	1500	5900	5900
Methylene chloride	NA	0.1	0.1	30	2300	45	240	210	700	590	1700	1400	4000	6600000	8300000	1300	2300	2300

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Sample Location Sample Identification Sample Date Sample Type Sample Depth	Statewide Default Background a	Drinking Water Protection b	Non-Residential Drinking Water Protection c	Groundwater Surface Water Interface Protection d	Groundwater Contact Protection e	Soil Volatilization to Indoor Air Inhalation f	Non-Residential Soil Volatilization to Indoor Air Inhalation g	Infinite Source Volatile Soil Inhalation h	Non-Residential Infinite Source Volatile Soil Inhalation i	Finite VSIC for 5 Meter Source Thickness j	Non-Residential Finite VSIC for 5 Meter Source Thickness k	Finite VSIC for 2 Meter Source Thickness l	Non-Residential Finite VSIC for 2 Meter Source Thickness m	Particulate Soil Inhalation n	Non-Residential Particulate Soil Inhalation o	Direct Contact p	Non-Residential Direct Contact q	Soil Saturation Concentration Screening r
Styrene	NA	2.7	2.7	2.1	270	250	520	970	3300	970	3300	1400	4200	5500000	6900000	400	520	520
Tetrachloroethene	NA	0.1	0.1	1.2	88	11	60	180	600	480	1400	1100	3300	5400000	6800000	88	88	88
Toluene	NA	16	16	5.4	250	250	250	2800	3300	5100	36000	12000	36000	27000000	12000000	250	250	250
trans-1,2-Dichloroethene	NA	2	2	30	1400	23	43	280	330	830	840	2000	2000	4700000	2100000	1400	1400	1400
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	NA	0.1	0.1	4	440	7.1	37	78	260	170	440	390	1100	1800000	2300000	500	500	500
Trichlorofluoromethane (CFC-11)	NA	52	150	NA	560	560	560	92000	110000	630000	140000000	1500000	140000000	3800000000	1700000000	560	560	560
Trifluorotrichloroethane (Freon 113)	NA	550	550	1.7	550	550	550	180000	210000	880000	890000	2100000	2100000	5100000000	2300000000	550	550	550
Vinyl chloride	NA	0.04	0.04	0.26	20	0.27	2.8	4.2	29	30	170	73	420	350000	890000	3.8	34	490
Xylenes (total)	NA	5.6	5.6	0.82	150	150	150	46000	54000	61000	65000	130000	130000	290000000	130000000	150	150	150

Notes
Michigan Part 201 generic clean up criteria (updated March 25, 2011)

ID Insufficient data to develop criterion
NLL Hazardous substance is not likely to leach under most soil conditions.
NLV Hazardous substance is not likely to volatilize under most conditions
NA Criterion or value is not available
VSIC Volatile Soil Inhalation Criteria

TABLE 3.2

GROUNDWATER SCREENING CRITERIA
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

	Residential Drinking Water	Non-Residential Drinking Water	Groundwater Surface Water Interface	Residential Groundwater Volatilization to Indoor Air Inhalation	Non-Residential Groundwater Volatilization to Indoor Air Inhalation	Groundwater Contact	Water Solubility	Flammability and Explosivity Screening Levels	Acute Inhalation Screening Levels
	a	b	c	d	e	f	g	h	i
Inorganics (mg/L)									
Aluminum	0.05	0.05	NA	NLV	NLV	64000	NA	ID	ID
Antimony	0.006	0.006	0.13	NLV	NLV	68	NA	ID	ID
Arsenic	0.01	0.01	0.01	NLV	NLV	4.3	NA	ID	ID
Barium	2	2	1.87	NLV	NLV	14000	NA	ID	ID
Beryllium	0.004	0.004	0.075	NLV	NLV	290	NA	ID	ID
Cadmium	0.005	0.005	0.006	NLV	NLV	190	NA	ID	ID
Calcium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium	0.1	0.1	0.011	NLV	NLV	460	NA	ID	ID
Chromium III (trivalent)	0.1	0.1	0.23	NLV	NLV	290000	NA	ID	ID
Chromium VI (hexavalent)	0.1	0.1	0.011	NLV	NLV	460	NA	ID	ID
Cobalt	0.04	0.1	0.1	NLV	NLV	2400	NA	ID	ID
Copper	1	1	0.029	NLV	NLV	7400	NA	ID	ID
Cyanide (total)	0.2	0.2	0.0052	NLV	NLV	57	NA	ID	ID
Iron	0.3	0.3	NA	NLV	NLV	58000	NA	ID	ID
Lead	0.004	0.004	0.044	NLV	NLV	ID	NA	ID	ID
Magnesium	400	1100	NA	NLV	NLV	1000000	NA	ID	ID
Manganese	0.05	0.05	6.40	NLV	NLV	9100	NA	ID	ID
Mercury	0.002	0.002	0.0000013	0.056	0.056	0.056	0.056	ID	ID
Nickel	0.1	0.1	0.16	NLV	NLV	74000	NA	ID	ID
Potassium	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium	0.05	0.05	0.005	NLV	NLV	970	NA	ID	ID
Silver	0.034	0.098	0.0002	NLV	NLV	1500	NA	ID	ID
Sodium	120	350	NA	NLV	NLV	1000000	NA	ID	ID
Thallium	0.002	0.002	0.0037	NLV	NLV	13	NA	ID	ID
Vanadium	0.0045	0.062	0.012	NLV	NLV	970	NA	ID	ID
Zinc	2.4	5	0.38	NLV	NLV	110000	NA	ID	ID
Aluminum (dissolved)	0.05	0.05	NA	NLV	NLV	64000	NA	ID	ID
Antimony (dissolved)	0.006	0.006	0.13	NLV	NLV	68	NA	ID	ID
Arsenic (dissolved)	0.01	0.01	0.01	NLV	NLV	4.3	NA	ID	ID
Barium (dissolved)	2	2	1.87	NLV	NLV	14000	NA	ID	ID
Beryllium (dissolved)	0.004	0.004	0.075	NLV	NLV	290	NA	ID	ID
Cadmium (dissolved)	0.005	0.005	0.006	NLV	NLV	190	NA	ID	ID
Chromium (dissolved)	0.1	0.1	0.011	NLV	NLV	460	NA	ID	ID
Cobalt (dissolved)	0.04	0.1	0.1	NLV	NLV	2400	NA	ID	ID
Copper (dissolved)	1	1	0.029	NLV	NLV	7400	NA	ID	ID
Iron (dissolved)	0.3	0.3	NA	NLV	NLV	58000	NA	ID	ID
Lead (dissolved)	0.004	0.004	0.044	NLV	NLV	ID	NA	ID	ID
Manganese (dissolved)	0.05	0.05	6.40	NLV	NLV	9100	NA	ID	ID
Mercury (dissolved)	0.002	0.002	0.0000013	0.056	0.056	0.056	0.056	ID	ID
Nickel (dissolved)	0.1	0.1	0.16	NLV	NLV	74000	NA	ID	ID
Selenium (dissolved)	0.05	0.05	0.005	NLV	NLV	970	NA	ID	ID
Silver (dissolved)	0.034	0.098	0.0002	NLV	NLV	1500	NA	ID	ID
Thallium (dissolved)	0.002	0.002	0.0037	NLV	NLV	13	NA	ID	ID
Vanadium (dissolved)	0.0045	0.062	0.012	NLV	NLV	970	NA	ID	ID
Zinc (dissolved)	2.4	5	0.38	NLV	NLV	110000	NA	ID	ID
PCBs (mg/L)									
Aroclor-1016 (PCB-1016)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221 (PCB-1221)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232 (PCB-1232)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242 (PCB-1242)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248 (PCB-1248)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254 (PCB-1254)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260 (PCB-1260)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total PCBs	0.0005	0.0005	0.0002	0.045	0.045	0.0033	0.0447	ID	ID
Semi-Volatile Organic Compounds (mg/L)									
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	0.73	2.1	NA	NLV	NLV	170	1200	ID	ID
2,4,6-Trichlorophenol	0.12	0.47	0.005	NLV	NLV	10	800	ID	ID
2,4-Dichlorophenol	0.073	0.21	0.011	NLV	NLV	48	4500	ID	ID
2,4-Dimethylphenol	0.37	1	0.38	NLV	NLV	520	7870	ID	ID
2,4-Dinitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	0.0077	0.032	NA	NLV	NLV	8.6	270	ID	ID
2,6-Dinitrotoluene	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	1.8	5.2	NA	ID	ID	6.7	6.74	ID	ID
2-Chlorophenol	0.045	0.13	0.018	ID	ID	94	22000	ID	ID
2-Methylnaphthalene	0.26	0.75	0.019	25	25	25	24.6	ID	ID
2-Methylphenol	0.37	1	0.03	NLV	NLV	810	28000	NA	ID
2-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	0.02	0.058	ID	NLV	NLV	79	2500	ID	ID
3&4-Methylphenol	0.37	1	0.03	NLV	NLV	810	28000	NA	ID
3,3'-Dichlorobenzidine	0.0011	0.0043	0.0003	NLV	NLV	0.18	3.11	ID	ID
3-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	0.02	0.02	NA	NLV	NLV	9.5	200	ID	ID
4-Bromophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	0.15	0.42	0.0074	NLV	NLV	79	3900	ID	ID
4-Chloroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	0.37	1	0.03	NLV	NLV	810	28000		ID
4-Nitroaniline	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	1.3	3.8	0.038	4.2	4.2	4.2	4.24	ID	ID
Acenaphthylene	0.052	0.15	ID	3.9	3.9	3.9	3.93	ID	ID
Acetophenone	1.5	4.4	NA	6100	6100	6100	6100	ID	ID
Anthracene	0.043	0.043	ID	0.043	0.043	0.043	0.0434	ID	ID
Atrazine	0.003	0.003	0.0073	NLV	NLV	5.4	70	ID	ID
Benzaldehyde	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	0.0021	0.0085	ID	NLV	NLV	0.0094	0.0094	ID	ID
Benzo(a)pyrene	0.005	0.005	ID	NLV	NLV	0.001	0.00162	ID	ID
Benzo(b)fluoranthene	0.0015	0.0015	ID	ID	ID	0.0015	0.0015	ID	ID
Benzo(g,h,i)perylene	0.001	0.001	NA	NLV	NLV	0.001	0.00026	ID	ID
Benzo(k)fluoranthene	0.001	0.001	NA	NLV	NLV	0.001	0.0008	ID	ID
Biphenyl (1,1-Biphenyl)	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	0.002	0.0083	0.001	38	210	5.7	17200	17000	17000
bis(2-Ethylhexyl)phthalate (DEHP)	0.006	0.006	0.025	NLV	NLV	0.32	0.34	NA	0.34
Butyl benzylphthalate (BBP)	1.2	2.7	0.067	NLV	NLV	2.7	2.69	ID	ID
Caprolactam	5.8	17	NA	NLV	NLV	390000	5250000	NA	1000000
Carbazole	0.085	0.35	0.01	NLV	NLV	7.4	7.48	ID	ID
Chrysene	0.0016	0.0016	ID	ID	ID	0.0016	0.0016	ID	ID
Dibenz(a,h)anthracene	0.002	0.002	ID	NLV	NLV	0.002	0.00249	ID	ID
Dibenzofuran	ID	ID	0.004	10	10	ID	10	ID	ID
Diethyl phthalate	5.5	16	0.11	NLV	NLV	1100	1080	NA	ID
Dimethyl phthalate	73	210	NA	NLV	NLV	4200	4190	NA	ID
Di-n-butylphthalate (DBP)	0.88	2.5	0.0097	NLV	NLV	11	11.2	NA	ID
Di-n-octyl phthalate (DnOP)	0.13	0.38	ID	NLV	NLV	0.4	3	ID	ID
Fluoranthene	0.21	0.21	0.0016	0.21	0.21	0.21	0.206	ID	ID
Fluorene	0.88	2	0.012	2	2	2	1.98	ID	ID
Hexachlorobenzene	0.001	0.001	0.0002	0.44	3	0.0046	6.2	ID	ID
Hexachlorobutadiene	0.015	0.042	0.000053	1.6	3.2	0.4	3.23	ID	ID
Hexachlorocyclopentadiene	0.05	0.05	ID	0.13	0.42	1.6	1.8	ID	ID
Hexachloroethane	0.0073	0.021	0.0067	27	50	1.9	50	ID	ID
Indeno(1,2,3-cd)pyrene	0.002	0.002	ID	NLV	NLV	0.002	0.000022	ID	ID
Isophorone	0.77	3.1	1.3	NLV	NLV	990	12000	NA	12000
Naphthalene	0.52	1.5	0.011	31	31	31	31	NA	31
Nitrobenzene	0.0034	0.0096	0.18	280	550	11	2090	NA	ID
N-Nitrosodi-n-propylamine	0.005	0.005	NA	NLV	NLV	0.36	9890	ID	ID
N-Nitrosodiphenylamine	0.27	1.1	NA	NLV	NLV	35	35.1	ID	ID
Pentachlorophenol	0.001	0.001	0.0028	NLV	NLV	0.2	1850	ID	ID
Phenanthrene	0.052	0.15	0.002	1	1	1	1	ID	ID
Phenol	4.4	13	0.45	NLV	NLV	29000	82800	NA	ID
Pyrene	0.14	0.14	ID	0.14	0.14	0.14	0.135	ID	ID
Volatile Organic Compounds (mg/L)									

TABLE 3.2

GROUNDWATER SCREENING CRITERIA
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

1,1,1-Trichloroethane	0.2	0.2	0.089	660	1300	1300	1330	ID	1300
1,1,2,2-Tetrachloroethane	0.0085	0.035	0.078	12	77	4.7	2970	ID	ID
1,1,2-Trichloroethane	0.005	0.005	0.33	17	110	21	4420	NA	ID
1,1-Dichloroethane	0.88	2.5	0.74	1000	2300	2400	5060	380	ID
1,1-Dichloroethene	0.007	0.007	0.13	0.2	1.3	11	2250	97	140
1,2,4-Trichlorobenzene	0.07	0.07	0.099	300	300	19	300	NA	300
1,2-Dibromo-3-chloropropane (DBCP)	0.0002	0.0002	NA	1.2	1.2	0.39	1.23	NA	ID
1,2-Dibromoethane (Ethylene dibromide)	0.00005	0.00005	0.0057	2.4	15	0.025	4200	ID	ID
1,2-Dichlorobenzene	0.6	0.6	0.013	160	160	160	156	NA	160
1,2-Dichloroethane	0.005	0.005	0.36	9.6	59	19	8520	2500	ID
1,2-Dichloropropane	0.005	0.005	0.23	16	36	16	2800	550	2800
1,3-Dichlorobenzene	0.0066	0.019	0.028	18	41	2	111	ID	ID
1,4-Dichlorobenzene	0.075	0.075	0.017	16	74	6.4	73.8	NA	ID
2-Butanone (Methyl ethyl ketone) (MEK)	13	38	2.2	240000	240000	240000	240000	ID	240000
2-Hexanone	1	2.9	ID	4200	8700	5200	16000	NA	ID
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	1.8	5.2	ID	20000	20000	13000	20000	ID	20000
Acetone	0.73	2.1	1.7	1000000	1000000	31000	1000000	15000	1000000
Benzene	0.005	0.005	0.2	5.6	35	11	1750	68	67
Bromodichloromethane	0.08	0.08	ID	4.8	37	14	6740	ID	ID
Bromoform	0.08	0.08	ID	470	3100	140	3100	ID	ID
Bromomethane (Methyl bromide)	0.01	0.029	0.035	4	9	70	14500	ID	ID
Carbon disulfide	0.8	2.3	ID	250	550	1200	1190	13	ID
Carbon tetrachloride	0.005	0.005	0.045	0.37	2.4	4.6	793	ID	96
Chlorobenzene	0.1	0.1	0.025	210	470	86	472	160	ID
Chloroethane	0.43	1.7	1.1	5700	5700	440	5740	110	ID
Chloroform (Trichloromethane)	0.08	0.08	0.35	28	180	150	7920	ID	ID
Chloromethane (Methyl chloride)	0.26	1.1	ID	8.6	45	490	6340	36	210
cis-1,2-Dichloroethene	0.07	0.07	0.62	93	210	200	3500	530	ID
cis-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	0.08	0.08	ID	14	110	18	2600	ID	ID
Dichlorodifluoromethane (CFC-12)	1.7	4.8	ID	220	300	300	300	ID	ID
Ethylbenzene	0.074	0.074	0.018	110	170	170	169	43	170
Isopropyl benzene	0.8	2.3	0.028	56	56	56	56	29	ID
Methyl acetate	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl cyclohexane	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert butyl ether (MTBE)	0.04	0.04	7.1	47000	47000	610	46800	ID	ID
Methylene chloride	0.005	0.005	1.5	220	1400	220	17000	ID	ID
Styrene	0.1	0.1	0.08	170	310	9.7	310	140	310
Tetrachloroethene	0.005	0.005	0.06	25	170	12	200	ID	200
Toluene	0.79	0.79	0.27	530	530	530	526	61	ID
trans-1,2-Dichloroethene	0.1	0.1	1.5	85	200	220	6300	230	ID
trans-1,3-Dichloropropene	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	0.005	0.005	0.2	15	97	22	1100	ID	1100
Trichlorofluoromethane (CFC-11)	2.6	7.3	NA	1100	1100	1100	1100	ID	1100
Trifluorotrichloroethane (Freon 113)	170	170	0.032	170	170	170	170	ID	170
Vinyl chloride	0.002	0.002	0.013	1.1	13	1	2760	33	ID
Xylenes (total)	0.28	0.28	0.041	190	190	190	186	70	190

Notes
Michigan Part 201 generic clean up criteria (updated March 25, 2011)

ID Insufficient data to develop criterion
NLV Hazardous substance is not likely to volatilize under most conditions
NA Criterion or value is not available

TABLE 3.3

SOIL ANALYTICAL RESULTS - 1988
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*0E0N*	*0E100N*	*0E200N*	*0E300N*	*0E400N*	*0E500N*	*0E600N*	*0E700N*	*0E800N*	*100E0N*	*100E100N*	*100E200N*	*100E300N*	*100E400N*	*100E500N*	*100E600N*	*100E700N*	*100E800N*	*170E600N*	*170E700N*	*170E800N*
Sample Identification	*0E0N*	*0E100N*	*0E200N*	*0E300N*	*0E400N*	*0E500N*	*0E600N*	*0E700N*	*0E800N*	*100E0N*	*100E100N*	*100E200N*	*100E300N*	*100E400N*	*100E500N*	*100E600N*	*100E700N*	*100E800N*	*170E600N*	*170E700N*	*170E800N*
Sample Date	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*
Sample Type																					
Sample Depth	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*
AOI	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*
Metals (mg/kg)																					
Cadmium	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.2	2.7	1 U	1 U	1 U	1 U	1 U	1.6	1 U	1 U	1 U	1 U	1 U	1 U
Chromium	4.8	4.8	4.3	8.5	3.3	3.6	**19[d]**	12	8.3	4.8	6.5	15	4.3	**74[bcd]**	12	5.6	3.9	5.8	--	--	--
Iron	0.0039	0.005	0.0049	0.0071	0.0044	0.0055	0.0076	0.013	--	0.0039	0.0045	0.0063	0.006	0.022	0.0098	0.0083	0.0071	0.0028	--	--	0.0085
Lead	15	8.8	7.4	8.1	2.5	7.6	8.8	12	38	6.7	4.5	54	7.9	65	33	8.1	5.4	7.1	--	--	--
Nickel	7.8	5.4	5.8	7.4	4.3	5.4	5.2	19	8.2	5.7	6.5	6.6	6.6	25	11	7.2	2.2	9.7	--	--	--
Zinc	23	21	19	25	18	18	20	33	48	19	17	34	20	62	66	25	15	23	--	--	--
PCBs (mg/kg)																					
Total PCBs	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	4	3.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Petrl Prod (mg/kg)																					
Total Petroleum Hydrocarbons	300	200	300	100	50 U	200	2500	600	1500	100	100	50 U	800	14000	13000	--	--	100	309	1469	239

Sample Location	*170E900N*	*215E0N*	*215E100N*	*215E200N*	*215E300N*	*215E400N*	*215E500N*	*300E540N*	*350E540N*	*350E600N*	*350E700N*	*350E800N*	*50E0N*	*50E100N*	*50E200N*	*50E300N*	*50E400N*	*50E500N*	*50E600N*	*50E700N*	*50E800N*
Sample Identification	*170E900N*	*215E0N*	*215E100N*	*215E200N*	*215E300N*	*215E400N*	*215E500N*	*300E540N*	*350E540N*	*350E600N*	*350E700N*	*350E800N*	*50E0N*	*50E100N*	*50E200N*	*50E300N*	*50E400N*	*50E500N*	*50E600N*	*50E700N*	*50E800N*
Sample Date	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*	*1/1/1988*
Sample Type																					
Sample Depth	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*	*(0-1) ft BGS*
AOI	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*	*AOI:12*
Metals (mg/kg)																					
Cadmium	1 U	1.6	1.2	1 U	1 U	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1	1 U	1 U	5.6	1 U	1 U	1 U	1 U
Chromium	--	14	11	6.7	5.1	8.6	7.6	--	--	--	--	--	5.8	6.3	5.3	5.5	**38[bcd]**	7.8	5.8	6.9	1.5
Iron	--	0.015	0.0097	0.0064	0.003	0.015	0.0071	--	--	--	--	--	0.0056	0.0097	0.0054	0.0051	0.034	0.01	0.012	0.009	0.0087
Lead	--	9.9	5	2.1	3.6	8.3	5.3	--	--	--	--	--	7.7	6.1	6.3	5.1	210	16	12	8.5	7.8
Nickel	--	18	13	7.4	5.5	12	11	--	--	--	--	--	8	11	5.5	5.5	3.4	11	7	11	3.6
Zinc	--	35	27	20	12	26	23	--	--	--	--	--	23	16	16	13	140	40	22	27	10
PCBs (mg/kg)																					
Total PCBs	0.2 U	0.4	0.2	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.9	0.2 U	0.2 U	0.2 U	0.2 U
Petrl Prod (mg/kg)																					
Total Petroleum Hydrocarbons	50 U	7000	14000	1900	50 U	2600	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U	200	50 U	5300	2400	80	100	50

Notes:

[b] Drinking Water Protection Criteria
[c] Non-Residential Drinking Water Protection Criteria
[d] Groundwater Surface Water Interface Criteria
U Not present at or above the associated value
-- Parameter not analyzed

TABLE 3.4

GROUNDWATER ANALYTICAL RESULTS - 1989 -1990
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

AOI	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12
Sample Location	CRA-266M	CRA-266M	CRA-266M	CRA-266M	CRA-266M	CRA-266M	CRA-266M	CRA-266M	CRA-266M	CRA-266M	CRA-265M	CRA-265M	CRA-265M	CRA-265M	CRA-265M	CRA-265M
Sample Identification	MW301	MW301	MW301	MW301	MW301	MW301	MW301	MW301	MW301	MW301	MW302	MW302	MW302	MW302	MW302	MW302
Sample Date	3/1/1989	3/1/1989	6/1/1989	6/1/1989	9/1/1989	12/1/1989	3/1/1990	7/1/1990	9/1/1990	12/1/1990	3/1/1989	6/1/1989	9/1/1989	9/1/1989	12/1/1989	3/1/1990
Sample Type		Duplicate		Duplicate										Duplicate		
Inorganics (mg/L)																
Cadmium (dissolved)	--	--	U	U	U	U	U	U	U	U	--	U	U	U	U	U
Chromium (dissolved)	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Copper (dissolved)	U	U	U	**0.04**[c]	U	U	--	U	U	U	U	U	0.02	0.02	U	--
Iron (dissolved)	U	U	0.03	0.04	0.16	U	U	**0.31**[ab]	**5.1**[ab]	0.03	**2.8**[ab]	**2**[ab]	**5.9**[ab]	**5.9**[ab]	**8.9**[ab]	**5.1**[ab]
Lead (dissolved)	U	U	U	U	U	U	U	U	**0.02**[ab]	U	U	U	U	U	U	U
Nickel (dissolved)	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Zinc (dissolved)	U	U	U	U	0.03	U	U	U	U	U	U	U	0.03	0.02	U	U
PCBs (mg/L)																
Aroclor-1248 (PCB-1248)	--	--	--	--	--	U	U	U	U	U	--	--	--	--	U	U
Volatile Organic Compounds (mg/L)																
1,1,1-Trichloroethane	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloroform (Trichloromethane)	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U

AOI	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12	AOI:12
Sample Location	CRA-265M	CRA-265M	CRA-265M	CRA-265M	CRA-265M	CRA-264M	CRA-264M	CRA-264M	CRA-264M	CRA-264M	CRA-264M	CRA-264M	CRA-264M	CRA-264M	CRA-264M	CRA-264M
Sample Identification	MW302	MW302	MW302	MW302	MW302	MW303	MW303	MW303	MW303	MW303	MW303	MW303	MW303	MW303	MW-303	MW303
Sample Date	3/1/1990	7/1/1990	9/1/1990	12/1/1990	12/1/1990	3/1/1989	6/1/1989	9/1/1989	12/1/1989	12/1/1989	3/1/1990	7/1/1990	7/1/1990	9/1/1990	9/1/1990	12/1/1990
Sample Type	Duplicate				Duplicate					Duplicate			Duplicate		Duplicate	
Inorganics (mg/L)																
Cadmium (dissolved)	U	U	U	U	U	--	U	U	U	U	U	U	U	U	U	U
Chromium (dissolved)	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Copper (dissolved)	--	U	U	U	U	U	U	U	U	U	--	U	U	U	U	U
Iron (dissolved)	**4.9**[ab]	**5.3**[ab]	**4.7**[ab]	**4.3**[ab]	**12**[ab]	**8.1**[ab]	**2**[ab]	**7.9**[ab]	**7.2**[ab]	**7.3**[ab]	**7.5**[ab]	**11**[ab]	**10**[ab]	**4.7**[ab]	**10**[ab]	**3.7**[ab]
Lead (dissolved)	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Nickel (dissolved)	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Zinc (dissolved)	U	0.11	U	U	U	U	U	0.03	U	U	U	U	U	U	U	U
PCBs (mg/L)																
Aroclor-1248 (PCB-1248)	U	U	U	U	U	--	--	--	**0.0031**[abc]	**0.006**[abcf]	**0.00077**[abc]	U	U	U	U	U
Volatile Organic Compounds (mg/L)																
1,1,1-Trichloroethane	U	U	U	U	U	U	0.002	U	U	U	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloroform (Trichloromethane)	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U

Notes:

[a] Residential Drinking Water Criteria
[b] Non-Residential Drinking Water Criteria
[c] Groundwater Surface Water Interface Criteria
[f] Groundwater Contact Criteria
U Not present at or above the associated value
-- Parameter not analyzed

TABLE 3.5

GROUNDWATER ANALYTICAL RESULTS - 2004 - 2012
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*CRA-TP-002*	*CRA-264M*	*CRA-264M*	*CRA-266M*	*CRA-705M*	*CRA-706M*	*CRA-709M*	*CRA-710M*	*CRA-710M*	*CRA-710M*	*CRA-828M*	*CRA-828M*	*CRA-829M*	*CRA-829M*	*CRA-833M*	*CRA-834M*
Sample Identification	*GW-17358-110304-DCR-756*	*GW-17358-012312-DR-027*	*GW-17358-012312-DR-028*	*GW-17358-012312-DR-029*	*GW-17358-012412-DR-031*	*GW-17358-012412-DR-030*	*GW-17358-012312-DR-026*	*GW-17358-012312-DR-025*	*GW-017358-020712-SK-038*	*GW-17358-041212-DR-1000*	*GW-17358-012312-DR-023*	*GW-017358-020712-SK-036*	*GW-17358-012312-DR-024*	*GW-017358-020712-SK-037*	*GW-17358-012412-DR-032*	*GW-17358-012412-DR-033*
Sample Date	*11/3/2004*	*1/23/2012*	*1/23/2012*	*1/23/2012*	*1/24/2012*	*1/24/2012*	*1/23/2012*	*1/23/2012*	*2/7/2012*	*4/12/2012 **	*1/23/2012*	*2/7/2012*	*1/23/2012*	*2/7/2012*	*1/24/2012*	*1/24/2012*
Sample Type			*Duplicate*													
Inorganics (mg/L)																
Aluminum	--	0.027 J	0.02 J	0.042 J	**0.42[ab]**	**0.44[ab]**	**0.33[ab]**	**35[ab]**	--	0.031 J	**1.4[ab]**	--	**0.35[ab]**	--	**0.43[ab]**	**0.1[ab]**
Antimony	--	0.00014 J	0.00013 J	0.00019 J	0.00056 J	0.0004 J	0.00029 J	0.0022	--	0.00042 J	0.00042 J	--	0.0002 J	--	0.00028 J	0.00084 J
Arsenic	--	0.00088 J	0.00081 J	0.0045 J	0.0011 J	0.0011 J	0.0026 J	**0.017[abc]**	--	0.002 J	0.0016 J	--	0.0012 J	--	0.0038 J	0.003 J
Barium	--	0.058 J	0.064 J	0.023 J	0.047 J	0.066 J	0.14	0.29	--	0.072 J	0.079 J	--	0.075 J	--	0.11	0.062 J
Beryllium	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002	--	0.001 U	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Cadmium	--	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0002 J	--	0.001 U	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Calcium	--	--	--	--	85	92	--	--	--	--	--	--	--	--	--	--
Chromium	--	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	**0.021[c]**	--	0.01 U	0.0021 J	--	0.01 U	--	0.01 U	0.01 U
Chromium III (trivalent)	--	--	--	--	0.01 U	--	0.01 U	--	--	--	--	--	--	--	--	--
Chromium VI (hexavalent)	--	--	--	--	0.01 UJ	--	0.01 U	--	--	--	--	--	--	--	--	--
Cobalt	--	0.0004 J	0.0004 J	0.00017 J	0.00057 J	0.00061 J	0.0019 J	0.0071 J	--	0.00059 J	0.0012 J	--	0.00099 J	--	0.00047 J	0.00055 J
Copper	--	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	**0.033[c]**	--	0.00042 J	0.004 U	--	0.004 U	--	0.004 U	0.004 U
Cyanide (total)	0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron	--	**0.54[ab]**	**0.54[ab]**	0.15 J	**0.45[ab]**	**0.6[ab]**	**0.84[ab]**	**24[ab]**	--	0.2 U	**1.1[ab]**	--	**0.46[ab]**	--	**0.76[ab]**	0.15 J
Lead	--	0.003 U	0.003 U	0.003 U	0.00032 J	0.00043 J	0.00036 J	**0.027[ab]**	--	0.003 U	0.00069 J	--	0.00032 J	--	0.00035 J	0.00033 J
Magnesium	--	--	--	--	16	18	--	--	--	--	--	--	--	--	--	--
Manganese	--	**0.2[ab]**	**0.2[ab]**	**0.06[ab]**	**0.059[ab]**	**0.11[ab]**	**0.28[ab]**	**0.25[ab]**	--	**0.18 B[ab]**	**0.1[ab]**	--	**0.23[ab]**	--	**0.19[ab]**	**0.051[ab]**
Mercury	--	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	0.04 U	--	0.04 U	0.04 U	--	0.04 U	--	0.04 U	0.04 U
Nickel	--	0.0012 J	0.0012 J	0.0016 J	0.0026 J	0.0024 J	0.0026 J	0.02	--	0.002 J	0.011 J	--	0.0021 J	--	0.0014 J	0.0029 J
Potassium	--	--	--	--	1.2 J	1.4 J	--	--	--	--	--	--	--	--	--	--
Selenium	--	0.0014 J	0.00097 J	0.005 U	0.0011 J	0.005 U	0.005 U	0.0046 J	--	0.005 U	0.0008 J	--	0.005 U	--	0.005 U	0.005 U
Silver	--	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	--	0.0002 U	0.0002 U	--	0.0002 U	--	0.0002 U	0.0002 U
Sodium	--	--	--	--	34	40	--	--	--	--	--	--	--	--	--	--
Thallium	--	0.00016 J	0.00014 J	0.002 U	0.00054 J	0.002 U	0.00018 J	0.00061 J	--	0.00069 J	0.00069 J	--	0.00036 J	--	0.00017 J	0.002 U
Vanadium	--	0.004 U	0.004 U	0.004 U	0.0013 J	0.0014 J	0.001 J	**0.047[bc]**	--	0.004 U	0.0033 J	--	0.0011 J	--	0.0012 J	0.0015 J
Zinc	--	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.081	--	0.05 U	0.05 U	--	0.05 U	--	0.05 U	0.05 U
Aluminum (dissolved)	**1.3[ab]**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Antimony (dissolved)	0.00093 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Arsenic (dissolved)	0.01 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Barium (dissolved)	0.025 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Beryllium (dissolved)	0.001 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cadmium (dissolved)	0.0005 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium (dissolved)	0.0028 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Cobalt (dissolved)	0.0057 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Copper (dissolved)	0.005	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Iron (dissolved)	**1.6[ab]**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Lead (dissolved)	0.003 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese (dissolved)	0.036	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mercury (dissolved)	**0.000056 J[c]**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Nickel (dissolved)	0.0026 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium (dissolved)	0.002 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Silver (dissolved)	0.0005 UJ	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium (dissolved)	0.001 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Vanadium (dissolved)	**0.0046 J[a]**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Zinc (dissolved)	0.0089 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
PCBs (mg/L)																
Aroclor-1016 (PCB-1016)	0.0002 U	0.00011 U	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.000095 U	--	0.000095 U	--	--	0.000095 U	--	0.000095 U	0.0001 U	0.0001 U
Aroclor-1221 (PCB-1221)	0.0002 U	0.00011 U	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.000095 U	--	0.000095 U	--	--	0.000095 U	--	0.000095 U	0.0001 U	0.0001 U
Aroclor-1232 (PCB-1232)	0.0004 U	0.00011 U	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.000095 U	--	0.000095 U	--	--	0.000095 U	--	0.000095 U	0.0001 U	0.0001 U
Aroclor-1242 (PCB-1242)	0.0002 U	0.00011 U	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.000095 U	--	0.000095 U	--	--	0.000095 U	--	0.000095 U	0.0001 U	0.0001 U
Aroclor-1248 (PCB-1248)	0.0002 U	0.00011 U	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.000095 U	--	0.000095 U	--	--	0.000095 U	--	0.000095 U	0.0001 U	0.0001 U
Aroclor-1254 (PCB-1254)	0.0002 U	0.00011 U	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.000095 U	--	0.000095 U	--	--	0.000095 U	--	0.000095 U	0.0001 U	0.0001 U
Aroclor-1260 (PCB-1260)	0.0002 U	0.00011 U	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.000095 U	--	0.000095 U	--	--	0.000095 U	--	0.000095 U	0.0001 U	0.0001 U
Total PCBs	ND	ND	ND	ND	ND	ND	ND	--	ND	--	--	ND	--	ND	ND	ND

TABLE 3.5

GROUNDWATER ANALYTICAL RESULTS - 2004 - 2012
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*CRA-TP-002*	*CRA-264M*	*CRA-264M*	*CRA-266M*	*CRA-705M*	*CRA-706M*	*CRA-709M*	*CRA-710M*	*CRA-710M*	*CRA-710M*	*CRA-828M*	*CRA-828M*	*CRA-829M*	*CRA-829M*	*CRA-833M*	*CRA-834M*
Sample Identification	*GW-17358-110304-DCR-756*	*GW-17358-012312-DR-027*	*GW-17358-012312-DR-028*	*GW-17358-012312-DR-029*	*GW-17358-012412-DR-031*	*GW-17358-012412-DR-030*	*GW-17358-012312-DR-026*	*GW-17358-012312-DR-025*	*GW-017358-020712-SK-038*	*GW-17358-041212-DR-1000*	*GW-17358-012312-DR-023*	*GW-017358-020712-SK-036*	*GW-17358-012312-DR-024*	*GW-017358-020712-SK-037*	*GW-17358-012412-DR-032*	*GW-17358-012412-DR-033*
Sample Date	*11/3/2004*	*1/23/2012*	*1/23/2012*	*1/23/2012*	*1/24/2012*	*1/24/2012*	*1/23/2012*	*1/23/2012*	*2/7/2012*	*4/12/2012 **	*1/23/2012*	*2/7/2012*	*1/23/2012*	*2/7/2012*	*1/24/2012*	*1/24/2012*
Sample Type			*Duplicate*													
Semi-Volatile Organic Compounds (mg/L)																
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
2,4,5-Trichlorophenol	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
2,4,6-Trichlorophenol	0.004 U	0.0043 U	0.0043 U	0.0042 U	0.004 U	0.0041 U	0.0042 U	0.0041 U	--	--	0.0041 U	--	0.0041 U	--	0.004 U	0.0038 U
2,4-Dichlorophenol	0.01 U	0.011 U	0.011 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	--	0.01 U	--	0.0099 U	0.0095 U
2,4-Dimethylphenol	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
2,4-Dinitrophenol	0.02 U	0.022 U	0.021 U	0.021 U	0.02 U	0.02 U	0.021 U	0.02 U	--	--	0.02 U	--	0.021 U	--	0.02 U	0.019 U
2,4-Dinitrotoluene	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
2,6-Dinitrotoluene	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
2-Chloronaphthalene	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
2-Chlorophenol	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
2-Methylnaphthalene	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
2-Methylphenol	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
2-Nitroaniline	0.02 U	0.022 U	0.021 U	0.021 U	0.02 U	0.02 U	0.021 U	0.02 U	--	--	0.02 U	--	0.021 U	--	0.02 U	0.019 U
2-Nitrophenol	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
3&4-Methylphenol	--	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
3,3'-Dichlorobenzidine	0.004 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.00099 U	0.00095 U
3-Nitroaniline	0.02 U	0.022 U	0.021 U	0.021 U	0.02 U	0.02 U	0.021 U	0.02 U	--	--	0.02 U	--	0.021 U	--	0.02 U	0.019 U
4,6-Dinitro-2-methylphenol	0.02 U	0.022 U	0.021 U	0.021 U	0.02 U	0.02 U	0.021 U	0.02 U	--	--	0.02 U	--	0.021 U	--	0.02 U	0.019 U
4-Bromophenyl phenyl ether	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
4-Chloro-3-methylphenol	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
4-Chloroaniline	0.02 U	0.011 U	0.011 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	--	0.01 U	--	0.0099 U	0.0095 U
4-Chlorophenyl phenyl ether	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
4-Methylphenol	0.005 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4-Nitroaniline	0.02 U	0.022 U	0.021 U	0.021 U	0.02 U	0.02 U	0.021 U	0.02 U	--	--	0.02 U	--	0.021 U	--	0.02 U	0.019 U
4-Nitrophenol	0.02 U	0.022 U	0.021 U	0.021 U	0.02 U	0.02 U	0.021 U	0.02 U	--	--	0.02 U	--	0.021 U	--	0.02 U	0.019 U
Acenaphthene	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Acenaphthylene	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Acetophenone	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Anthracene	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Atrazine	0.005 U	0.0032 U	0.0032 U	0.0031 U	0.003 U	0.0031 U	0.0031 U	0.0031 U	--	--	0.0031 U	--	0.0031 U	--	0.003 U	0.0029 U
Benzaldehyde	0.01 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Benzo(a)anthracene	0.004 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.00099 U	0.00095 U
Benzo(a)pyrene	0.004 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.00099 U	0.00095 U
Benzo(b)fluoranthene	0.004 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.00099 U	0.00095 U
Benzo(g,h,i)perylene	0.005 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.00099 U	0.00095 U
Benzo(k)fluoranthene	0.005 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.00099 U	0.00095 U
Biphenyl (1,1-Biphenyl)	0.01 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
bis(2-Chloroethoxy)methane	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
bis(2-Chloroethyl)ether	0.004 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.00099 U	0.00095 U
bis(2-Ethylhexyl)phthalate (DEHP)	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Butyl benzylphthalate (BBP)	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Caprolactam	0.01 U	0.011 U	0.011 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	--	0.01 U	--	0.0099 U	0.0095 U
Carbazole	0.01 U	0.011 U	0.011 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	--	0.01 U	--	0.0099 U	0.0095 U
Chrysene	0.005 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.00099 U	0.00095 U
Dibenz(a,h)anthracene	0.004 U	0.0022 U	0.0021 U	0.0021 U	0.002 U	0.002 U	0.0021 U	0.002 U	--	--	0.002 U	--	0.0021 U	--	0.002 U	0.0019 U
Dibenzofuran	0.005 U	0.0043 U	0.0043 U	0.0042 U	0.004 U	0.0041 U	0.0042 U	0.0041 U	--	--	0.0041 U	--	0.0041 U	--	0.004 U	0.0038 U
Diethyl phthalate	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Dimethyl phthalate	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Di-n-butylphthalate (DBP)	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Di-n-octyl phthalate (DnOP)	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Fluoranthene	0.005 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.00099 U	0.00095 U
Fluorene	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Hexachlorobenzene	0.005 U	0.00022 U	0.00021 U	0.00021 U	0.0002 U	0.0002 U	0.00021 U	0.0002 U	--	--	0.0002 U	--	0.00021 U	--	0.0002 U	0.00019 U
Hexachlorobutadiene	0.005 U	0.0011 U	0.0011 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.00099 U	0.00095 U
Hexachlorocyclopentadiene	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Hexachloroethane	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Indeno(1,2,3-cd)pyrene	0.004 U	0.0022 U	0.0021 U	0.0021 U	0.002 UJ	0.002 U	0.0021 U	0.002 U	--	--	0.002 U	--	0.0021 U	--	0.002 U	0.0019 U
Isophorone	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Naphthalene	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Nitrobenzene	0.004 U	0.0032 U	0.0032 U	0.0031 U	0.003 U	0.0031 U	0.0031 U	0.0031 U	--	--	0.0031 U	--	0.0031 U	--	0.003 U	0.0029 U
N-Nitrosodi-n-propylamine	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
N-Nitrosodiphenylamine	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Pentachlorophenol	0.02 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Phenanthrene	0.005 U	0.0022 U	0.0021 U	0.0021 U	0.002 U	0.002 U	0.0021 U	0.002 U	--	--	0.002 U	--	0.0021 U	--	0.002 U	0.0019 U
Phenol	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U
Pyrene	0.005 U	0.0054 U	0.0053 U	0.0052 U	0.005 U	0.0051 U	0.0052 U	0.0051 U	--	--	0.0051 U	--	0.0052 U	--	0.005 U	0.0048 U

TABLE 3.5

GROUNDWATER ANALYTICAL RESULTS - 2004 - 2012
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*CRA-TP-002*	*CRA-264M*	*CRA-264M*	*CRA-266M*	*CRA-705M*	*CRA-706M*	*CRA-709M*	*CRA-710M*	*CRA-710M*	*CRA-710M*	*CRA-828M*	*CRA-828M*	*CRA-829M*	*CRA-829M*	*CRA-833M*	*CRA-834M*
Sample Identification	*GW-17358-110304-DCR-756*	*GW-17358-012312-DR-027*	*GW-17358-012312-DR-028*	*GW-17358-012312-DR-029*	*GW-17358-012412-DR-031*	*GW-17358-012412-DR-030*	*GW-17358-012312-DR-026*	*GW-17358-012312-DR-025*	*GW-017358-020712-SK-038*	*GW-17358-041212-DR-1000*	*GW-17358-012312-DR-023*	*GW-017358-020712-SK-036*	*GW-17358-012312-DR-024*	*GW-017358-020712-SK-037*	*GW-17358-012412-DR-032*	*GW-17358-012412-DR-033*
Sample Date	*11/3/2004*	*1/23/2012*	*1/23/2012*	*1/23/2012*	*1/24/2012*	*1/24/2012*	*1/23/2012*	*1/23/2012*	*2/7/2012*	*4/12/2012 **	*1/23/2012*	*2/7/2012*	*1/23/2012*	*2/7/2012*	*1/24/2012*	*1/24/2012*
Sample Type			*Duplicate*													
Volatile Organic Compounds (mg/L)																
1,1,1-Trichloroethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
1,1,2-Trichloroethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
1,1-Dichloroethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
1,1-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
1,2,4-Trichlorobenzene	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane (DBCP)	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
1,2-Dibromoethane (Ethylene dibromide)	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
1,2-Dichlorobenzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
1,2-Dichloroethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
1,2-Dichloropropane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
1,3-Dichlorobenzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
1,4-Dichlorobenzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
2-Butanone (Methyl ethyl ketone) (MEK)	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.00057 J	--	--	0.01 U	--	0.01 U	--	0.01 U	0.01 U
2-Hexanone	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	--	0.01 U	--	0.01 U	0.01 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	0.05 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	--	0.01 U	--	0.01 U	0.01 U
Acetone	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	--	0.01 U	--	0.01 U	0.01 U
Benzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Bromodichloromethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Bromoform	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Bromomethane (Methyl bromide)	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Carbon disulfide	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	--	0.005 U	--	0.005 U	0.005 U
Carbon tetrachloride	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Chlorobenzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Chloroethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Chloroform (Trichloromethane)	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Chloromethane (Methyl chloride)	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
cis-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
cis-1,3-Dichloropropene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Cyclohexane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Dibromochloromethane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Dichlorodifluoromethane (CFC-12)	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Ethylbenzene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Isopropyl benzene	0.005 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Methyl acetate	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	--	--	0.01 U	--	0.01 U	--	0.01 U	0.01 U
Methyl cyclohexane	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Methyl tert butyl ether (MTBE)	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	--	0.005 U	--	0.005 U	0.005 U
Methylene chloride	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	--	--	0.005 U	--	0.005 U	--	0.005 U	0.005 U
Styrene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Tetrachloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Toluene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
trans-1,2-Dichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
trans-1,3-Dichloropropene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Trichloroethene	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Trichlorofluoromethane (CFC-11)	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Trifluorotrichloroethane (Freon 113)	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Vinyl chloride	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	--	--	0.001 U	--	0.001 U	--	0.001 U	0.001 U
Xylenes (total)	0.003 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	--	--	0.002 U	--	0.002 U	--	0.002 U	0.002 U

Notes:

[a] Residential Drinking Water Criteria
[b] Non-Residential Drinking Water Criteria
[c] Groundwater Surface Water Interface Criteria
B Compound wad detected in the blank and sample
J Estimated concentration.
ND Non detect
U Not present at or above the associated value
UJ Estimated reporting limit
* Data validation has not been completed on this sample.
-- Parameter not analyzed.

TABLE 3.6

SOIL ANALYTICAL RESULTS - 2012
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*CRA-705M*	*CRA-705M*	*CRA-705M*	*CRA-706M*	*CRA-707SB*	*CRA-707SB*	*CRA-708SB*	*CRA-708SB*	*CRA-709M*	*CRA-709M*	*CRA-710M*	*CRA-710M*	*CRA-828M*	*CRA-828M*	*CRA-829M*	*CRA-829M*	*CRA-833M*	*CRA-833M*	*CRA-834M*	*CRA-834M*	*CRA-835-SB*	*CRA-835-SB*
Sample Identification	*SO-17358-011812-DR-009*	*SO-17358-011812-DR-010*	*SO-17358-011812-DR-011*	*SO-17358-011812-DR-012*	*SO-17358-011812-DR-015*	*SO-17358-011812-DR-016*	*SO-17358-011812-DR-013*	*SO-17358-011812-DR-014*	*SO-17358-011712-DR-005*	*SO-17358-011712-DR-006*	*SO-17358-011812-DR-007*	*SO-17358-011812-DR-008*	*SO-17358-011712-DR-003*	*SO-17358-011712-DR-004*	*SO-17358-011712-DR-001*	*SO-17358-011712-DR-002*	*SO-17358-011912-DR-021*	*SO-17358-011912-DR-022*	*SO-17358-011812-DR-017*	*SO-17358-011812-DR-018*	*SO-17358-011912-DR-019*	*SO-17358-011912-DR-020*
Sample Date	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/17/2012*	*1/17/2012*	*1/18/2012*	*1/18/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/19/2012*	*1/19/2012*	*1/18/2012*	*1/18/2012*	*1/19/2012*	*1/19/2012*
Sample Depth	*(0-2) ft BGS*	*(0-2) ft BGS*	*(2-3) ft BGS*	*(0-2) ft BGS*	*(0-2) ft BGS*	*(2-3) ft BGS*	*(0-2) ft BGS*	*(2-3) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2.5-4.5) ft BGS*	*(0-2) ft BGS*	*(3-5) ft BGS*	*(0-2) ft BGS*	*(3-5) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*
Sample Type		*Duplicate*																				
Inorganics (mg/kg)																						
Aluminum	4400	4300	2400	3300	4300	3200	6600	2700	2700	4600	4900	2300	4500	2100	1900	3100	3500	5300	3400	2900	3900	4100
Antimony	0.057 J	0.048 J	0.045 J	0.067 J	0.21 J	0.081 J	0.042 J	0.046 J	0.18 J	0.031 J	0.066 J	0.12 J	0.038 J	0.056 J	0.039 J	0.084 J	0.063 J	0.049 J	0.07 J	0.071 J	0.042 J	0.037 J
Arsenic	4.9	5.3	3.4	4.2	4.5	**8.7**[bcdp]	**6.8**[bcd]	**5.9**[bcd]	**5.9**[bcd]	4.1	**6.2**[bcd]	**6.8**[bcd]	3.8	2.9	3.5	3.4	3.7	**7.5**[bcd]	3.7	**7.7**[bcdp]	3.1	3
Barium	17	16	6.9	13	31	12	72	29	19	20	41	7.3	17	8.1	7.3	11	19	80	31	47	19	16
Beryllium	0.12 J	0.054 J	0.16 U	0.17 U	0.07 J	0.066 J	0.22	0.16 U	0.071 J	0.17 U	0.13 J	0.12 U	0.047 J	0.17 U	0.13 U	0.15 U	0.15 U	0.083 J	0.16 U	0.07 J	0.17 U	0.16 U
Cadmium	0.049 J	0.046 J	0.042 J	0.084 J	0.69	0.081 U	0.36	0.064 J	0.082	0.085 U	0.11	0.029 J	0.075 U	0.086 U	0.068	0.075	0.075 J	0.079 U	0.1	0.15	0.087 U	0.082 U
Calcium	52000 J	38000 J	95000 J	6900 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Chromium	8.7	9.8	8.2	7.9	14	8.6	12	5.8	6.3	9.3	9.2	6.2	10	4.6	4.2	8.5	7.7	11	9.6	6.6	6.5	9.7
Chromium III (trivalent)	8	9.3	8.2	--	13	7.9	--	--	5.5	8.9	8.3	5.7	9.5	3.9	4.2	8.1	7.3	10	--	--	--	--
Chromium VI (hexavalent)	0.63 J	0.42 J	0.87 U	--	1.9	0.75 J	--	--	0.76 J	0.38 J	0.9	0.53 J	0.74 J	0.65 J	0.85 U	0.35 J	0.45 J	0.85 J	--	--	--	--
Cobalt	2.8	3.1	2.3	2.9	3.9	3.2	6.3	2.4	2.2	3	3.6	3.2	3.2	3.4	1.7	3.9	3	3.8	3.3	6.3	1.6	2.7
Copper	9.6	10	8	6.8	26	9.3	7.8	5.8	8.8	4.4	8	9.1	8.8	13	5.8	15	7.1	5.6	18	7.7	2.8	3.3
Iron	9300	10000	6600	9400	**13000**[bc]	**14000**[bc]	**15000**[bc]	9900	7100	10000	11000	12000	9100	7500	5200	8100	7600	**16000**[bc]	7700	12000	7000	8600
Lead	5.1	5.8	3.5	5.4	26	6	7.6	2.7	6.1	5.8	6.7	3.1	4.1	3.1	2.4	4.5	5.5	5.5	14	4.9	4.5	4.7
Magnesium	**14000**[b]	**10000**[b]	**14000**[b]	2200	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Manganese	230 J	220 J	180 J	110 J	330 J	160 J	**600 J**[bcd]	440 J	220 J	95 J	360 J	110 J	66 J	170 J	200 J	210 J	180 J	300 J	190 J	**710 J**[bcd]	54 J	59 J
Mercury	0.015 J	0.044 U	0.039 U	0.044 U	0.027 J	0.037 U	0.042	0.04 U	0.026 J	0.016 J	0.024 J	0.034 U	0.027 J	0.026 J	0.04 U	0.02 J	0.041 U	0.027 J	0.026 J	0.035 U	0.041 U	0.043 U
Nickel	9.4	9.9	7.2	8.2	13	7.8	11	10	6.5	7.5	8.3	5.9	9	6.6	5	13	7.6	9.4	8.2	9.7	4.2	7
Potassium	430 J	360	350 J	260 J	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Selenium	**0.67**[d]	**0.59**[d]	0.37	**0.52**[d]	**0.47**[d]	**0.54**[d]	**1.1**[d]	0.4	**0.44**[d]	**0.62**[d]	**0.71**[d]	**0.44**[d]	**0.71**[d]	0.35	0.34	**0.7**[d]	**0.48**[d]	**0.63**[d]	**0.48**[d]	**0.73**[d]	0.36	**0.44**[d]
Silver	0.089 U	0.065 U	0.08 U	0.087 U	0.022 J	0.081 U	0.025 J	0.081 U	0.022 J	0.085 U	0.018 J	0.061 U	0.075 U	0.086 U	0.067 U	0.074 U	0.076 U	0.025 J	0.033 J	0.078 U	0.087 U	0.082 U
Sodium	89 U	65 U	80 U	87 U	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Thallium	0.13	0.11	0.079 J	0.12	0.1	0.07 J	0.1	0.091	0.074	0.095	0.082	0.061 U	0.075 U	0.24	0.11	0.14	0.11	0.083	0.088	0.075 J	0.11	0.13
Vanadium	12	13	8.5	13	13	17	19	8.8	9	14	14	15	13	12	6.8	9.8	11	18	9.7	17	13	13
Zinc	26	24	19	22	47	27	32	14	18	32	27	17	19	18	12	27	19	32	26	19	12	18
PCBs (mg/kg)																						
Aroclor-1016 (PCB-1016)	0.037 U	0.037 U	0.036 U	0.037 U	0.035 U	0.036 U	0.038 U	0.037 U	0.036 U	0.036 U	0.037 U	0.037 U	0.036 U	0.036 U	0.035 U	0.035 U	0.036 U	0.038 U	0.037 U	0.035 U	0.036 U	0.037 U
Aroclor-1221 (PCB-1221)	0.037 U	0.037 U	0.036 U	0.037 U	0.035 U	0.036 U	0.038 U	0.037 U	0.036 U	0.036 U	0.037 U	0.037 U	0.036 U	0.036 U	0.035 U	0.035 U	0.036 U	0.038 U	0.037 U	0.035 U	0.036 U	0.037 U
Aroclor-1232 (PCB-1232)	0.037 U	0.037 U	0.036 U	0.037 U	0.035 U	0.036 U	0.038 U	0.037 U	0.036 U	0.036 U	0.037 U	0.037 U	0.036 U	0.036 U	0.035 U	0.035 U	0.036 U	0.038 U	0.037 U	0.035 U	0.036 U	0.037 U
Aroclor-1242 (PCB-1242)	0.037 U	0.037 U	0.036 U	0.037 U	0.035 U	0.036 U	0.038 U	0.037 U	0.036 U	0.036 U	0.037 U	0.037 U	0.036 U	0.036 U	0.035 U	0.035 U	0.036 U	0.038 U	0.037 U	0.035 U	0.036 U	0.037 U
Aroclor-1248 (PCB-1248)	0.037 U	0.037 U	0.036 U	0.037 U	0.035 U	0.036 U	0.038 U	0.037 U	0.036 U	0.036 U	0.037 U	0.037 U	0.036 U	0.036 U	0.035 U	0.035 U	0.036 U	0.038 U	0.037 U	0.035 U	0.036 U	0.037 U
Aroclor-1254 (PCB-1254)	0.037 U	0.037 U	0.036 U	0.037 U	0.035 U	0.036 U	0.038 U	0.037 U	0.036 U	0.036 U	0.037 U	0.037 U	0.036 U	0.036 U	0.035 U	0.035 U	0.036 U	0.038 U	0.037 U	0.035 U	0.036 U	0.037 U
Aroclor-1260 (PCB-1260)	0.037 U	0.037 U	0.036 U	0.037 U	0.035 U	0.036 U	0.038 U	0.037 U	0.036 U	0.036 U	0.037 U	0.037 U	0.036 U	0.036 U	0.035 U	0.035 U	0.036 U	0.038 U	0.079	0.035 U	0.036 U	0.037 U
Total PCBs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.079	ND	ND	ND
Semi-Volatile Organic Compounds (mg/kg)																						
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
2,4,5-Trichlorophenol	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
2,4,6-Trichlorophenol	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
2,4-Dichlorophenol	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
2,4-Dimethylphenol	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
2,4-Dinitrophenol	0.17 U	0.17 U	0.16 U	0.17 U	0.63 U	0.16 U	0.17 U	0.17 U	0.65 U	0.17 U	0.17 U	0.17 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.17 U	0.42 U	0.16 U	0.41 U	0.17 U
2,4-Dinitrotoluene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
2,6-Dinitrotoluene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
2-Chloronaphthalene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
2-Chlorophenol	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
2-Methylnaphthalene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.042 J	0.28 U	0.73 U	0.29 U
2-Methylphenol	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
2-Nitroaniline	0.22 U	0.22 U	0.22 U	0.23 U	0.85 U	0.22 U	0.23 U	0.22 U	0.86 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.22 U	0.23 U	0.56 U	0.21 U	0.55 U	0.22 U
2-Nitrophenol	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
3&4-Methylphenol	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
3,3'-Dichlorobenzidine	1.8 U	1.8 U	1.7 U	1.8 U	6.8 U	1.7 U	1.8 U	1.8 U	6.9 U	1.8 U	1.8 U	1.8 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.9 U	4.5 U	1.7 U	4.4 U	1.8 U
3-Nitroaniline	0.22 U	0.22 U	0.22 U	0.23 U	0.85 U	0.22 U	0.23 U	0.22 U	0.86 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.22 U	0.23 U	0.56 U	0.21 U	0.55 U	0.22 U
4,6-Dinitro-2-methylphenol	0.17 U	0.17 U	0.16 U	0.17 U	0.63 U	0.16 U	0.17 U	0.17 U	0.65 U	0.17 U	0.17 U	0.17 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.17 U	0.42 U	0.16 U	0.41 U	0.17 U
4-Bromophenyl phenyl ether	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
4-Chloro-3-methylphenol	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
4-Chloroaniline	0.22 U	0.22 U	0.22 U	0.23 U	0.85 U	0.22 U	0.23 U	0.22 U	0.86 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.22 U	0.23 U	0.56 U	0.21 U	0.55 U	0.22 U
4-Chlorophenyl phenyl ether	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
4-Nitroaniline	0.22 U	0.22 U	0.22 U	0.23 U	0.85 U	0.22 U	0.23 U	0.22 U	0.86 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.21 U	0.22 U	0.23 U	0.56 U	0.21 U	0.55 U	0.22 U
4-Nitrophenol	0.37 U	0.37 U	0.36 U	0.37 U	1.4 U	0.36 U	0.38 U	0.37 U	1.4 U	0.37 U	0.37 U	0.37 U	0.36 U	0.36 U	0.35 U	0.35 U	0.36 U	0.38 U	0.92 U	0.35 U	0.91 U	0.37 U
Acenaphthene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.043 J	0.28 U	0.73 U	0.29 U
Acenaphthylene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Acetophenone	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Anthracene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.13 J	0.28 U	0.73 U	0.29 U
Atrazine	0.045 U	0.044 U	0.043 U	0.045 U	0.17 U	0.044 U	0.046 U	0.045 U	0.17 U	0.044 U	0.045 U	0.045 U	0.044 U	0.044 U	0.043 U	0.043 U	0.043 U	0.046 U	0.11 U	0.043 U	0.11 U	0.044 U

TABLE 3.6

SOIL ANALYTICAL RESULTS - 2012
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*CRA-705M*	*CRA-705M*	*CRA-705M*	*CRA-706M*	*CRA-707SB*	*CRA-707SB*	*CRA-708SB*	*CRA-708SB*	*CRA-709M*	*CRA-709M*	*CRA-710M*	*CRA-710M*	*CRA-828M*	*CRA-828M*	*CRA-829M*	*CRA-829M*	*CRA-833M*	*CRA-833M*	*CRA-834M*	*CRA-834M*	*CRA-835-SB*	*CRA-835-SB*
Sample Identification	*SO-17358-011812-DR-009*	*SO-17358-011812-DR-010*	*SO-17358-011812-DR-011*	*SO-17358-011812-DR-012*	*SO-17358-011812-DR-015*	*SO-17358-011812-DR-016*	*SO-17358-011812-DR-013*	*SO-17358-011812-DR-014*	*SO-17358-011712-DR-005*	*SO-17358-011712-DR-006*	*SO-17358-011812-DR-007*	*SO-17358-011812-DR-008*	*SO-17358-011712-DR-003*	*SO-17358-011712-DR-004*	*SO-17358-011712-DR-001*	*SO-17358-011712-DR-002*	*SO-17358-011912-DR-021*	*SO-17358-011912-DR-022*	*SO-17358-011812-DR-017*	*SO-17358-011812-DR-018*	*SO-17358-011912-DR-019*	*SO-17358-011912-DR-020*
Sample Date	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/17/2012*	*1/17/2012*	*1/18/2012*	*1/18/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/19/2012*	*1/19/2012*	*1/18/2012*	*1/18/2012*	*1/19/2012*	*1/19/2012*
Sample Depth	*(0-2) ft BGS*	*(0-2) ft BGS*	*(2-3) ft BGS*	*(0-2) ft BGS*	*(0-2) ft BGS*	*(2-3) ft BGS*	*(0-2) ft BGS*	*(2-3) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2.5-4.5) ft BGS*	*(0-2) ft BGS*	*(3-5) ft BGS*	*(0-2) ft BGS*	*(3-5) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*
Sample Type		*Duplicate*																				
Benzaldehyde	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Benzo(a)anthracene	0.3 U	0.29 U	0.29 U	0.3 U	0.038 J	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.024 J	0.31 U	0.39 J	0.28 U	0.73 U	0.29 U
Benzo(a)pyrene	0.3 U	0.29 U	0.29 U	0.3 U	0.048 J	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.025 J	0.31 U	0.4 J	0.28 U	0.73 U	0.29 U
Benzo(b)fluoranthene	0.3 U	0.29 U	0.29 U	0.3 U	0.068 J	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.046 J	0.0085 J	0.5 J	0.28 U	0.025 J	0.29 U
Benzo(g,h,i)perylene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.024 J	0.31 U	0.37 J	0.28 U	0.73 U	0.29 U
Benzo(k)fluoranthene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.015 J	0.31 U	0.23 J	0.28 U	0.73 U	0.29 U
Biphenyl (1,1-Biphenyl)	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
bis(2-Chloroethoxy)methane	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
bis(2-Chloroethyl)ether	0.09 U	0.089 U	0.087 U	0.09 U	0.34 U	0.087 U	0.092 U	0.089 U	0.34 U	0.089 U	0.089 U	0.09 U	0.087 U	0.087 U	0.085 U	0.085 U	0.086 U	0.093 U	0.22 U	0.086 U	0.22 U	0.089 U
bis(2-Ethylhexyl)phthalate (DEHP)	0.047 J	0.052 J	0.039 J	0.037 J	0.096 J	0.031 J	0.025 J	0.032 J	1.1 U	0.29 U	0.053 J	0.029 J	0.041 J	0.29 U	0.034 J	0.041 J	0.29 U	0.31 U	0.086 J	0.038 J	0.73 U	0.29 U
Butyl benzylphthalate (BBP)	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Caprolactam	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Carbazole	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.083 J	0.28 U	0.73 U	0.29 U
Chrysene	0.3 U	0.29 U	0.29 U	0.3 U	0.049 J	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.028 J	0.31 U	0.4 J	0.28 U	0.73 U	0.29 U
Dibenz(a,h)anthracene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.054 J	0.28 U	0.73 U	0.29 U
Dibenzofuran	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.031 J	0.28 U	0.73 U	0.29 U
Diethyl phthalate	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Dimethyl phthalate	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Di-n-butylphthalate (DBP)	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Di-n-octyl phthalate (DnOP)	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Fluoranthene	0.3 U	0.29 U	0.29 U	0.3 U	0.061 J	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.028 J	0.31 U	0.89	0.28 U	0.01 J	0.29 U
Fluorene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.04 J	0.28 U	0.73 U	0.29 U
Hexachlorobenzene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Hexachlorobutadiene	0.045 U	0.044 U	0.043 U	0.045 U	0.17 U	0.044 U	0.046 U	0.045 U	0.17 U	0.044 U	0.045 U	0.045 U	0.044 U	0.044 U	0.043 U	0.043 U	0.043 U	0.046 U	0.11 U	0.043 U	0.11 U	0.044 U
Hexachlorocyclopentadiene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Hexachloroethane	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Indeno(1,2,3-cd)pyrene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.019 J	0.31 U	0.26 J	0.28 U	0.73 U	0.29 U
Isophorone	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Naphthalene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.033 J	0.28 U	0.73 U	0.29 U
Nitrobenzene	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
N-Nitrosodi-n-propylamine	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
N-Nitrosodiphenylamine	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Pentachlorophenol	0.17 U	0.17 U	0.16 U	0.17 U	0.63 U	0.16 U	0.17 U	0.17 U	0.65 U	0.17 U	0.17 U	0.17 U	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U	0.17 U	0.42 U	0.16 U	0.41 U	0.17 U
Phenanthrene	0.3 U	0.0083 J	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.52 J	0.28 U	0.73 U	0.29 U
Phenol	0.3 U	0.29 U	0.29 U	0.3 U	1.1 U	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.29 U	0.31 U	0.74 U	0.28 U	0.73 U	0.29 U
Pyrene	0.3 U	0.0077 J	0.29 U	0.3 U	0.072 J	0.29 U	0.3 U	0.29 U	1.1 U	0.29 U	0.29 U	0.3 U	0.29 U	0.29 U	0.28 U	0.28 U	0.029 J	0.31 U	0.67 J	0.28 U	0.0094 J	0.29 U
Volatile Organic Compounds (mg/kg)																						
1,1,1-Trichloroethane	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
1,1,2,2-Tetrachloroethane	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
1,1,2-Trichloroethane	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
1,1-Dichloroethane	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
1,1-Dichloroethene	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
1,2,4-Trichlorobenzene	0.22 U	0.22 U	0.22 U	0.25 U	0.21 U	0.21 U	0.25 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U	0.014 J	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U
1,2-Dibromo-3-chloropropane (DBCP)	0.22 U	0.22 U	0.22 U	0.25 U	0.21 U	0.21 U	0.25 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U	0.24 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U
1,2-Dibromoethane (Ethylene dibromide)	0.22 U	0.22 U	0.22 U	0.25 U	0.21 U	0.21 U	0.25 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U	0.24 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U
1,2-Dichlorobenzene	0.09 U	0.088 U	0.087 U	0.098 U	0.084 U	0.086 U	0.1 U	0.087 U	0.086 U	0.088 U	0.089 U	0.086 U	0.081 U	0.082 U	0.087 U	0.086 U	0.095 U	0.085 U	0.089 U	0.08 U	0.091 U	0.089 U
1,2-Dichloroethane	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
1,2-Dichloropropane	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
1,3-Dichlorobenzene	0.09 U	0.088 U	0.087 U	0.098 U	0.084 U	0.086 U	0.1 U	0.087 U	0.086 U	0.088 U	0.089 U	0.086 U	0.081 U	0.082 U	0.087 U	0.086 U	0.095 U	0.085 U	0.089 U	0.08 U	0.091 U	0.089 U
1,4-Dichlorobenzene	0.09 U	0.088 U	0.087 U	0.098 U	0.084 U	0.086 U	0.1 U	0.087 U	0.086 U	0.088 U	0.089 U	0.086 U	0.081 U	0.082 U	0.087 U	0.086 U	0.095 U	0.085 U	0.089 U	0.08 U	0.091 U	0.089 U
2-Butanone (Methyl ethyl ketone) (MEK)	0.67 U	0.66 U	0.65 U	0.74 U	0.63 U	0.64 U	0.75 U	0.65 U	0.65 U	0.66 U	0.67 U	0.64 U	0.61 U	0.62 U	0.65 U	0.64 U	0.71 U	0.64 U	0.67 U	0.6 U	0.68 U	0.67 U
2-Hexanone	2.2 U	2.2 U	2.2 U	2.5 U	2.1 U	2.1 U	2.5 U	2.2 U	2.2 U	2.2 U	2.2 U	2.1 U	2 U	2.1 U	2.2 U	2.1 U	2.4 U	2.1 U	2.2 U	2 U	2.3 U	2.2 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	2.2 U	2.2 U	2.2 U	2.5 U	2.1 U	2.1 U	2.5 U	2.2 U	2.2 U	2.2 U	2.2 U	2.1 U	2 U	2.1 U	2.2 U	2.1 U	2.4 U	2.1 U	2.2 U	2 U	2.3 U	2.2 U
Acetone	0.67 U	0.66 U	0.65 U	0.74 U	0.63 U	0.64 U	0.75 U	0.65 U	0.65 U	0.66 U	0.67 U	0.64 U	0.61 U	0.62 U	0.65 U	0.64 U	0.71 U	0.64 U	0.67 U	0.6 U	0.68 U	0.67 U
Benzene	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
Bromodichloromethane	0.09 U	0.088 U	0.087 U	0.098 U	0.084 U	0.086 U	0.1 U	0.087 U	0.086 U	0.088 U	0.089 U	0.086 U	0.081 U	0.082 U	0.087 U	0.086 U	0.095 U	0.085 U	0.089 U	0.08 U	0.091 U	0.089 U
Bromoform	0.09 U	0.088 U	0.087 U	0.098 U	0.084 U	0.086 U	0.1 U	0.087 U	0.086 U	0.088 U	0.089 U	0.086 U	0.081 U	0.082 U	0.087 U	0.086 U	0.095 U	0.085 U	0.089 U	0.08 U	0.091 U	0.089 U
Bromomethane (Methyl bromide)	0.22 U	0.22 U	0.22 U	0.25 U	0.21 U	0.21 U	0.25 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U	0.24 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U
Carbon disulfide	0.22 U	0.22 U	0.22 U	0.25 U	0.21 U	0.21 U	0.25 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U	0.24 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U
Carbon tetrachloride	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
Chlorobenzene	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
Chloroethane	0.22 U	0.22 U	0.22 U	0.25 U	0.21 U	0.21 U	0.25 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U	0.24 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U
Chloroform (Trichloromethane)	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
Chloromethane (Methyl chloride)	0.22 U	0.22 U	0.22 U	0.25 U	0.21 U	0.21 U	0.25 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U	0.24 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U
cis-1,2-Dichloroethene	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
cis-1,3-Dichloropropene	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
Cyclohexane	1.1 U	1.1 U	1 U	1.2 U	1 U	1 U	1.2 U	1 U	1 U	1.1 U	1.1 U	1 U	0.97 U	0.99 U	1 U	1 U	1.1 U	1 U	1.1 U	0.96 U	1.1 U	1.1 U
Dibromochloromethane	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
Dichlorodifluoromethane (CFC-12)	0.09 U	0.088 U	0.087 U	0.098 U	0.084 U	0.086 U	0.1 U	0.087 U	0.086 U	0.088 U	0.089 U	0.086 U	0.081 U	0.082 U	0.087 U	0.086 U	0.095 U	0.085 U	0.089 U	0.08 U	0.091 U	0.089 U
Ethylbenzene	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U

TABLE 3.6

SOIL ANALYTICAL RESULTS - 2012
NORTHEAST AREA SUMMARY REPORT
FORMER WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Sample Location	*CRA-705M*	*CRA-705M*	*CRA-705M*	*CRA-706M*	*CRA-707SB*	*CRA-707SB*	*CRA-708SB*	*CRA-708SB*	*CRA-709M*	*CRA-709M*	*CRA-710M*	*CRA-710M*	*CRA-828M*	*CRA-828M*	*CRA-829M*	*CRA-829M*	*CRA-833M*	*CRA-833M*	*CRA-834M*	*CRA-834M*	*CRA-835-SB*	*CRA-835-SB*
Sample Identification	*SO-17358-011812-DR-009*	*SO-17358-011812-DR-010*	*SO-17358-011812-DR-011*	*SO-17358-011812-DR-012*	*SO-17358-011812-DR-015*	*SO-17358-011812-DR-016*	*SO-17358-011812-DR-013*	*SO-17358-011812-DR-014*	*SO-17358-011712-DR-005*	*SO-17358-011712-DR-006*	*SO-17358-011812-DR-007*	*SO-17358-011812-DR-008*	*SO-17358-011712-DR-003*	*SO-17358-011712-DR-004*	*SO-17358-011712-DR-001*	*SO-17358-011712-DR-002*	*SO-17358-011912-DR-021*	*SO-17358-011912-DR-022*	*SO-17358-011812-DR-017*	*SO-17358-011812-DR-018*	*SO-17358-011912-DR-019*	*SO-17358-011912-DR-020*
Sample Date	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/18/2012*	*1/17/2012*	*1/17/2012*	*1/18/2012*	*1/18/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/17/2012*	*1/19/2012*	*1/19/2012*	*1/18/2012*	*1/18/2012*	*1/19/2012*	*1/19/2012*
Sample Depth	*(0-2) ft BGS*	*(0-2) ft BGS*	*(2-3) ft BGS*	*(0-2) ft BGS*	*(0-2) ft BGS*	*(2-3) ft BGS*	*(0-2) ft BGS*	*(2-3) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*	*(0-2) ft BGS*	*(2.5-4.5) ft BGS*	*(0-2) ft BGS*	*(3-5) ft BGS*	*(0-2) ft BGS*	*(3-5) ft BGS*	*(0-2) ft BGS*	*(2-4) ft BGS*
Sample Type		*Duplicate*																				
Isopropyl benzene	0.22 U	0.22 U	0.22 U	0.25 U	0.21 U	0.21 U	0.25 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U	0.24 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U
Methyl acetate	1.1 U	1.1 U	1 U	1.2 U	1 U	1 U	1.2 U	1 U	1 U	1.1 U	1.1 U	1 U	0.97 U	0.99 U	1 U	1 U	1.1 U	0.42 J	0.089 J	0.96 U	1.1 U	1.1 U
Methyl cyclohexane	1.1 U	1.1 U	1 U	1.2 U	1 U	1 U	1.2 U	1 U	1 U	1.1 U	1.1 U	1 U	0.97 U	0.99 U	1 U	1 U	1.1 U	1 U	1.1 U	0.96 U	1.1 U	1.1 U
Methyl tert butyl ether (MTBE)	0.22 U	0.22 U	0.22 U	0.25 U	0.21 U	0.21 U	0.25 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U	0.24 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U
Methylene chloride	0.22 U	0.22 U	0.22 U	0.25 U	0.21 U	0.21 U	0.25 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U	0.24 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U
Styrene	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
Tetrachloroethene	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
Toluene	0.09 U	0.088 U	0.087 U	0.098 U	0.084 U	0.086 U	0.1 U	0.087 U	0.086 U	0.088 U	0.089 U	0.086 U	0.081 U	0.082 U	0.087 U	0.086 U	0.095 U	0.085 U	0.089 U	0.08 U	0.091 U	0.089 U
trans-1,2-Dichloroethene	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
trans-1,3-Dichloropropene	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
Trichloroethene	0.045 U	0.044 U	0.044 U	0.049 U	0.042 U	0.043 U	0.05 U	0.044 U	0.043 U	0.044 U	0.045 U	0.043 U	0.041 U	0.041 U	0.043 U	0.043 U	0.048 U	0.043 U	0.045 U	0.04 U	0.045 U	0.045 U
Trichlorofluoromethane (CFC-11)	0.09 U	0.088 U	0.087 U	0.098 U	0.084 U	0.086 U	0.1 U	0.087 U	0.086 U	0.088 U	0.089 U	0.086 U	0.081 U	0.082 U	0.087 U	0.086 U	0.095 U	0.085 U	0.089 U	0.08 U	0.091 U	0.089 U
Trifluorotrichloroethane (Freon 113)	0.22 U	0.22 U	0.22 U	0.25 U	0.21 U	0.21 U	0.25 U	0.22 U	0.22 U	0.22 U	0.22 U	0.21 U	0.2 U	0.21 U	0.22 U	0.21 U	0.24 U	0.21 U	0.22 U	0.2 U	0.23 U	0.22 U
Vinyl chloride	0.036 U	0.035 U	0.035 U	0.039 U	0.034 U	0.034 U	0.04 U	0.035 U	0.034 U	0.035 U	0.036 U	0.034 U	0.032 U	0.033 U	0.035 U	0.034 U	0.038 U	0.034 U	0.036 U	0.032 U	0.036 U	0.036 U
Xylenes (total)	0.13 U	0.13 U	0.13 U	0.15 U	0.13 U	0.13 U	0.15 U	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	0.12 U	0.12 U	0.13 U	0.13 U	0.14 U	0.13 U	0.13 U	0.12 U	0.14 U	0.13 U
Total Petroleum Hydrocarbons (mg/kg)																						
Total Petroleum Hydrocarbons	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

[b] Drinking Water Protection Criteria
[c] Non-Residential Drinking Water Protection Criteria
[d] Groundwater Surface Water Interface Criteria
[p] Direct Contact Criteria
J Estimated concentration
ND Non detect
U Not present at or above the associated value
-- Parameter not analyzed

APPENDIX A

STRATIGRAPHIC LOGS

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

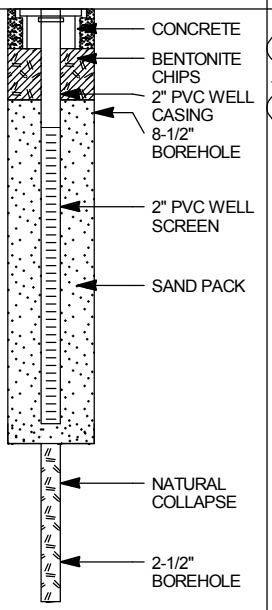
PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

HOLE DESIGNATION: CRA-705M
DATE COMPLETED: January 18, 2012
DRILLING METHOD: DIRECT PUSH / HSA
FIELD PERSONNEL: D. RIVERS

NORTHING: 273015.69
EASTING: 13344440.13

	ELEV. ft
TOP OF CASING	716.84
GROUND SURFACE	716.84
TOP OF RISER	716.20

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft
0	ASPHALT	716.64
2	SC-CLAYEY SAND (FILL), with silt, trace fine gravel, compact, fine to coarse grained, poorly graded, brown and yellow brown, moist	714.34
4	SP-SAND, with fine gravel, compact, fine to coarse grained, poorly graded, brown and light brown, moist - wet at 3.5ft BGS - trace fine gravel at 4.5ft BGS - trace fine grained, medium to coarse grained, gray at 6.0ft BGS	
6	- fine to coarse grained at 6.4ft BGS	
8	- fine grained, brown gray at 8.8ft BGS - fine to coarse grained at 9.1ft BGS	
10	- with fine gravel at 9.6ft BGS	706.74
12	CL-SILTY CLAY, firm, low plasticity, gray, moist	
14		
16	END OF BOREHOLE @ 15.0ft BGS	701.84
18		
20		
22		
24		
26		
28		
30		
32		
34		



WELL DETAILS
Screened interval:
713.84 to 706.34ft
3.00 to 10.50ft BGS
Length: 7.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.84 to 714.54ft
1.00 to 2.30ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.54 to 705.84ft
2.30 to 11.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP 0-2' -009/ 010				0.0
2-3' -011 2DP				0.0
3DP				0.0
4DP				0.0
5DP				0.0
6DP				0.0
7DP				0.0
8DP				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 017358-RACER.GPJ CRA_CORP.GDT 6/12/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

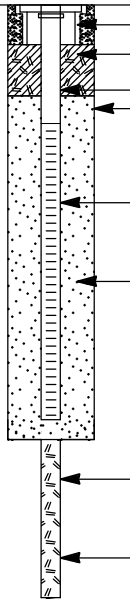
HOLE DESIGNATION: CRA-706M
DATE COMPLETED: January 18, 2012
DRILLING METHOD: DIRECT PUSH / HSA
FIELD PERSONNEL: D. RIVERS

NORTHING: 273197.54
EASTING: 13345062.49

TOP OF CASING 715.73
GROUND SURFACE 715.72
TOP OF RISER 715.16

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft
0	ASPHALT	715.52
2	SP-SAND (FILL), trace silt and fine gravel, compact, fine to medium grained, poorly graded, dark brown, moist - no gravel, orange brown at 0.8ft BGS - fine to coarse grained, brown, moist to wet (native) at 2.5ft BGS - wet at 3.5ft BGS	
4	- with fine gravel at 4.2ft BGS	710.52
6	SW-SAND, trace fine gravel, compact, fine to coarse grained, well graded, brown gray, wet	708.52
8	SP-SAND, trace silt, compact, fine to coarse grained, poorly graded, gray, wet	706.52
10	SM-SILTY SAND, compact, fine grained, poorly graded, gray, wet	705.72
12	CL-SILTY CLAY, firm, low plasticity, gray, moist	
14		
16	END OF BOREHOLE @ 15.0ft BGS	700.72
18		
20		
22		
24		
26		
28		
30		
32		
34		

MONITORING WELL



WELL DETAILS
Screened interval:
712.72 to 705.22ft
3.00 to 10.50ft BGS
Length: 7.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
714.72 to 713.42ft
1.00 to 2.30ft BGS
Material: BENTONITE CHIPS
Sand Pack:
713.42 to 704.72ft
2.30 to 11.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP 0-2' -012				0.0
2DP				0.0
3DP				0.0
4DP				0.0
5DP				0.0
6DP				0.0
7DP				0.0
8DP				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 017358-RACER.GPJ CRA_CORP.GDT 6/12/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

HOLE DESIGNATION: CRA-707SB
DATE COMPLETED: January 18, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 272967.94 EASTING: 13344730.42 GROUND SURFACE	716.50						
0	ASPHALT	716.30	BACKFILLED WITH BENTONITE CHIPS	1DP 0-2' -015				0.0
2	SC-CLAYEY SAND (FILL), with silt, trace fine gravel, compact, fine to coarse grained, poorly graded, brown and yellow brown, moist	714.50	2-1/2" BOREHOLE	2-3' -016 2DP				0.0
4	SP-SAND, trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown and orange brown, moist to wet - wet at 3.5ft BGS	711.50		3DP				0.0
6	END OF BOREHOLE @ 5.0ft BGS							
8								
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (1DP)

OVERBURDEN LOG 017358-RACER.GPJ CRA_CORP.GDT 6/12/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

HOLE DESIGNATION: CRA-708SB
DATE COMPLETED: January 18, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 272973.78 EASTING: 13345059.61 GROUND SURFACE	715.96						
0	ASPHALT	715.66	BACKFILLED WITH BENTONITE CHIPS	1DP 0-2' -013				0.0
2	SC-CLAYEY SAND (FILL), with silt, trace fine gravel, compact, fine to coarse grained, poorly graded, brown and yellow brown, moist	713.96	2-1/2" BOREHOLE	2-3' -024 2DP				0.0
4	SP-SAND, trace silt, compact, fine grained, poorly graded, orange brown, moist - moist to wet at 3.0ft BGS - wet at 3.5ft BGS			3DP				0.0
6	- trace fine gravel, fine to coarse grained, brown gray at 3.8ft BGS	710.96						
8	END OF BOREHOLE @ 5.0ft BGS							
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 017358-RACER.GPJ CRA_CORP.GDT 6/12/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

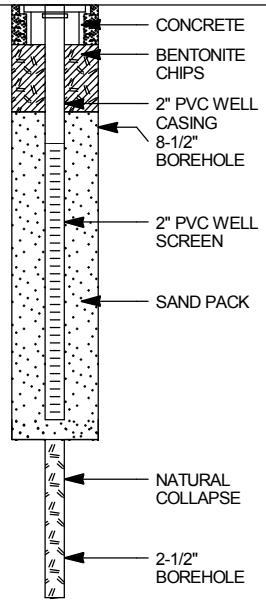
HOLE DESIGNATION: CRA-709M
DATE COMPLETED: January 17, 2012
DRILLING METHOD: DIRECT PUSH / HSA
FIELD PERSONNEL: D. RIVERS

NORTHING: 272764.99
EASTING: 13345075.21

TOP OF CASING 716.08
GROUND SURFACE 716.08
TOP OF RISER 715.73

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft
0	ASPHALT	715.78
2	SM/CL-SAND, SILT AND CLAY (FILL), trace fine gravel, compact, non plastic, fine to coarse sand, brown, gray and light brown, moist	714.28
4	SP-SAND, trace silt, compact, fine grained, poorly graded, brown gray, moist - orange brown at 2.2ft BGS - trace fine gravel, fine to coarse grained, brown at 2.7ft BGS	710.58
6	- brown gray, wet at 4.8ft BGS - 0.1' silty clay seam, firm, low plasticity, gray, moist at 5.2ft BGS	710.38 708.98
8	GP-SANDY GRAVEL, compact, fine gravel, coarse sand, round to subrounded, brown gray, wet	
10	SW-SAND, compact, fine to coarse grained, well graded, gray, wet	706.08
12	SP-SAND, trace silt, compact, fine to coarse grained, poorly graded, gray, wet CL-SILTY CLAY, firm, low plasticity, gray, moist	
14		
16	END OF BOREHOLE @ 15.0ft BGS	701.08
18		
20		
22		
24		
26		
28		
30		
32		
34		

MONITORING WELL



WELL DETAILS
Screened interval:
712.58 to 705.58ft
3.50 to 10.50ft BGS
Length: 7ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.08 to 713.38ft
1.00 to 2.70ft BGS
Material: BENTONITE CHIPS
Sand Pack:
713.38 to 705.08ft
2.70 to 11.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP 0-2' -005				0.0
2DP 2-4' -006				0.0
3DP				0.0
4DP				0.0
5DP				0.0
6DP				0.0
7DP				0.0
8DP				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

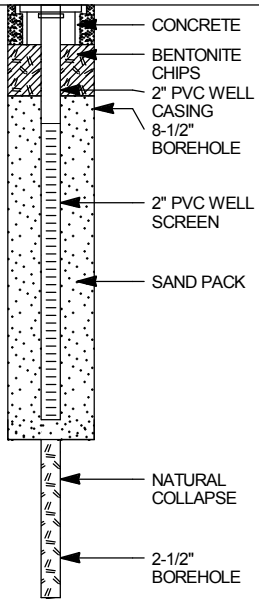
HOLE DESIGNATION: CRA-710M
DATE COMPLETED: January 18, 2012
DRILLING METHOD: DIRECT PUSH / HSA
FIELD PERSONNEL: D. RIVERS

NORTHING: 272748.91
EASTING: 13344746.55

TOP OF CASING 716.52
GROUND SURFACE 716.51
TOP OF RISER 715.92

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft
0	ASPHALT	716.21
	CL-CLAY (FILL), with silt and fine sand, trace fine gravel, firm, low plasticity, brown, moist	
2	SP-SAND, trace silt, compact, fine grained, poorly graded, orange brown, moist	714.01
4	- brown gray at 3.5ft BGS	
	- fine to coarse grained, moist to wet at 4.0ft BGS	
6	- trace fine gravel, wet at 4.5ft BGS	
8	- no gravel, fine grained, increase in silt content at 8.7ft BGS	707.11
10	SM-SILTY SAND, compact, fine grained, poorly graded, gray, wet	706.51
	CL-SILTY CLAY, firm, low plasticity, gray, moist	
12		
14		
	END OF BOREHOLE @ 15.0ft BGS	701.51
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		

MONITORING WELL



WELL DETAILS
Screened interval:
713.51 to 706.01ft
3.00 to 10.50ft BGS
Length: 7.5ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.51 to 714.21ft
1.00 to 2.30ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.21 to 705.51ft
2.30 to 11.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP 0-2' -007				0.0
2DP 2-4' -008				0.0
3DP				0.0
4DP				0.0
5DP				0.0
6DP				0.0
7DP				0.0
8DP				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

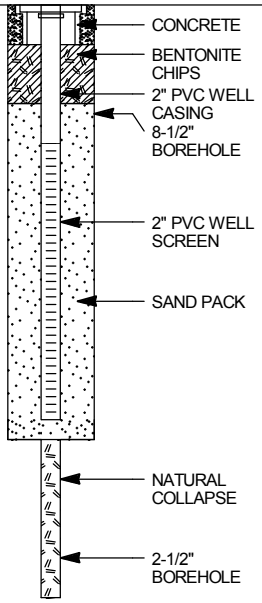
HOLE DESIGNATION: CRA-828M
DATE COMPLETED: January 17, 2012
DRILLING METHOD: DIRECT PUSH / HSA
FIELD PERSONNEL: D. RIVERS

NORTHING: 271967.07
EASTING: 13345494.03

	ELEV. ft
GROUND SURFACE	716.11
TOP OF CASING	716.08
TOP OF RISER	715.70

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft
0	CONCRETE	715.41
2	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, orange brown, moist - trace fine gravel, fine to coarse grained, light brown at 2.0ft BGS - no gravel, fine grained,, brown at 3.2ft BGS	
4	- moist to wet at 4.5ft BGS	
6	SP-SAND, trace silt, fine to coarse grained, poorly graded, brown gray, wet - fine to medium grained at 6.0ft BGS	711.11
8		
10	- fine grained, gray at 9.5ft BGS	
12	CL-SILTY CLAY, firm, low plasticity, gray, moist	706.31
14		
16	END OF BOREHOLE @ 15.0ft BGS	701.11
18		
20		
22		
24		
26		
28		
30		
32		
34		

MONITORING WELL



WELL DETAILS
Screened interval:
712.61 to 705.61ft
3.50 to 10.50ft BGS
Length: 7ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.11 to 713.61ft
1.00 to 2.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
713.61 to 705.11ft
2.50 to 11.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP 0-2' -003				0.0
2DP 2-4' -004				0.0
3DP				0.0
4DP				0.0
5DP				0.0
6DP				0.0
7DP				0.0
8DP				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017358-RACER.GPJ CRA_CORP.GDT 6/12/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

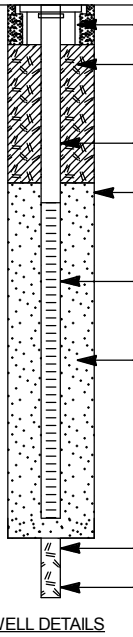
HOLE DESIGNATION: CRA-829M
DATE COMPLETED: January 17, 2012
DRILLING METHOD: DIRECT PUSH / HSA
FIELD PERSONNEL: D. RIVERS

NORTHING: 271975.16
EASTING: 13345640.61

TOP OF CASING 716.26
GROUND SURFACE 716.15
TOP OF RISER 715.81

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft
0	CONCRETE	715.65
	CL-SILTY CLAY (FILL), with fine sand, trace fine gravel, firm, low plasticity, brown, moist	715.05
2	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, orange brown, moist	
4	- with fine gravel at 2.5ft BGS	711.65
	CL-SILTY CLAY (FILL), trace fine sand to fine gravel, firm, low plasticity, brown gray, moist	710.85
6	SP-SAND, trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown, wet	
8	- 0.2' fine gravel seam at 6.3ft BGS	
10	- no gravel, fine to medium grained, brown gray at 10.5ft BGS	
12		703.65
	CL-SILTY CLAY, firm, low plasticity, gray, moist	
14		701.15
	END OF BOREHOLE @ 15.0ft BGS	
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		

MONITORING WELL



WELL DETAILS
Screened interval:
711.15 to 703.15ft
5.00 to 13.00ft BGS
Length: 8ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
715.15 to 711.65ft
1.00 to 4.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
711.65 to 702.65ft
4.50 to 13.50ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP 0-2' -001				0.0
2DP 2.5-4.5' -002				0.0
3DP				0.0
4DP				0.0
5DP				0.0
6DP				0.0
7DP				0.0
8DP				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS

OVERBURDEN LOG 017358-RACER.GPJ CRA_CORP.GDT 6/12/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

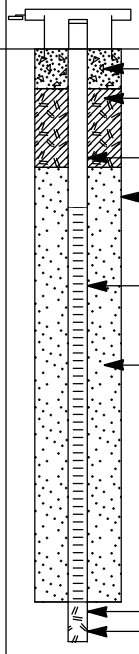
HOLE DESIGNATION: CRA-833M
DATE COMPLETED: January 19, 2012
DRILLING METHOD: DIRECT PUSH / HSA
FIELD PERSONNEL: D. RIVERS

NORTHING: 273156.32
EASTING: 13345505.26

TOP OF CASING 720.07
TOP OF RISER 719.81
GROUND SURFACE 717.01

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft
0	MIX of CONCRETE AND ASPHALT DEBRIS, with sand, silt and clay	716.01
2	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown, moist	714.51
4	SM/CL-SAND AND CLAY (FILL), with silt, compact, nonplastic, fine sand, dark brown, moist	
	- yellow brown and greenish brown at 4.0ft BGS	711.91
6	SP-SAND, with fine gravel, trace silt, compact, fine to coarse grained, poorly graded, brown gray, wet	
8		
	- trace fine gravel at 9.2ft BGS	
10		
12		
14	CL-SILTY CLAY, firm, low plasticity, gray, moist	703.51
	END OF BOREHOLE @ 15.0ft BGS	702.01
16		
18		
20		
22		
24		
26		
28		
30		
32		
34		

MONITORING WELL



WELL DETAILS
Screened interval:
713.01 to 703.01ft
4.00 to 14.00ft BGS
Length: 10ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
716.01 to 714.01ft
1.00 to 3.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
714.01 to 703.01ft
3.00 to 14.00ft BGS
Material: SAND

SAMPLE NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
1DP 0-2' -021				0.0
2DP				0.0
3-5' -022				
3DP				0.0
4DP				0.0
5DP				0.0
6DP				0.0
7DP				0.0
8DP				0.0

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

OVERBURDEN LOG 017358-RACER.GPJ CRA_CORP.GDT 6/12/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: RACER-WILLOW RUN
PROJECT NUMBER: 017358-T01
CLIENT: RACER
LOCATION: YPSILANTI, MI

HOLE DESIGNATION: CRA-835SB
DATE COMPLETED: January 19, 2012
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE 'N' VALUE	SAMPLE PID (ppm)
	NORTHING: 272504.31 EASTING: 13345540.31 GROUND SURFACE	716.61						
0	ASPHALT AND GRAVEL (FILL)	716.11	BACKFILLED WITH BENTONITE CHIPS	1DP 0-2'-019				0.0
2	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, dark brown, moist - brown at 1.0ft BGS - no gravel, with silt, fine grained at 2.0ft BGS - trace silt (native), brown and orange brown at 2.5ft BGS - trace fine gravel, fine to coarse grained, moist to wet at 4.1ft BGS - wet at 4.8ft BGS		2-1/2" BOREHOLE	2DP 2-4'-020				0.0
4				3DP				0.0
6		711.61						
8	END OF BOREHOLE @ 5.0ft BGS							
10								
12								
14								
16								
18								
20								
22								
24								
26								
28								
30								
32								
34								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS (oval)

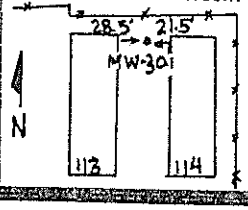
OVERBURDEN LOG 017358-RACER.GPJ CRA_CORP.GDT 6/12/12

CRA-264M

BORING LOG / MONITORING WELL DIAGRAM

C-E ENVIRONMENTAL, INC.

PROJECT NO.: 5883-00	PROJECT NAME: HYDRA-MATIC WILLOW RUN	BORING/WELL DESIGNATION: MW-303	BORING/WELL LOCATION:
DRILLING CONTRACTOR: P.S.I.	DRILLING METHOD: HOLLOW STEM AUGER	BOREHOLE SIZE: 8 IN.	BOREHOLE DEPTH: 13.5 FT.
DATE STARTED: 2/14/89	DATE COMPLETED: 2/14/89	GROUND ELEV.: 102.02 FT.	MEASURING POINT ELEV: 100.02 FT.
RIG: CME-55	DRILLER: P. LIBBY	HELPER: M. BOND	LOGGED BY: C KIELTY



DEPTH (FT.)	DESCRIPTION	SAMPLE NO.	SAMPLE TYPE	BLOW COUNTS(N)	P.I. METER (ppm)	COMMENTS	WELL DATA
0	ASPHALT DEBRIS; SAND & GRAVEL (FILL)	N/A	N/A	N/A	BG	WELL FINISHED ABOVE GRADE W/A LOCKABLE PROTECTIVE CASING	
	SAND - orange-brown, medium grained, moist, some fine gravel.					CEMENT	
2.5						BENTONITE SEAL	
5.0	SAND - gray-brown, fine-medium grained, moist, some silt.					TWO-INCH SCHEDULE 40 FLUSH-THREADED PVC WELL CASING	
7.5						SAND FILTER PACK	
	SAND - gray, medium grained, wet, some silt.						
10.0	(groundwater encountered @ approx. 9 feet)					TWO-INCH 10-SLOT PVC WELL SCREEN	
12.5	CLAY - gray, moist, some silt.						
	END OF BORING AT 13.5 FEET						
15.0							

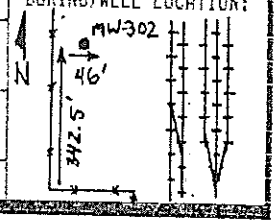
NOTES: BG - BACKGROUND
N/A - NOT APPLICABLE
SAMPLES LOGGED FROM CUTTINGS

CRA-265M

BORING LOG / MONITORING WELL DIAGRAM

C-E ENVIRONMENTAL, INC.

PROJECT NO.: 5883-00	PROJECT NAME: HYDRA-MATIC WILLOW RUN	BORING/WELL DESIGNATION: MW-302	BORING/WELL LOCATION:
DRILLING CONTRACTOR: P.S.I.	DRILLING METHOD: HOLLOW STEM AUGER	BOREHOLE SIZE: 8 IN.	BOREHOLE DEPTH: 13 FT.
DATE STARTED: 2/14/89	DATE COMPLETED: 2/14/89	GROUND ELEV.: 102.63 FT.	MEASURING POINT ELEV: 100.13 FT.
WELL DEPTH: 12.5 FT.			
RIG: CME-55	DRILLER: P. LIBBY	HELPER: M. BOND	LOGGED BY: C KIELTY



DEPTH (FT.)	DESCRIPTION	SAMPLE NO.	SAMPLE TYPE	BLOW COUNTS(N)	P.I. METER	COMMENTS	WELL DATA
0	ASPHALT DEBRIS SAND & GRAVEL (FILL)	N/A	N/A	N/A	BG (ppm)	WELL FINISHED ABOVE GRADE W/A LOCKABLE PROTECTIVE CASING CEMENT BENTONITE SEAL TWO-INCH SCHEDULE 40 FLUSH-THREADED PVC WELL CASING	XX XXX
2.5	SAND - orange-brown, medium grained, moist, some fine gravel.						
5.0						SAND FILTER PACK	
	SAND - gray-brown, wet, trace fine gravel and silt. (groundwater encountered @ approx. 6-feet)						
7.5						TWO-INCH 10-SLOT PVC WELL SCREEN	
10.0							
	CLAY - gray, moist, some silt.						
12.5							
	END OF BORING AT 13 FEET						
15.0							

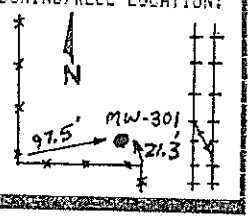
NOTES: BG - BACKGROUND
N/A - NOT APPLICABLE
SAMPLES LOGGED FROM CUTTINGS

CRA-266M

BORING LOG / MONITORING WELL DIAGRAM

C-E ENVIRONMENTAL, INC.

PROJECT NO.: 5883-00	PROJECT NAME: HYDRA-MATIC WILLOW RUN		BORING/WELL DESIGNATION: MW-301	BORING/WELL LOCATION:
DRILLING CONTRACTOR: P.S.I.	DRILLING METHOD: HOLLOW STEM AUGER	BOREHOLE SIZE: 8 IN.	BOREHOLE DEPTH: 11 FT.	
DATE STARTED: 2/14/89	DATE COMPLETED: 2/14/89	GROUND ELEV.: 99.79 FT.	MEASURING POINT ELEV: 97.79 FT.	WELL DEPTH: 10.0 FT.
RIG: CME-55	DRILLER: P. LIBBY	HELPER: M. BOND	LOGGED BY: C KIELTY	



DEPTH (FT.)	DESCRIPTION	SAMPLE NO.	SAMPLE TYPE	BLOW COUNTS(N)	P.I. METER (ppm)	COMMENTS	WELL DATA
0	SAND (FILL)	N/A	N/A	N/A	BG	WELL FINISHED ABOVE GRADE W/A LOCKABLE PROTECTIVE CASING	
	SAND - orange-brown, medium grained, moist.					CEMENT	
						BENTONITE SEAL	
2.5	(groundwater encountered @ approx. 3 feet)					TWO-INCH SCHEDULE 40 FLUSH-THREADED PVC WELL CASING	
5.0	SAND - gray-brown, wet, trace silt.					SAND FILTER PACK	
7.5						TWO-INCH 10-SLOT PVC WELL SCREEN	
10.0	CLAY - gray, moist, some silt.						
	END OF BORING AT 11 FEET						
12.5							
15.0							

NOTES: BG - BACKGROUND
N/A - NOT APPLICABLE
SAMPLES LOGGED FROM CUTTINGS

APPENDIX B

HISTORICAL REPORTS

9803-147

HYDRA-MATIC

Division of General Motors Corporation Ypsilanti, Michigan 48198-6198

437
9/88
ENV033:Binder/147 - Soil & Groundwater Invest North Yard & ATF

September 30, 1988

Mr. Charles F. San Juan
Geologist
Environmental Response Division
Jackson State Office Building
301 E. Louis Glick Hwy.
Jackson, Michigan 49201

Subject: North Yard and ATF Spill Areas

Dear Mr. San Juan:

The purpose of this letter is to transmit information pertaining to the North Yard and ATF hydrogeological work. The enclosed submittals will provide supporting documentation for the previous presentations given to MDNR regarding the above stated Subject. Included are outlines of GMRL's field research activities and work plans that were mutually agreed upon, findings of the investigations and discussion on remedial strategies. This documentation is intended to provide the framework for the forthcoming technical reports that will be submitted to MDNR by December 1988 for the ATF spill area, and by February 1989 for the North Yard.

Hydra-Matic trusts that this submittal will supplement the information package that MDNR currently has in its files. Furthermore, Hydra-Matic is confident that this submittal, along with the forthcoming technical reports, will sufficiently detail the North Yard and ATF hydrogeological work plans thus far. If you have any questions regarding this matter, please contact the undersigned at (313) 481-7232.

Sincerely,

Christopher F Winkeljohn

Christopher F. Winkeljohn
Environmental Engineering

Enclosures

SOIL AND GROUNDWATER INVESTIGATION
HYDRA-MATIC WILLOW RUN PLANT
MACHINE STORAGE AREA

WORK PLAN 1
FOR
SITE CHARACTERIZATION AND DELINEATION
OF CONTAMINATED ZONES

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A region of the north-east corner of the Hydra-matic Willow Run property is suspected of being contaminated by organic and inorganic constituents from old machinery formerly stored on the site. In this presentation titled "Soil and Groundwater Investigation Hydra-matic Willow Run Plant...Machine Storage Area" we will outline a proposal to characterize the site and delineate the zones of contamination. The contents of this proposal is referred to as WORK PLAN 1.

The proposal was developed by a team of environmental professionals from the General Motors Research Laboratories (GMRL) and Hydra-matic. The team includes Abdul S. Abdul (Ph.D, contaminant hydrogeology, Thomas L. Gibson (Ph.D, organic chemistry), and Chris Winkeljohn (BSc., environmental engineering). This team will supervise the implementation of Work Plan 1. Soil coring and drilling will be carried out by Professional Services Industries, Inc. Michigan Testing Engineers Division, Detroit MI., while chemical analyses will be done by Environmental Control Technology Corporation (ENCOTEC), Ann Arbor, Michigan.

SUMMARY

- A REGION ON THE NORTH SIDE OF THE HYDRA-MATIC WILLOW RUN PLANT IS SUSPECTED OF BEING CONTAMINATED BY CONSTITUENTS FROM OLD MACHINERY FORMERLY STORED ON THE SITE

- THIS WORK PLAN OUTLINES THE ACTIONS HYDRA-MATIC INTENDS TO TAKE, IN COLLABORATION WITH EV AND EAS, TO INVESTIGATE THE EXTENT OF SOIL AND GROUNDWATER CONTAMINATION AT THE SITE AND TO CHARACTERIZE THE SITE

- THE INVESTIGATION WILL PROGRESS IN FOUR STAGES
  - (1) CONTAMINATION OF SURFACE MATERIALS
  - (2) CONTAMINATION AND CHARACTERIZATION OF THE UNSATURATED ZONE
  - (3) CONTAMINATION AND CHARACTERIZATION OF THE SATURATED ZONE
  - (4) DELINEATION OF VAPOR PHASE CONTAMINATION

- INVESTIGATION WILL COMMENCE 11/87 AND WILL PROGRESS THROUGH 12/88

- IN EACH STAGE METHOD DEVELOPMENT AND BETTER UNDERSTANDING OF PROCESSES MAY BE NEEDED

Here is a summary of the presentation. The third main point in this summary list indicates the proposed investigative approach that we plan to inplement at the site. By this approach the investigation is divided into four main stages. First the lateral extent of contamination of the surface material (0 to 12 inch) will be assessed. If the surface material is contaminated then the investigation will progress through the unsaturated zone, otherwise the investigation will not progress to deeper regions of the subsurface. Again, if the unsaturated zone is investigated and found to be contaminated then this will trigger investigation of the saturated zone and then of vapor phase contamination. The details of these proposed investigations are included in this presentation.

The investigation will commence 11/87 and is expected to be completed by 12/88.

The site to be investigated is about 200 by 800 feet. Inspection of the site location map on the next page should give a general perspective of where the site is on the Hydra-matic property. Potential contaminants at the site include; oils, PCBs, and metals.

PROBLEM BACKBROUND

- PAST PRACTICE OF STORING USED MACHINERY ON A 200 BY 800 FT SURFACE PLOT
- PLOT IS IMMEDIATELY NORTH OF THE NORTH-EAST CORNER OF THE HYDRAMATIC PLANT
- SOME OF THE MACHINERY WAS NOT COMPLETELY DRAINED OF OPERATING FLUIDS:
  - OILS - CONTAIN LOW LEVELS OF PCBs
  - OTHER ORGANICS MAY BE PRESENT
  - SOLUTIONS MAY CONTAIN METALS

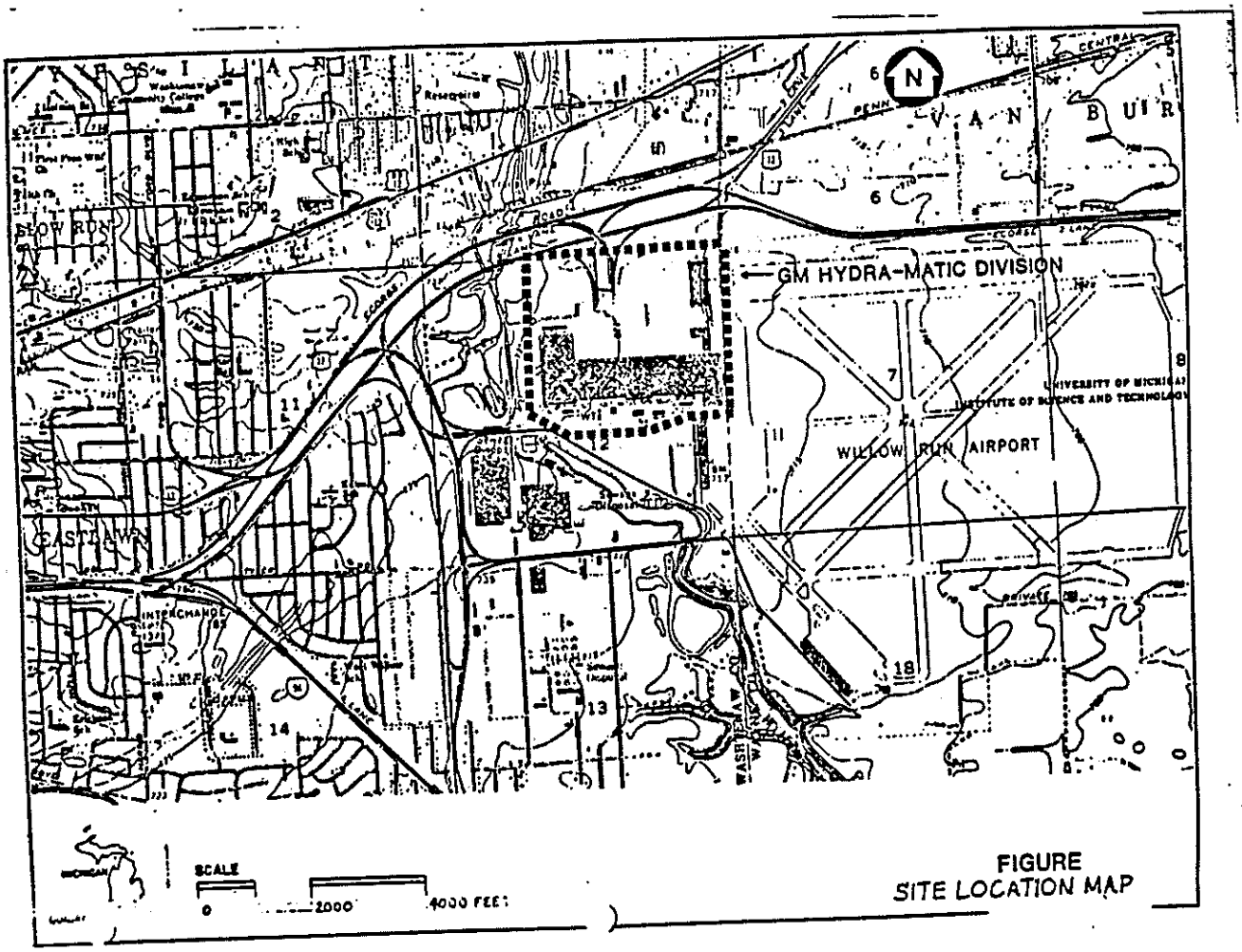


FIGURE
SITE LOCATION MAP

Based on data collected from other regions of the Hydra-matic property, the surficial deposits are continuous and of mainly medium to fine lacustrine materials. Also, the water table of a perched aquifer is 6 to 7 feet below the surface and flow is mainly towards the south to southwest. The perched aquifer is not used for potable water and there is no aquifer or surface water at risk.

SITE BACKGROUND

- THE UNCONSOLIDATED SURFACIAL DEPOSIT IS CONTINUOUS AND OF MAINLY MEDIUM TO FINE LACUSTRINE MATERIALS
- THE WATER TABLE IS 6 TO 7 FEET BELOW THE SURFACE AND FLOW IS MAINLY TOWARDS THE SOUTH/SOUTHWEST
- THE UNCONFINED AQUIFER IS NOT USED FOR POTABLE WATER AND THERE IS NO AQUIFER OR SURFACE WATER AT RISK
- THE SITE IS DRAINED BY THE HURON RIVER WHICH RUNS NW TO SE ON THE SOUTH SIDE OF THE SITE

The specific objectives of WORK PLAN 1 are to delineate the zones of contamination, describe the site geology and hydrology (if necessary), and assess the problem in each contaminated zone.

OBJECTIVES OF WORK PLAN 1

- DELINEATE THE ZONES OF CONTAMINATION
- DESCRIBE THE SITE GEOLOGY AND HYDROLOGY
- ASSESS THE PROBLEM

The tasks included in phase 1 for delineating the extent of surface contamination are presented in this and the next two pages. We propose to divide the site into a 100 by 100 feet grid (see figure on next page). Twenty five soil samples from the surface to a depth of 12 inches will be taken at the 25 grid points by using a 3 inch I.D split-spoon sampler. The lower 3 inch of the soil core (from 9 to 12 inch depth) will be analyzed by Encotec for PCB Aroclors 1221, 1248, 1254, and 1260, for total heavy metals (Cr, Pb, Cd, Zn, Ni, and Fe), and for total hydrocarbons.

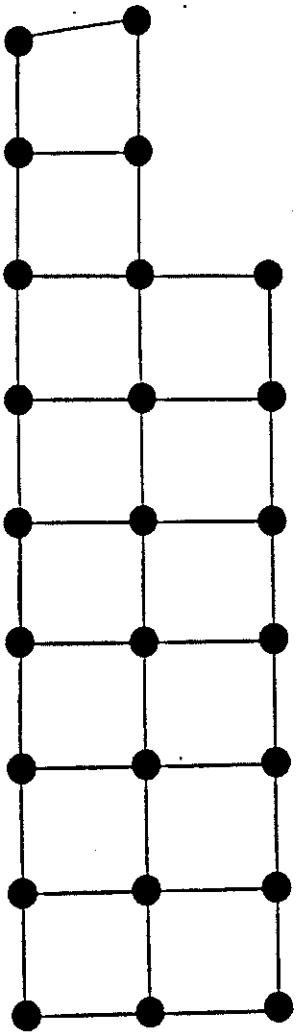
Based on the results of these 25 samples we will assess the needs for increasing the sampling density and extending the sampling area to adequately define the extent of surface contamination.

After the extent of surface contamination is established we plan to assess the needs for excavation and disposal of the surface material.

PHASES OF WORK PLAN 1

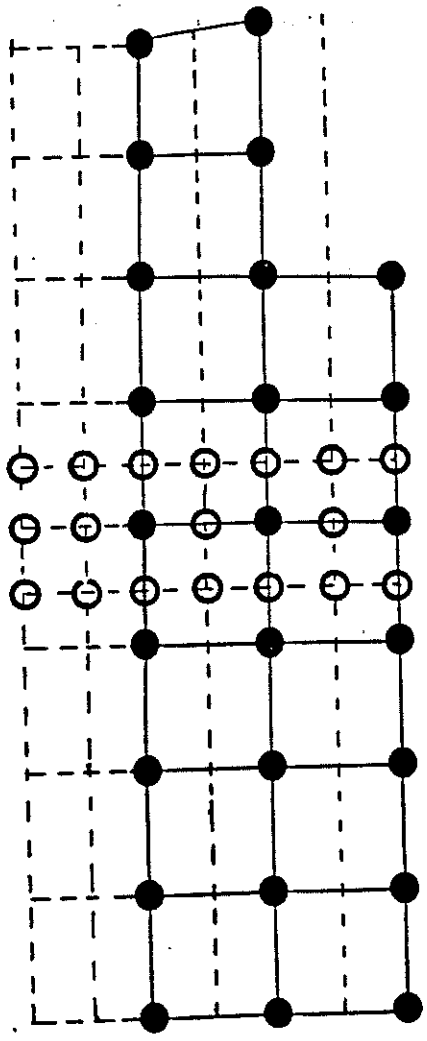
- PHASE 1
  - DELINEATION OF SURFACE CONTAMINATION
    - 3 BY 3 INCH SOIL CORES FROM 9 TO 12 INCH DEPTH
    - 100 BY 100 FT GRID: 25 SOIL SAMPLES
    - SOIL EXTRACTS WILL BE ANALYZED FOR:
      - (A) PCBs:
        - (1) AROCLOR 1221
        - (2) AROCLOR 1248
        - (3) AROCLOR 1254
        - (4) AROCLOR 1260
      - (B) HEAVY METALS:
        - Cr, Pb, Cd, Zn, Ni, Fe
      - (C) TOTAL HYDROCARBONS
  - INCREASE DENSITY OF SAMPLING
  - EXTEND SAMPLING AREA
  - ASSESS REMOVAL OF SURFACE SOURCES

This diagram shows the 200 by 800 ft site divided into a 100 by 100 ft grid. The 25 sampling locations are shown as circles.



CORING AND SAMPLING LOCATIONS

This diagram illustrates how the sampling density and site area could be increased should it be necessary to define the contaminated area in more detail.



CORING AND SAMPLING LOCATIONS

Tables 1 and 2 outline the analytical program that Encotec will follow to detect and quantify organic and inorganic constituents in soil and water samples. The analyte , analytical method, and practical quantification limits (PQL) are identified for both soil and water samples.

TABLE 1. ANALYTICAL PROGRAM FOR ORGANICS IN SOIL AND WATER SAMPLES
GM Hydra-Matic Plant, Willow Run, Michigan

	SOIL CORES		LIQUIDS	
ANALYTE	METHOD	PQL (mg/kg)	METHOD	PQL (mg/kg)
VOCs			MDNR SCAN 1-2	.005-.100
PCBs	EPA 8080	1.0	EPA 8080	.02
HYDROCARBONS Lube oil Hydraulic fluid Cleaning solution Fuels	GRAVIMETRY/GC-FID	1-10	GC/FID	.02-.2

Notes:

1. PQLs are highly matrix dependent. Typical values are presented here; actual limits are determined at time of analysis.

2. Soil results will be on a dry weight basis.

TABLE 2. ANALYTICAL PROGRAM FOR INORGANICS IN SOIL AND WATER SAMPLES
GM Hydra-Matic Plant, Willow Run, Michigan

		SOIL CORES		LIQUIDS
ANALYTE	METHOD	PQL (mg/kg)		PQL (mg/kg)
Cadmium	EPA 3050/ICP & 6010	0.5-2.0		0.01-0.04
Chromium	"	"		"
Nickel	"	"		"
Zinc	"	"		"
Iron	"	"		"
Barium	"	"		"
Copper	"	"		"
Arsenic	7061	0.10	7061	0.002
Lead	7420	1.00	7420	0.02
Mercury	7471	0.01	7470	0.0002

Notes:

1. PQLs are highly matrix dependent. Typical values are presented here; actual limits are determined at time of analysis.

2. Soil results will be on a dry weight basis.

3. ICP - inductively coupled plasma method

Phase 2 of the project will address investigation of the unsaturated zone. Recall that Phase 2 will be implemented only if the surface material is contaminated.

In Phase 2, we plan to determine the vertical and lateral spread of contamination and describe the geologic material in the unsaturated zone. Soil cores will be used in these analyses. Also, depending on the degree of saturation of the unsaturated zone and the level of soil contamination we will consider the need for characterizing the pore water chemistry.

- PHASE 2: INVESTIGATE THE UNSATURATED ZONE
  - DETERMINE VERTICAL AND LATERAL SPREAD OF CONTAMINANTS FROM SURFACE
    - INCREMENTAL CORING
  - CHARACTERIZATION OF UNSATURATED ZONE
    - INCREMENTAL CORING
  - CHARACTERIZATION OF PORE WATER CHEMISTRY
    - PORE WATER EXTRACTS

Phase 3 of the project will address investigation of the saturated zone. Recall that Phase 3 will be implemented only if the unsaturated zone is comtaminated down to the water table.

In Phase 3, we plan to determine the vertical and lateral spread of contamination and characterize the site geology and hydrology. Soil cores, monitoring wells, and field and lab measurements will be used in these analyses.

- PHASE 3: INVESTIGATE SATURATED ZONE
  - DETERMINE VERTICAL AND LATERAL SPREAD OF CONTAMINANTS
    - CORES
    - MONITORING WELLS
    - FIELD AND LAB MEASUREMENTS
    - CHEMICAL ANALYTICAL PROGRAM
  - CHARACTERIZATION OF SITE GEOLOGY
    - CORES
    - LABORATORY MEASUREMENTS
  - CHARACTERIZATION OF SITE HYDROLOGY
    - MONITORING WELLS
    - FIELD AND LAB MEASUREMENTS

If the unsaturated zone is contaminated down to the water table and if volatile organic constituents are found in the unsaturated zone then we plan to investigate the spread of VOCs in the soil air. This investigation will involve sampling the air from the vadose zone and analyzing the samples for VOCs.

* PHASE 4:

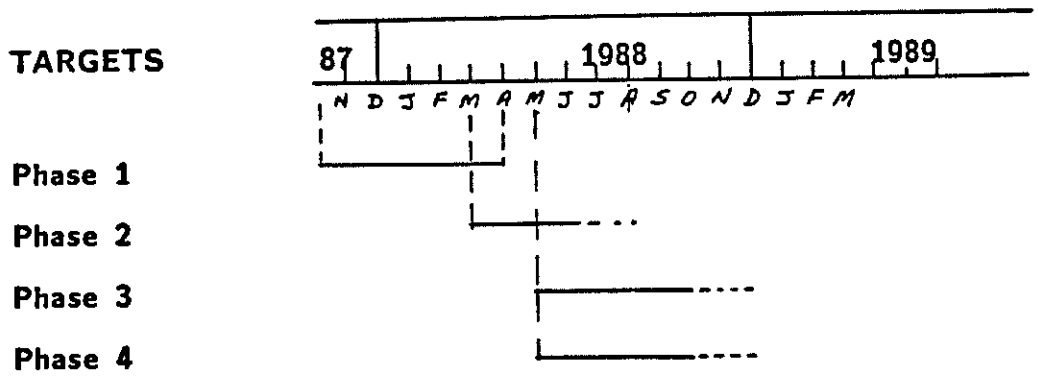
  * ASSESS THE NEED FOR MONITORING VAPOR IN THE VADOSE ZONE

  * IF NEEDED, DESIGN AND IMPLEMENT A MONITORING SCHEME

  * MULTIBUNDLE TUBES IN THE VADOSE ZONE

Here is a proposed schedule for initiating the four phases of the project. We expect the investigation to be completed by December 1988.

HYDRA-MATIC MACHINE STORAGE SITE SCHEDULE (WORK PLAN 1)



MACHINE STORAGE AREA

NORTH YARD

HYDRA-MATIC WILLOW RUN PLANT

HYDROGEOLOGIC STUDIES

MAY 1988

In November 1987 a work plan (WORK PLAN 1) was presented to MDNR for site investigation and delineation of the contaminated zones at a former machine storage yard on the Hydra-matic Willow Run Plant property. This presentation addresses the implementation of WORK PLAN 1.

The presentation will be given in two parts. In the first part, the results from the implementation of WORK PLAN 1 will be presented, while in the second part these results will be used to assess the present extent of surface and subsurface contamination at the site and concerns about future migration of contaminants from the site.

This map gives a general perspective of the location of the Hydra-matic property.

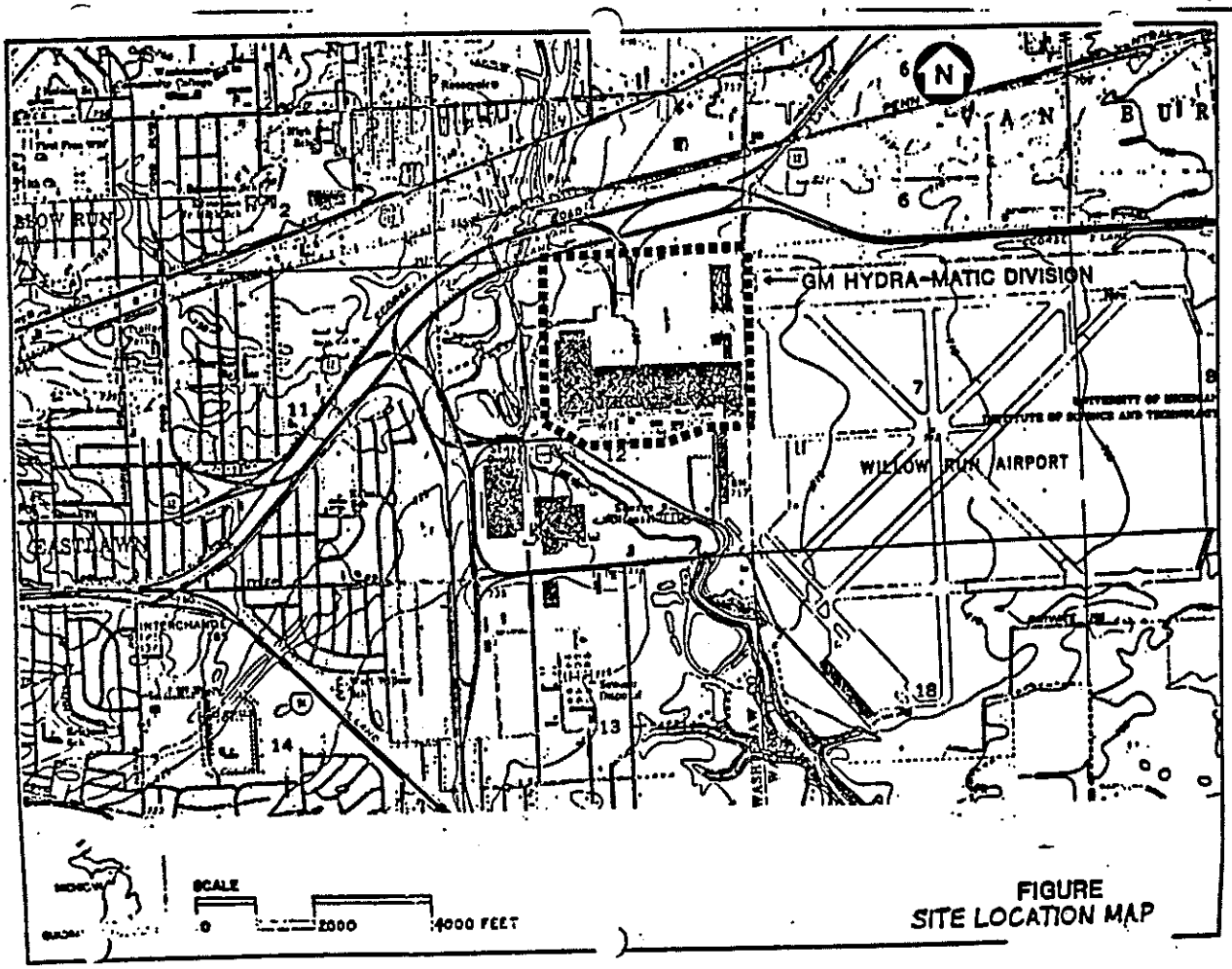


FIGURE
SITE LOCATION MAP

Here, we are reminded of the investigative approach we planned to implement at the site. By this approach, the investigation is divided into four main stages. First the lateral extent of contamination of the surface material (0 to 12 inch) will be assessed. If the surface material is contaminated then the investigation will progress through the unsaturated zone, otherwise the investigation will not progress to deeper regions of the subsurface. Again, if the unsaturated zone is investigated and found to be contaminated down to the water table this will trigger investigation of the saturated zone and then of vapor phase contamination.

PHASES OF INVESTIGATION

- **The investigation has progressed in four stages**

  Phase (1) Organic and inorganic constituents in the surface materials

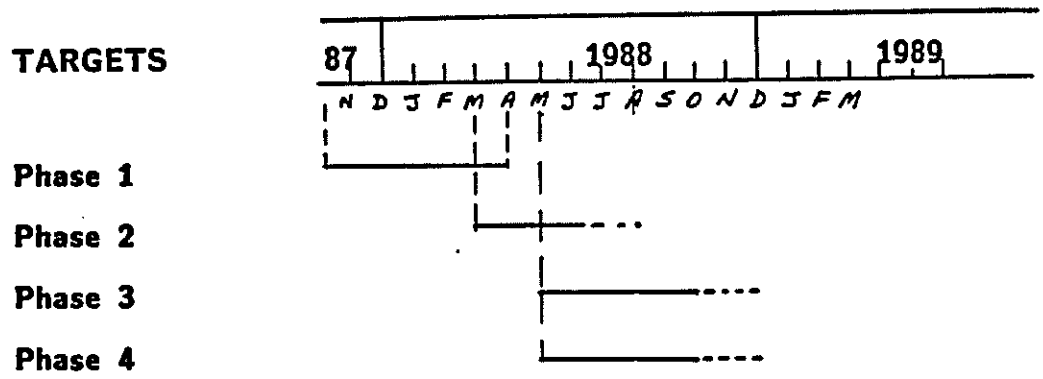
  Phase (2) Constituents and characterization of the unsaturated zone

  Phase (3) Constituents and characterization of the saturated zone

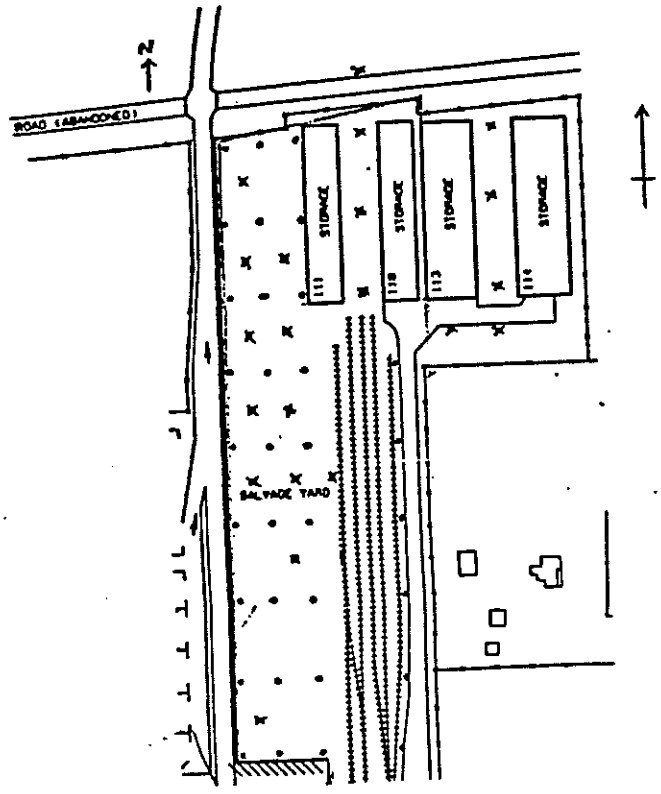
  Phase (4) Delineation of vapor phase constituents

This schedule for implementing the four phases was presented in WORK PLAN 1.

HYDRA-MATIC MACHINE STORAGE SITE SCHEDULE (WORK PLAN 1)



This diagram shows the locations where soil cores were taken during phase 1 (surface investigation) and phase 2 (unsaturated zone investigation). The circles and the Xs (with a few exceptions) show the coring locations during phase 1, while the Xs show the coring locations during phase 2. Forty two locations were cored, from 0 to 12 inches, during phase 1 and 21 locations were cored to 4 ft during phase 2.



The specific objective of phase 1 was to delineate the extent of surface contamination. A total of 42 soil samples, from 0 to 12 inches, were taken by a split-spoon sampler mounted on a drill rig. The soil sampling was carried out by Professional Services Industries, Inc., Detroit MI. These samples were analyzed by ENCOTEC for PCBs (Aroclors 1221, 1248, 1254, and 1260), heavy metals (Cr, Pb, Cd, Zn, Ni, and Fe), and total hydrocarbons. The results from these analyses are included in this presentation.

PHASE 1

- **Delineation of surface contamination**
  - **Soil cores from surface to 12 inch depth (PSI)**
  - **35 soil samples**
  - **Soil extracts will be analyzed for:**
    - **(A) PCBs:**
      - **(1) Aroclor 1221**
      - **(2) Aroclor 1248**
      - **(3) Aroclor 1254** **(ENCOTEC)**
      - **(4) Aroclor 1260**
    - **(B) Heavy metals:**
      Cr, Pb, Cd, Zn, Ni, Fe
    - **(C) Total hydrocarbons**

Here is a summary of the analytical procedures ENCOTEC followed to detect total hydrocarbon, PCBs, and heavy metals in the soil samples. As a screening step to determine if the soil was contaminated with oil, some soil samples were also extracted with freon at the General Motors Research Laboratories (GMRL).

ANALYTICAL PROCEDURES

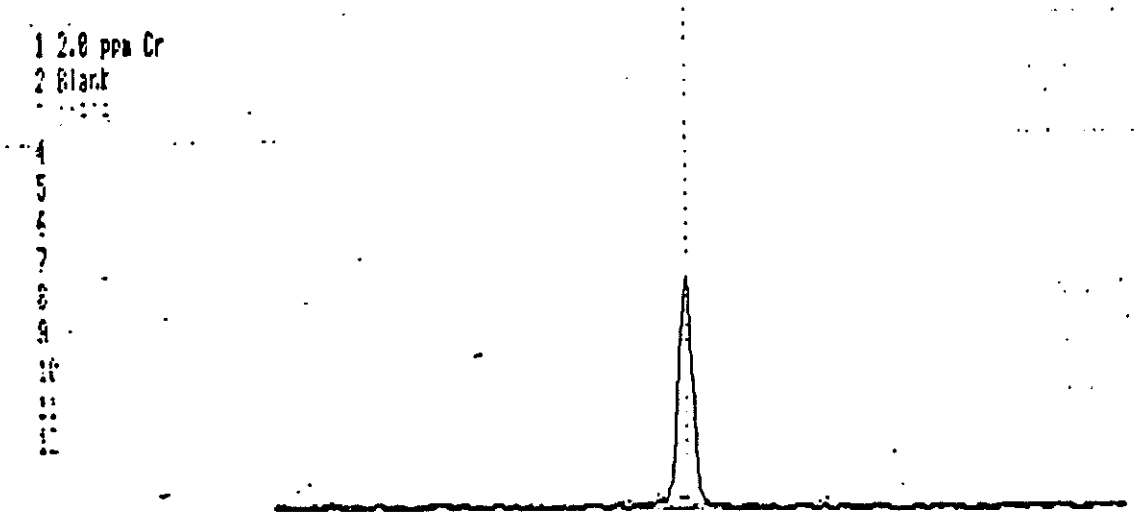
Freon extractables - oil and grease, ATF
- Extraction
- Solvent evaporation - 100°C
- Weigh residue

Total Hydrocarbon
- Extraction - CH_2Cl_2
- GC - FID

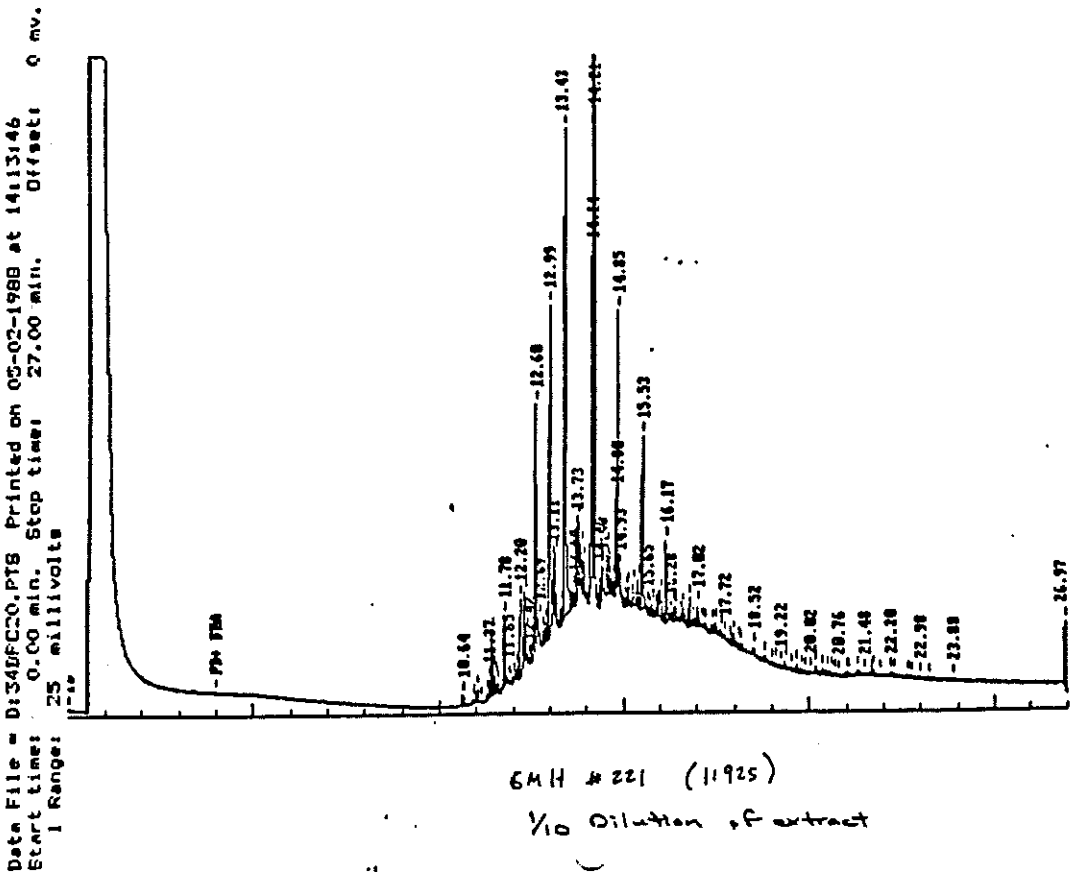
PCB'S - EPA 8080
- Extraction
- GC - EC

Heavy Metals - EPA 3050, 6010, 7420
- Total conc.
- HNO_3 Digestion
- Inductively coupled plasma

This figure shows a typical spectrum for chromium. The spectra for the other metals were similar. The spectra were used to detect the metals and to determine their concentrations in the soil samples.

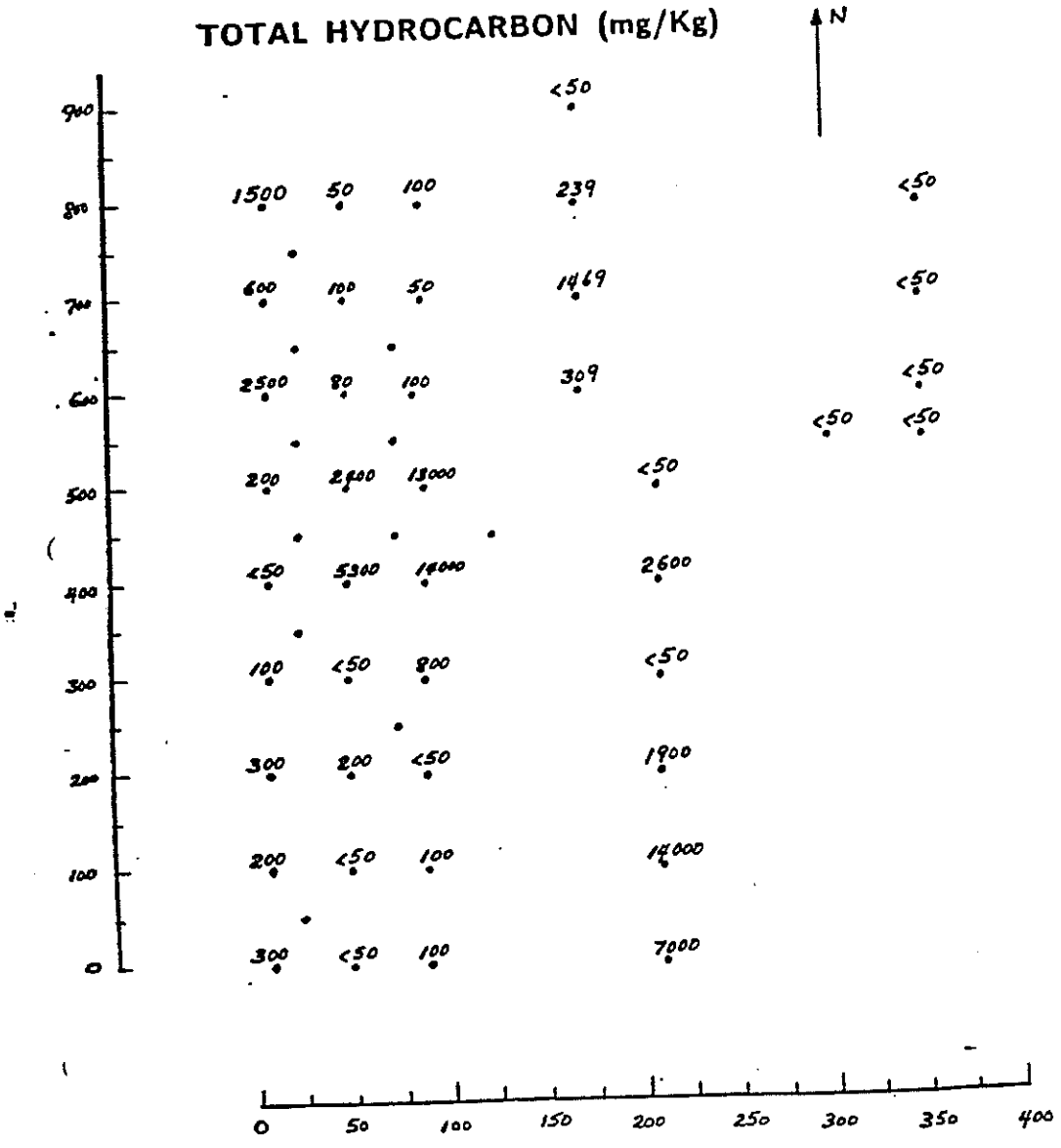


This figure shows a typical chromatogram for the total hydrocarbons in the soil samples. The chromatograms were used to determine the total concentrations of hydrocarbons in the soil samples.

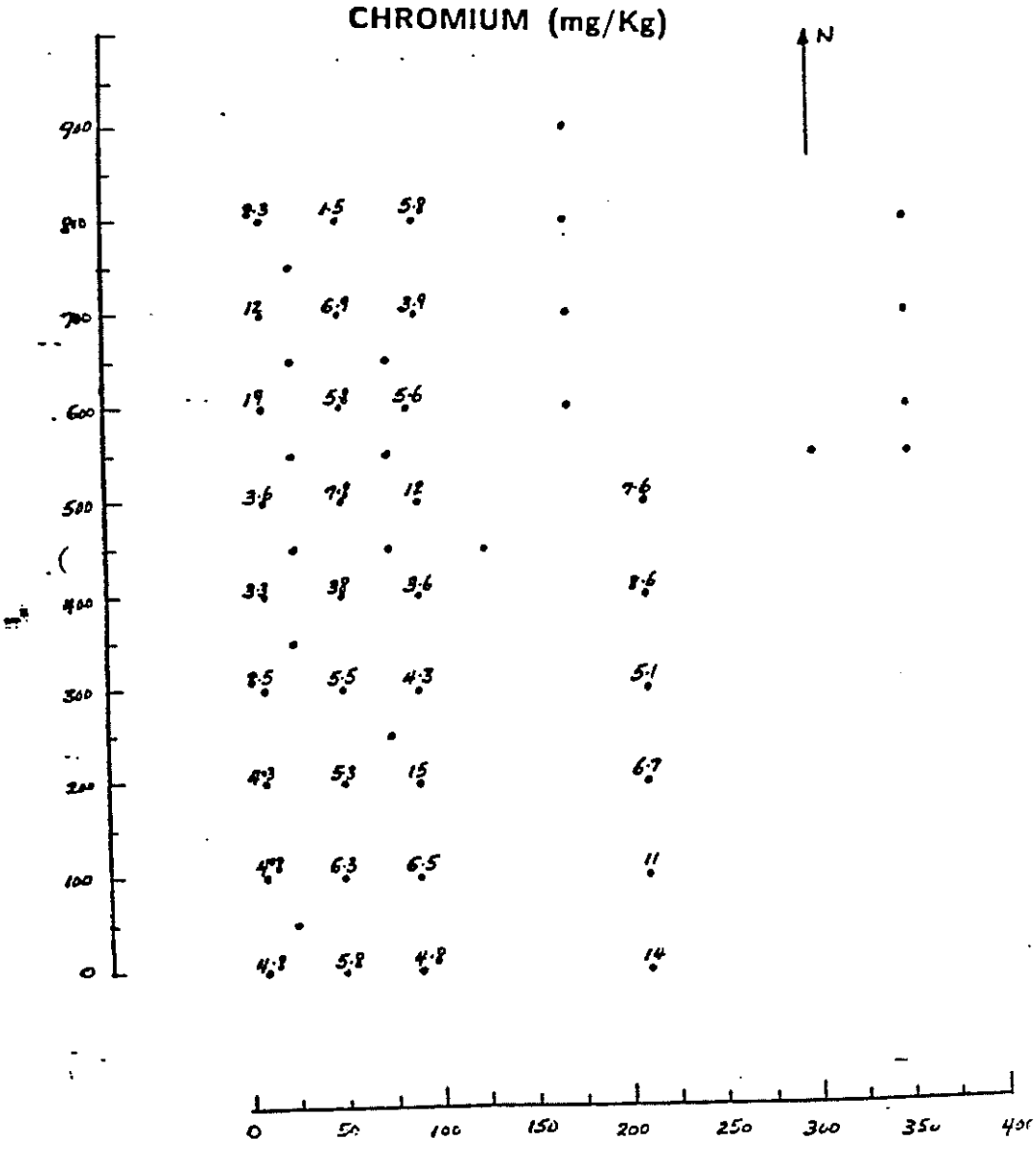


The concentrations of total hydrocarbons (mg hydrocarbon/Kg of soil) in the surface samples are shown in this diagram. The x and y axes can be used to find the sample location with respect to the south-west corner of the site, which has the coordinate 0,0.

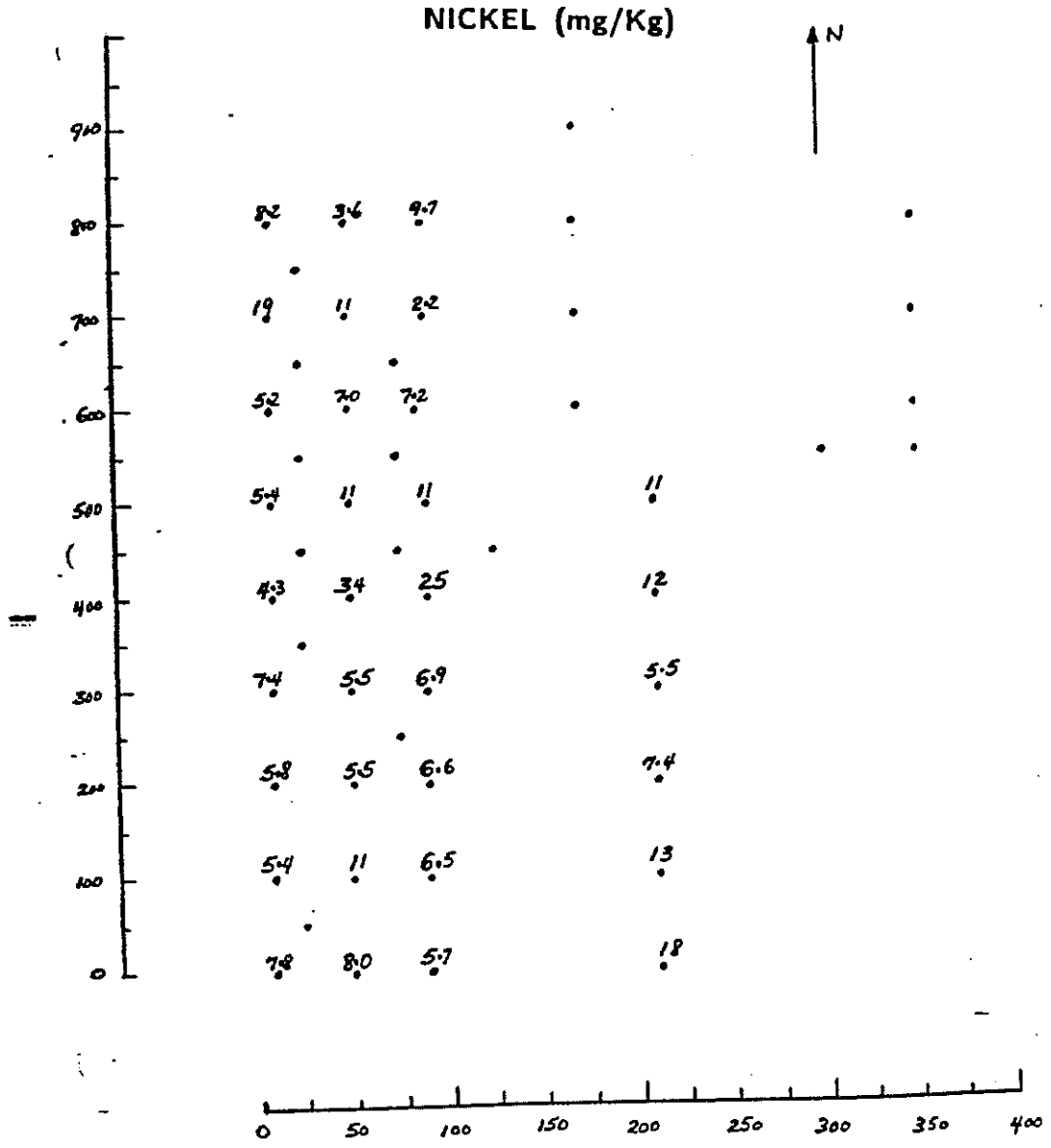
The concentrations of total hydrocarbon range from below detection (< 50 mg/Kg) to 14,000 mg/Kg.



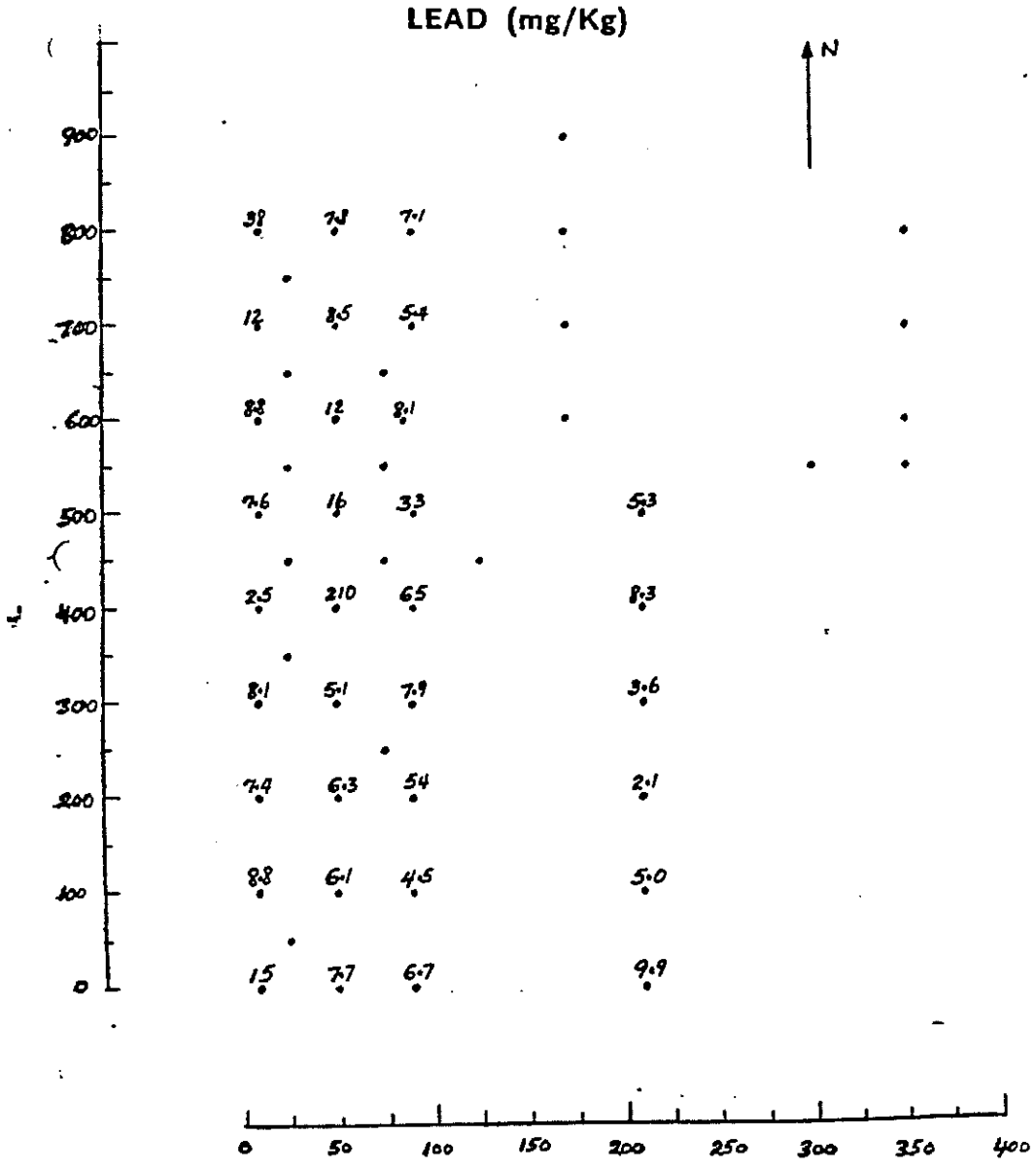
This diagram shows the concentrations (mg/Kg) of chromium in the surface samples. These concentrations of total chromium range from 1.5 to 38 mg/Kg



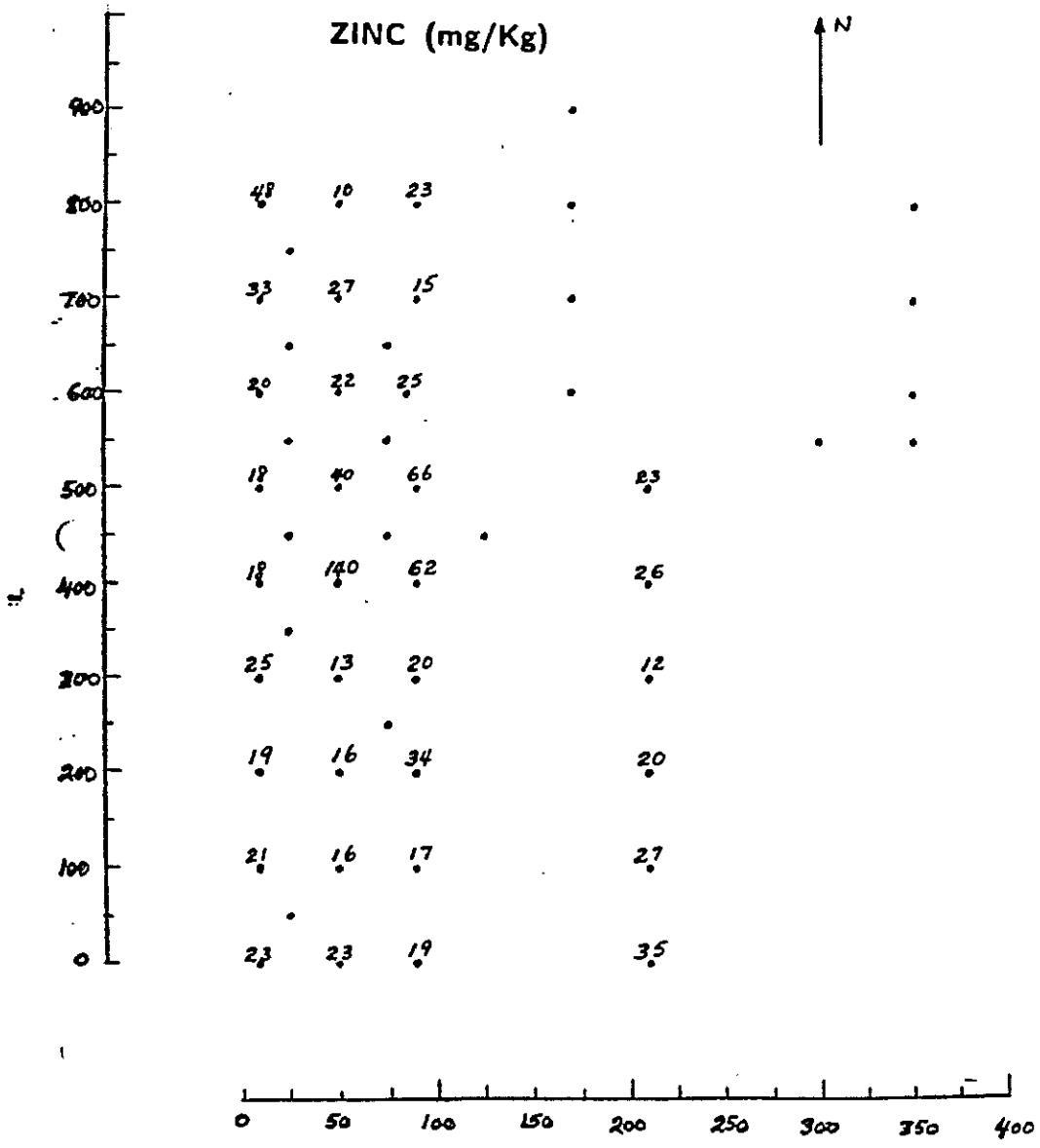
This diagram shows the concentrations (mg/Kg) of nickel in the surface samples. These concentrations of total nickel range from 2.2 to 34 mg/kg.



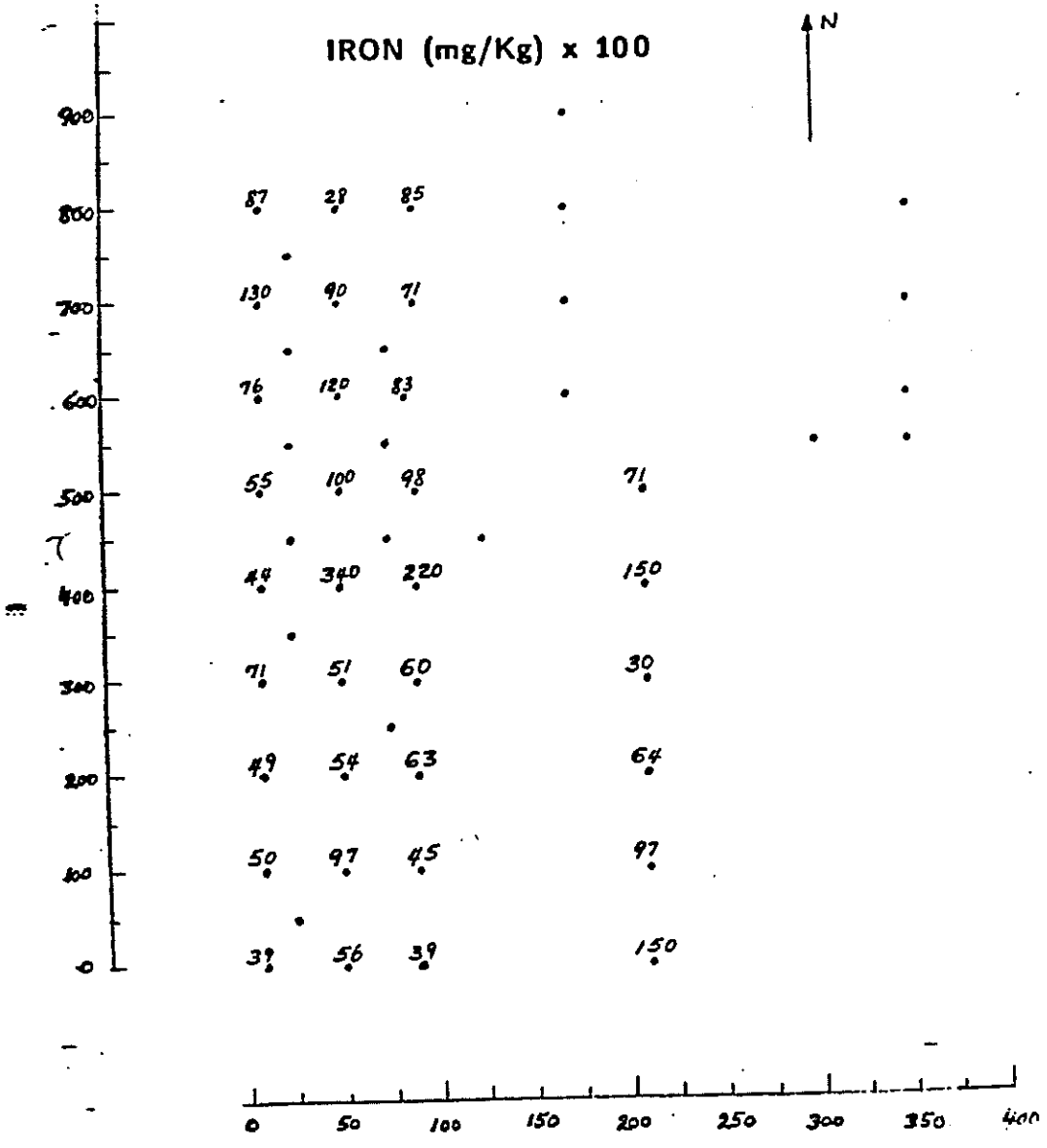
This diagram shows the concentration (mg/Kg) of lead in the surface samples. These concentrations of total lead range from 2.1 to 210 mg/kg.



This diagram shows the concentration (mg/Kg) of zinc in the surface samples. These concentrations of total zinc range from 10 to 140 mg/Kg.

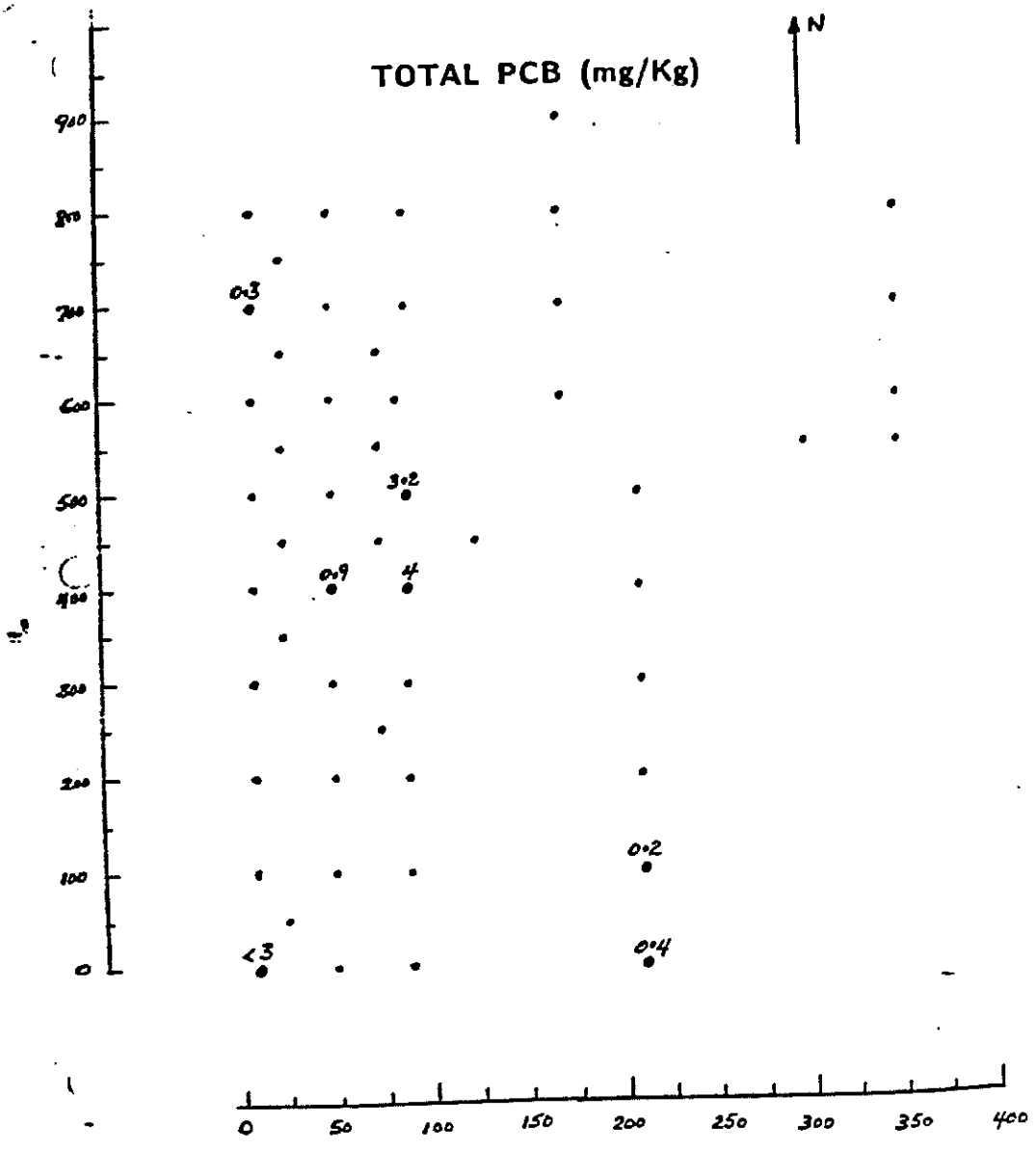


This diagram shows the concentration (mg/Kg) of iron in the surface samples. These concentrations of total iron range from 2800 to 34000 mg/Kg.



This diagram shows the concentration (mg/Kg) of PCBs in the surface samples. These concentrations are the sums of the four Aroclors (1221, 1248, 1254, 1260), each of which has a detection limit of 0.2 mg/kg. PCBs were found in seven surface samples and the concentrations range from 0.2 to 4 mg/Kg.

Based on either the concentrations of total hydrocarbons, of the metals, or of the PCBs, the region of highest contamination is bounded by the following coordinates: (50,400), (50,500), (100,400), (100,500).



Because contamination was found in the surface samples, Phase 2 of the investigation was implemented. The specific objectives of Phase 2 was to determine the vertical and lateral spread of contaminants in the unsaturated zone and to characterize the unsaturated zone. The results from this phase of the investigation is included in this presentation.

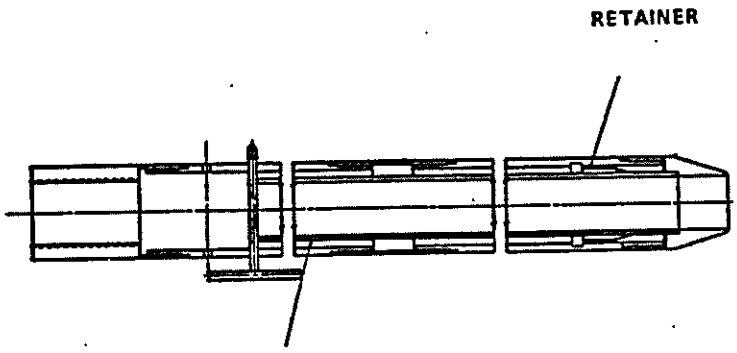
PHASE 2: INVESTIGATE THE UNSATURATED ZONE

- **Determine vertical and lateral spread of contaminants from surface**

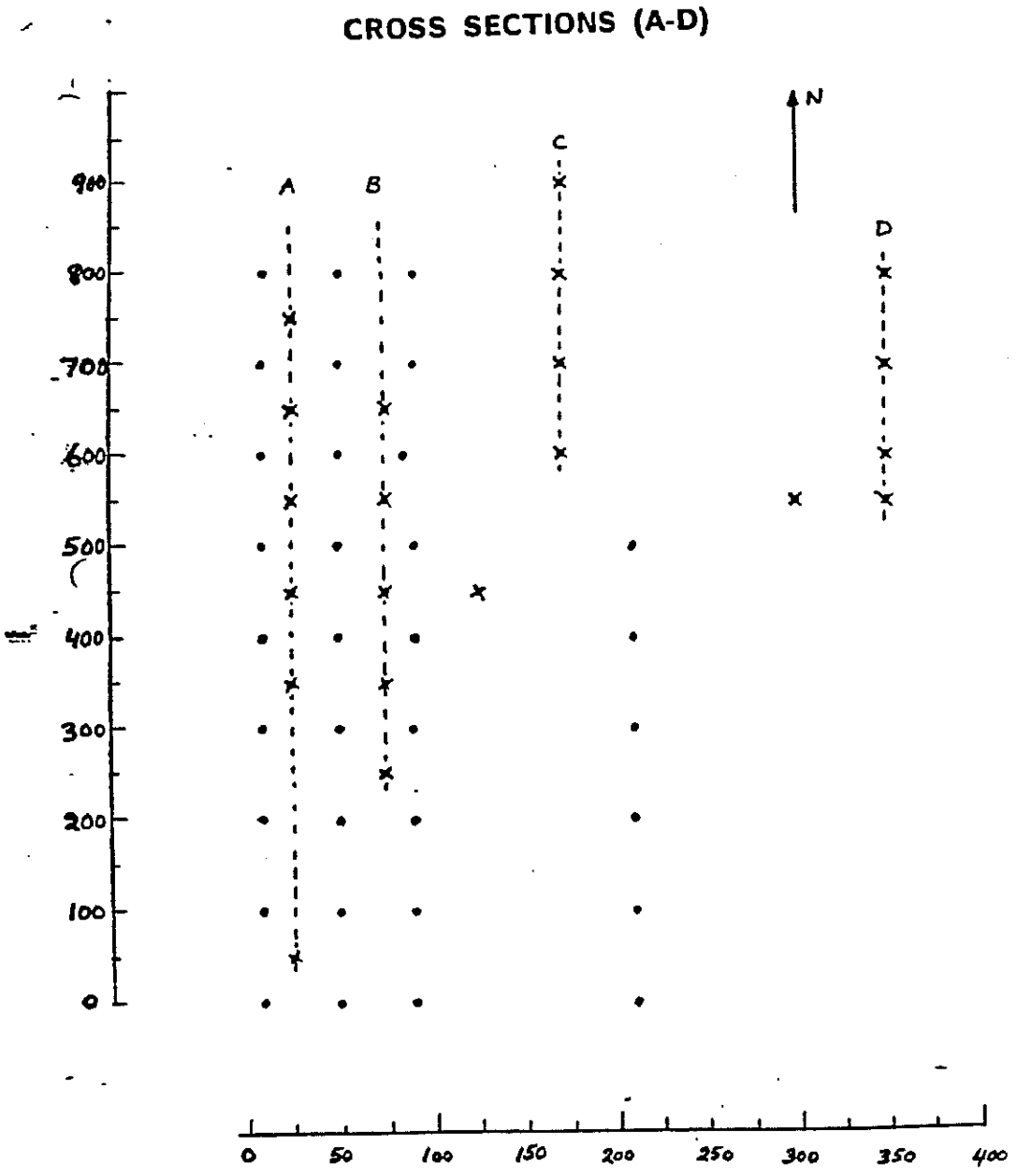
- **Characterization of unsaturated zone**

In phase 2, twenty one soil cores were taken from 1 ft to 4 ft depth by using an undisturbed soil sampler. A schematic of the soil sampler, which was designed and built at GMRL, is shown below. Each soil core was collected in a 1.75 inch I.D. aluminum tube, which was subsequently split along its length to expose the soil. Each soil core was divided into 5 inch sections. Each section was extracted with freon and the concentration of freon extractables measured. Selected cores were analyzed for metals.

UNDISTURBED SOIL CORER



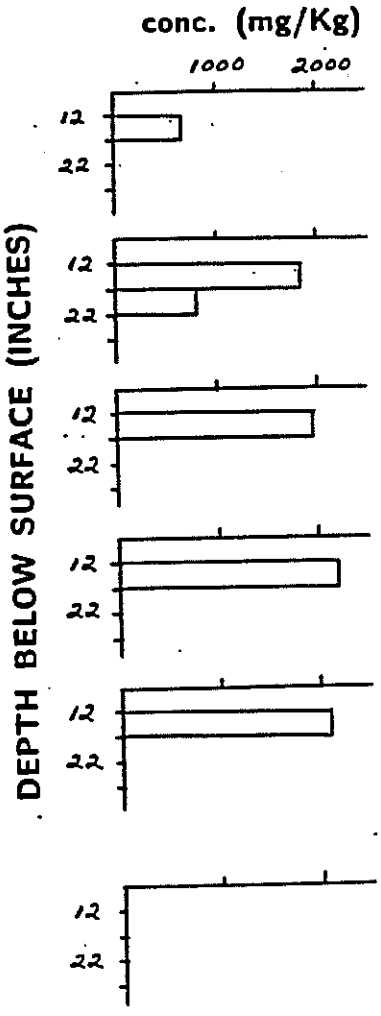
The coring locations during phase 2 are shown by the Xs. The results for freon extractables, which include the total hydrocarbons, will be presented along the four cross-sections (A, B, C, and D) shown in this diagram.



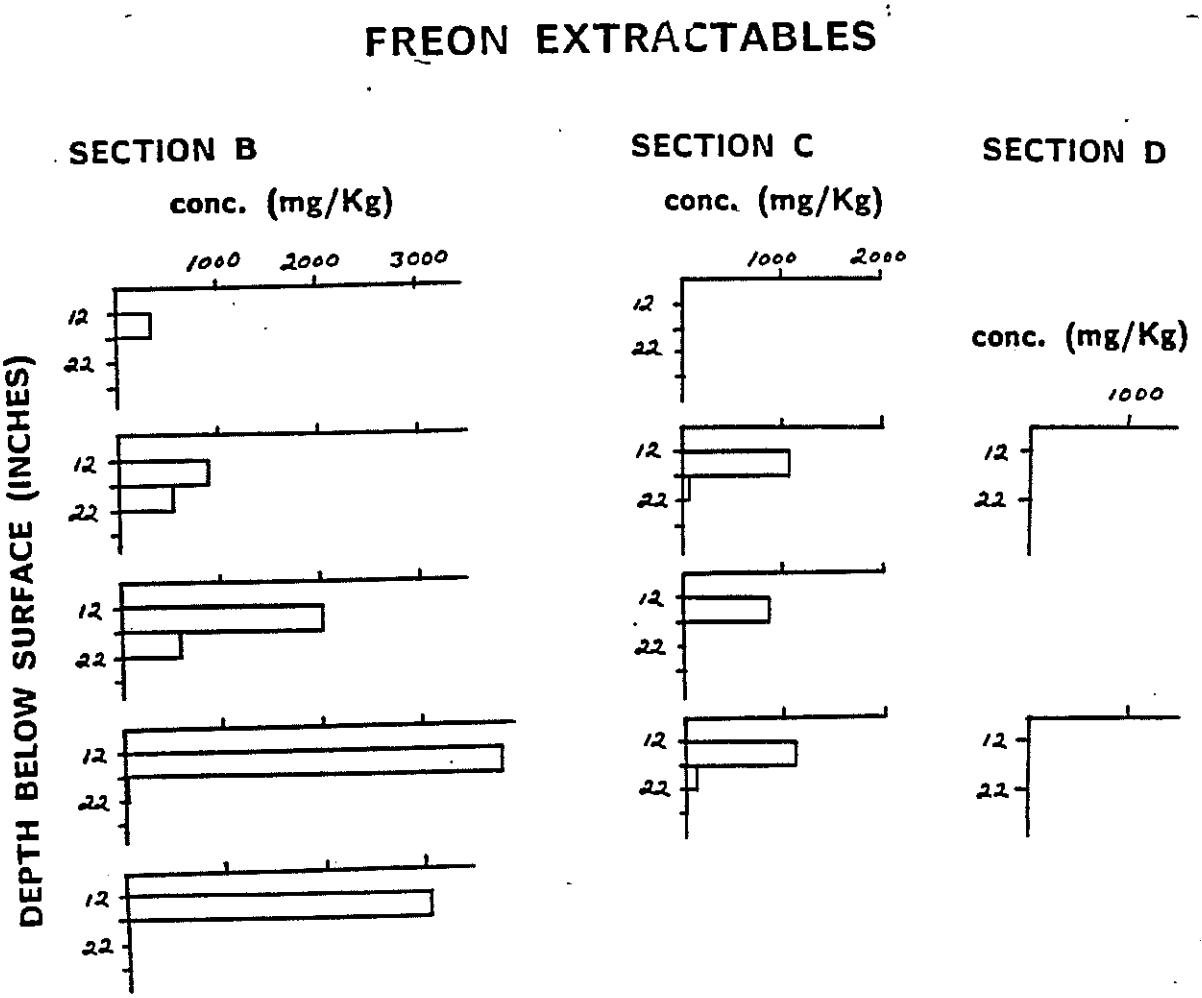
These plots going down the page are for coring locations along cross-section A, going from north to south. The results indicate that in most cases the freon extractables are above a depth of 17 inches and in no case below 22 inches. These concentrations are lower than the total hydrocarbon concentrations found in the surface samples.

FREON EXTRACTABLES - VERTICAL DISTRIBUTION

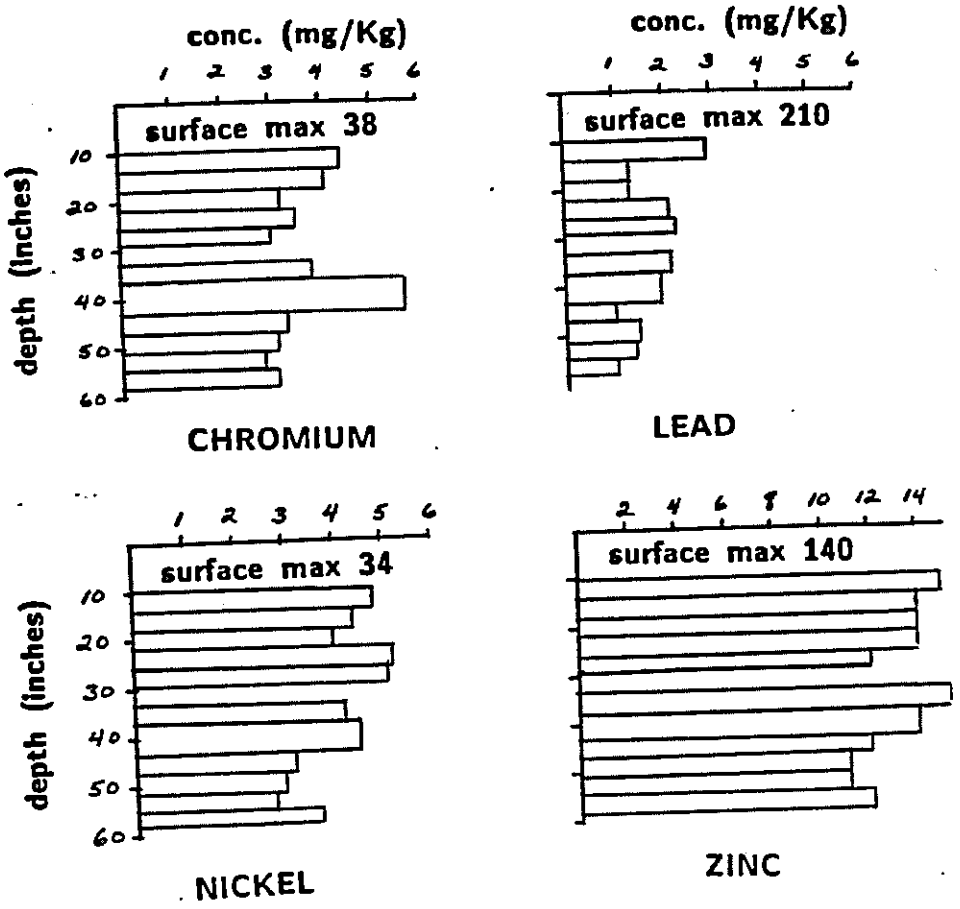
SECTION A



These results are similar to those for cross-section A.



These plots show the results for the vertical distributions of total chromium, lead, nickel, and zinc. The soil core was taken at cordinate (50,400), where the highest levels of surface contamination was found. The concentrations are given in mg/Kg and the surface concentrations are indicated in the plots. These results show that the concentrations of these metals in the soil, beneath the location of highest surface contamination, are much lower than the surface concentrations. In fact, as will be subsequently shown, these subsurface concentrations are similar to background levels.



VERTICAL DISTRIBUTIONS

METALS

As was the case for the metals, no PCB was found in the subsurface material taken from beneath areas of known surface contamination by PCBs.

PCBs

Vertical spread - undisturbed cores

- **No PCB s (<0.2 mg/Kg) below 10 inches**
- **Region with surface PCBs**

The results indicated that the lateral distributions of metals, PCBs, and total hydrocarbon-oil constituents in the surface materials are mainly confined to a 100 x 200 ft area in the center region of the site. Also, the bulk of these constituents are contained above 12 inch depth and they do not extend below 22 inch depth.

The distribution of the contaminants is adequately delineated and there is no need for further site investigation. In the second part of this presentation, which follows next, we will address the needs for site remediation.

SUMMARY

- Highly consistent patterns for metal, PCB, and hydrocarbon-oil constituents
- Lateral distribution - mainly concentrated in a central region - 100 x 200 ft
- Vertical spread -
  Bulk above 12 inch depth
  None below 17-22 inch depth

Of 33 sampling locations, PCBs were detected at 7 and their concentrations ranged from undetectable to 4 mg/Kg. Only at three locations was the concentration of PCBs greater than 1 ppm. By the requirements of a Federal spill cleanup policy (Federal Register Vol. 52, No. 63), and based on the current concentrations of PCBs in the soil there is no need for site remediation.

TOTAL PCBs

RESULTS

- Of 33 sampling locations, PCBs were detected at 7
- Range: 0 to 4 (mg/Kg)
- Three locations had higher than 1 ppm PCBs

Federal Register (Vol. 52, No. 63) PCB Spill Cleanup Policy

- Requirement for decontaminating spills in restricted access areas
  - 'Soil contaminated by spill will be cleaned to 25 ppm (mg/Kg) PCBs by weight.'
- Requirement for decontaminating spills in nonrestricted access areas
  - 'Soil contaminated by a spill will be decontaminated to 10 ppm (mg/Kg) PCBs by weight provided the soil is excavated to a minimum depth of 10 inches. The excavated soil will be replaced with clean soil, i.e., containing less than 1 ppm (mg/Kg) PCBs.'

Next, we will show that the PCBs left in place will not migrate through the unsaturated zone to the underlying perched water table. The migration of PCBs through soils will depend on the extent to which they are adsorbed by the soils or on the k_d of the PCBs. The first two equations can be used to calculate the value of k_d from the octanol-water partition coefficient (Kow) of the PCB and the organic carbon content (foc) of the soil. For the Hydra-matic site, a value for K_d of 240 was calculated.

Based on this value of K_d, if 1 cm of soil is contaminated with 4 ppm PCB, infiltrating water in equilibrium with the soil will have an aqueous concentration of 17 ppb PCB. This aqueous concentration of 17 ppb PCB will be reduced to 71 ppt as the water comes to equilibrium with another cm of soil. Because of the strong adsorption of PCBs on the soil, water leaving the contaminated surface soil will be readily cleansed soon after it leaves the surface.

MIGRATION OF PCBs

$$\log koc = 1.04 \log Kow - 0.88 \quad (r = 0.95)$$

$$k_d = foc \cdot koc$$

For: $\log kow = 5.62$
$\log koc = 4.38$
$foc = 0.01$

$$k_d = 240$$

4 ppm PCBs on soil.....17 ppb in infiltrating water

which will be immediately adsorbed.....71 ppt.....

The mobility of metals through soils is significantly dependent on the cation exchange capacity (CEC) of the soil. Typically, in the neutral pH environments of surface soils, where the CEC range from 5 to 10 meq/100 g of soil, the mobility of metals is not expected to be significant. This expectation is corroborated with the results, in that the metals are confined to the upper 12 inches of the subsurface.

MIGRATION OF HEAVY METALS

- **Significant fraction of the site material is smaller than 125 um**
- **Typically the CEC for soil ranged from 5 to 10 meq/100 g of soil**
- **The ion exchange of these metals with the soil could explain why they are contained in the thin upper layer.**

This table summarizes the results for the six metals found at the site and includes Michigan average values for sand and clay, and typical averages for Pennsylvania and Tennessee soils. From a comparison of the results with the reference values it is concluded that the subsurface levels of these metals are similar to expected background levels. Also, of the surface concentrations only those of lead, cadmium, and perhaps zinc are outside the reference ranges. These will be addressed next.

HEAVY METALS

Metals	North Yard Maximum Conc. Surface (mg/Kg	Subsur. Soil)	Michigan Avg. Sand (mg/Kg	Clay Soil)	Pennsylvania Soil (mg/Kg Soil)	Tennessee Soil (mg/Kg Soil)
Cr	38	5.7	3-4	9-25	66-100	26-74
Ni	34	5.2	3-10	25-34	25-45	6-17
Pb	210	2.9	9-14	13-23	25-32	5-19
Cd	5.6	<1	1-1.4	1-1.6	---	---
Zn	140	16	---	41-51	81-115	25-168
Fe	34000	5000	---	---	37000-56000	13000-47000

These results are EP Toxicity measurements for the most contaminated surface soil. These results indicate that non of the six metals found in the surface soil is leachable by the influx of precipitation. Further, the EP Toxicity results are within RCRA and Drinking Water Standards. Based on these results, there is no need for site remediation.

EP TOXICITY RESULTS

Parameter	Units	S-2 11/11/87 EP TOX 9193	S-3 11/11/87 EP TOX 9194	2-4 11/11/87 EP TOX 9195		RCRA STDS	Drinking Water STDS	
Cadmium	mg/l	0.01	0.01	<0.005		1.0	0.01	
Chromium	mg/l	<0.03	<0.03	<0.03		5.0	0.05	
Iron	mg/l	4.1	5.5	0.33		—	—	
Lead	mg/l	0.05	0.06	<0.02		5.0	0.05	
Nickel	mg/l	<0.05	0.07	<0.05		—	—	
Zinc	mg/l	0.08	0.25	0.02		500	5.0	

As oils drain through soils, a residual fraction is left behind trapped in the soil pore space. This residual fraction typically occupies about 20 % of the pore space (20 % saturation). Laboratory measurements with the Hydra-matic soil indicated a residual volume of about 22 percent. A residual oil volume of 20 % is equivalent to 48,600 mg of oil per Kg of soil from the site. Also, the residual fraction is not mobile; that is, it cannot drain under the influence of gravity.

The maximum concentration of total hydrocarbons in the surface soil was 14,000 mg/Kg. This level of contamination is equivalent to 5.8 % saturation. For comparison, 200 mg/Kg total hydrocarbon is equivalent to 0.08 % saturation, and it will take 11,000 gal of oil to satisfy the residual volume of a soil layer 200 ft by 100 ft by 1 ft.

Since the surface soil is significantly below residual oil saturation, the results suggest that there was no significant pool of oil on the surface, and the contamination was likely caused by small spills or leaks from the machines.

Since infiltrating water has not washed the low level of oil from the surface soil, this low residual volume of oil is considered quite stable in the surface material and does not warrant any remedial action.

TOTAL HYDROCARBONS

RESULTS

* **Maximum.....14,000 mg/Kg of surface soil**
* **Residual hydrocarbon saturation from infiltration and drainage**

ρ_b = 1.4 g/cc

η = 0.4

θ_r = 20 % of pores

= 48,600 mg/kg

* **Hydrocarbon at this concentration will be immobile**
* **14,000 mg/Kg.....5.8% saturation**
* **200 mg/Kg..... 0.08% saturation**
* **To bring a 200 ft by 100 ft by 1 ft layer of soil to residual**

11,000 gal of oil

* **These results suggest that there was no significant pool of oil on the surface.....and small spills or leaks from machines cannot fill the residual capacity of the surface soil.**

CONCLUSIONS

(1) THE CONSTITUENTS AT THE NORTH YARD DO NOT POSE RISKS TO THE SOIL AND GROUNDWATER ENVIRONMENTS AT THE SITE

(2) THESE CONSTITUENTS ARE CONTAINED IN LOCALIZED AREAS AND IN THE UPPER 22 INCHES OF THE SURFACE MATERIAL. THE RESULTS INDICATE THAT THESE CONSTITUENTS WILL NOT MIGRATE TO DEEPER ZONES AT THE SITE. THEREFORE, FURTHER SPREADING AND FUTURE RISKS ARE NOT LIKELY.

* A PERCHED AQUIFER EXIST BENEATH THE SITE WHICH IS NOT USED AS POTABLE WATER (BY ACT 307 NOT A RESOURCE)

* NO WATER RESOURCE OR LOCAL WELL IS AT RISK

* SURFACE RUNOFF FROM THE SITE ARE COLLECTED, TREATED, AND DISCHARGED UNDER PERMIT

HYDRA-MATIC'S PROPOSAL FOR ADDITIONAL WORK AT THE NORTH YARD

GMRL's results and conclusions establish that no remedial work is needed at the North Yard. However, in the interest of improving and monitoring the subsurface condition at the North Yard, Hydra-Matic proposes to implement the following:

Soil Excavation

Soil will be excavated to 2 feet below grade at a radius of 50 feet from coring locations that had PCB concentrations above 1 ppm.

Soil will be excavated to 1 foot below grade at a radius of 50 feet from coring locations that had detectable PCB concentrations below 1 ppm.

Soil Sampling

For those areas within the North Yard that will not be excavated, three randomly-located soil core samples will be taken semiannually to monitor the natural biodegradation of the residual oil in the surface soil. These cores will extend 2 feet beneath the surface. The soil samples will be analyzed for total hydrocarbons per Workplan 1. At the end of a two year period, the analytical results will be reviewed to determine the need for an ongoing sampling program.

Groundwater Monitoring

Although GMRL has analytically established that soils in the North Yard are not contributing organic or inorganic constituents to groundwater, Hydra-Matic proposes to monitor the groundwater in this area as an additional measure of ensuring that groundwater quality in the perched aquifer is not adversely impacted by historical activities at the North Yard. To accomplish this, three groundwater monitoring wells are proposed. Hydra-Matic will retain a hydrogeological consultant to develop the work plan for the well installation and to develop the sampling program. The work plan proposal will be submitted to MDNR by January 1989.

9803-046

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7/88

ENV033:Binder # 046
ATF Work on North Yard

Environmental Activities Staff
General Motors Corporation
General Motors Technical Center
30400 Mound Road
Warren, Michigan 48090-9015

Date: November 18, 1988

Subject: Documentation of work on ATF and North Yard

From: Steve Song

To: Chris Winkeljohn

Earlier this week I received a copy of the September 30, 1988 letter from Hydra-matic to the MDNR concerning the submittal of documentation on the remedial investigation conducted by GMR on the ATF Spill and North Yard at Hydra-matic, Ypsilanti.

Per our conversation, I am forwarding to you two suggested report formats for the documentation. The attached formats are from the Draft Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, March 1988, OSWER Directive 9355.3-01. Although the guidance document, on the whole, is designed to provide an understanding of the RI/FS process under the Superfund program, it contains much information that is relevant to "less rigorous" remedial investigations and feasibility studies. I believe that the report formats I have excerpted are examples of such information.

As you review these formats, I think you'll find that the items outlined are fairly consistent with what I had previously suggested as being necessary, although there are some sections in these formats that appear to be more rigorous than what is required for our immediate purpose. Specifically, these sections are: Section 6 of the RI Report Format, and Sections 3 and 4 of the FS Report Format. Inasmuch as GMR has already conducted both the "RI" and the "FS", it would be appropriate to combine the two formats to generate one report.

Please let me know if you would like to discuss this matter in more detail.

Attachments

cc: Phil Gerwert

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Table 3-13
SUGGESTED RI REPORT FORMAT

Executive Summary

1. Introduction
   - 1.1 Purpose of Report
   - 1.2 Site Background
     - 1.2.1 Site Description
     - 1.2.2 Site History
     - 1.2.3 Previous Investigations
   - 1.3 Report Organization

2. Study Area Investigation
   - 2.1 Includes field activities associated with site characterization. These may include physical and chemical monitoring of some, but not necessarily all, of the following:
     - 2.1.1 Surface Features (topographic mapping, etc.) (natural and manmade features)
     - 2.1.2 Contaminant Source Investigations
     - 2.1.3 Meteorological Investigations
     - 2.1.4 Surface-Water and Sediment Investigations
     - 2.1.5 Geological Investigations
     - 2.1.6 Soil and Vadose Zone Investigations
     - 2.1.7 Ground-Water Investigations
     - 2.1.8 Human Population Surveys
     - 2.1.9 Ecological Investigations
   - 2.2 If technical memoranda documenting field activities were prepared, they may be included in an appendix and summarized in this report chapter.

3. Physical Characteristics of the Study Area
   - 3.1 Includes results of field activities to determine physical characteristics. These may include some, but not necessarily all, of the following:
     - 3.1.1 Surface Features
     - 3.1.2 Meteorology
     - 3.1.3 Surface-Water Hydrology
     - 3.1.4 Geology
     - 3.1.5 Soils
     - 3.1.6 Hydrogeology
     - 3.1.7 Demography and Land Use
     - 3.1.8 Ecology

Table 7-7

SUGGESTED FS REPORT FORMAT

Executive Summary

1 Introduction
- 1.1 Purpose and Organization of Report
- 1.2 Background Information (Summarized from RI Report)
  - 1.2.1 Site Description
  - 1.2.2 Site History
  - 1.2.3 Nature and Extent of Contamination
  - 1.2.4 Contaminant Fate and Transport
  - 1.2.5 Baseline Risk Assessment

2 Identification and Screening of Technologies
- 2.1 Introduction
- 2.2 Remedial Action Objectives--
  Presents the development of remedial action objectives for each medium of interest (i.e., ground water, soil, surface water, air, etc.). For each medium, the following should be discussed:
  - Contaminants of interest
  - Allowable exposure based on risk assessment
  - Allowable exposure based on ARARs
  - Development of remedial action objectives
- 2.3 General Response Actions--
  For each medium of interest, describes the estimation of areas or volumes to which treatment, containment, or exposure technologies may be applied.
- 2.4 Identification and Screening of Technology Types and Process Options--For each medium of interest, describes:
  - 2.4.1 Identification and Screening of Technologies
  - 2.4.2 Evaluation of Technologies and Selection of Representative Technologies

3 Development and Screening of Alternatives
- 3.1 Development of Alternatives--
  Describes rationale for combination of technologies/media into alternatives. Note: This discussion may be by medium or for the site as a whole.
- 3.2 Screening of Alternatives
  - 3.2.1 Introduction
  - 3.2.2 Alternative 1
    - Description
    - Evaluation
      - Effectiveness
      - Implementability
      - Cost

Subject: Work Plan 2 for ATF

1. Page 2: How will we know when the ATF is removed?
2. What about pockets of ATF that remain?
3. Page 3: Extrapolation of plume beyond wells just east of the storm sewer needs to be addressed or taken out since it appears that the plume is entering the sewer and we do not have any data to support this.
4. Page 7: How did you arrive at the size of the drawdown cones and why are they different sizes.
5. Why are the regions of the plume outside of the drawdown cones not being addressed.

Subject: Work Plan 1 for the North Yard

1. Page 1: Change to Chris Winkeljohn (BSc., chemical engineering)
2. Page 2: The word 'implement' in the third line is misspelled
3. Page 3: Last line of text to read "Potential contaminants at the site are: Include .
4. Why would we expect to find PCB's at the site? This needs to be addressed in the text.
5. Attention must be given to the fact that HydraMatic's procedure called for draining machinery before taking

them out to the NOrth Yard, and that only residual oils, with rainwater were spilled onto the ground.

6. Page 5: What does "at risk" mean? Why is do you say that there is no surface water at risk when Willow Creek and Tyler Pond are 1/2 mile south of the plant?

7. Page 7: Second paragraph; What, specifically, will tell you when to increase the sampling density.

8. Why only these aroclors and heavy metals. This must be addressed in the text.

9. Page 11 Specifically, what conditions will tell you when pore water chemistry must be looked at and why?

Subject: Work plan 2 for the North Yard

1. Page 5: Work Plan 1 called for 25 soil cores. How did you get to 42 cores.

2. Page 6: What did the results from the GMR screening extractions performed on the soil samples tell you? What is the screening criteria.

3. Page 8: How did you get from this chromatogram to actual ppm. What is a normal or background level.

4. Page 9: What did the results from phase 1 tell you and how did you come up with the phase 2 coring locations and the number of cores to be taken?

5.Pg.11-15 Where is the data for the rest of the sampling

locations? Where is the data for Cd as called for in work plans 1 and 2?

6. Page 16 If PCB was not detected at any other locations, then this must be indicated on the diagram.

7. Page 22 For the Vertical Distributions of Metals slide not show values for Cd and Fe?

8. Page 25 The Federal regulations called out here are not applicable here since the spillage occurred prior to the promulgation of this reg. and is therefore not covered.

Inter-Organization

Environmental Activities Staff
General Motors Corporation
General Motors Technical Center
30400 Mound Road
Warren, Michigan 48090-9015

Date: September 15, 1988

Subject: ATF Project at Hydra-matic, Ypsilanti

From: Steve Song

To: Ron Williams

Your group's presentation of its work on the above referenced project last Friday at EAS is much appreciated. I hope the exchange of information and perspectives was as useful for your group as it was enlightening for us. I look forward to further exchanges of this type.

Problems in contaminant identification, plume delineation, and remediation are of much interest to all of us. Basic research in these areas is of value to not only GM but the environmental management community in general. GMRL's effort to carry this research into the field is commendable as is its attempt to translate the results from basic research into innovative solutions of real-life problems at Hydra-matic, Ypsilanti.

Combining field research with practical real-world problem solving does, unfortunately, raise concerns. Unless very clear distinctions are made between which activities are motivated by research objectives and which are appropriate for practical problem solving, ample opportunities will be presented for those who are either unfamiliar with the work or inexperienced in this field to loose sight of the research and practical problem solving applications. The resulting potential confusion could present obvious significant difficulties in future investigations where the scope of work is constrained by practicality and cost-effectiveness. This mutual concern has been voiced previously and was articulated again last Friday.

To forestall potential problems of this nature, I trust you'll agree that it is imperative that the documentation of GMRL's work on the above referenced project firmly establishes all explicit and/or implicit research related objectives within the more obvious overall objective and clearly distinguishes between what was research and what was practical problem solving.

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By letter dated August 16, 1988 from Don Schafer to Charles San Juan, Hydra-matic indicated that detailed documentation of the above referenced project, compiled by GMRL, will be submitted to the MDNR by October 3, 1988. I believe that it would be appropriate to have a draft of the documentation ready for review by September 19, 1988.

cc: Don Schafer, Hydra-matic
Chris Winklejohn, Hydra-matic
Nick Gallopoulos, GMRL
Phil Gerwert, GM EAS
Don Schiemann, GM Legal

E.C. JORDAN CO. ENGINEERS & SCIENTISTS

SAMPLING PLAN

HYDROGEOLOGIC INVESTIGATIONS AT FIVE SEPARATE AREAS

HYDRA-MATIC WILLOW RUN PLANT

Prepared for:

GENERAL MOTORS CORPORATION
HYDRA-MATIC DIVISION
Ypsilanti, Michigan

SAMPLING PLAN

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Prepared for:

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Ypsilanti, Michigan

Prepared by:

E.C. JORDAN CO.
FARMINGTON HILLS, MICHIGAN

Job No. 5883-00

January 1989

TABLE OF CONTENTS

SECTION	TITLE	PAGE NO.
1.0	INTRODUCTION	1
1.1	BUILDING #19 TANK FARM	1
1.2	POWERHOUSE TANK FARM	1
1.3	NORTH YARD	4
1.4	BAY Q-24	4
1.5	TRANSMISSION SUBTEST AREA	4
2.0	PHASE I ACTIVITIES	6
2.1	BUILDING #19 TANK FARM	6
2.2	POWERHOUSE TANK FARM	6
2.3	NORTH YARD	9
2.4	BAY Q-24	9
2.5	TRANSMISSION SUBTEST AREA	9
3.0	FIELD PROCEDURES	14
3.1	SOIL BORINGS AND SOIL SAMPLING	14
3.2	GROUNDWATER MONITORING WELLS	14
3.3	GROUNDWATER SAMPLING	15
4.0	ANALYTICAL PROGRAM	16

APPENDICES

APPENDIX A - FIELD SAMPLING FORMS

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
1-1	LOCATION OF THE GM HYDRA-MATIC PLANT.....	2
1-2	LOCATIONS OF THE FIVE AREAS OF INVESTIGATION.....	3
2-1	PROPOSED WELL LOCATIONS - BUILDING #19 TANK FARM.....	7
2-2	PROPOSED WELL LOCATIONS - POWERHOUSE TANK FARM.....	7
2-3	PROPOSED WELL LOCATIONS - NORTH YARD.....	10
2-4	PROPOSED WELL AND SOIL BORING LOCATIONS - BAY Q-24...	11
2-5	PROPOSED WELL LOCATIONS - TRANSMISSION SUBTEST AREA..	13

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
4-1	SAMPLE SUMMARY TABLE.....	17
4-2	DNR SCAN 1 COMPOUNDS.....	18
4-3	DNR SCAN 2 COMPOUNDS.....	19
4-4	SAMPLE CONTAINER AND PRESERVATION REQUIREMENTS.....	20

1.0 INTRODUCTION

The General Motors (GM) Hydra-matic Willow Run plant is located in Ypsilanti, Michigan, within Washtenaw County (see Figure 1-1). In 1953, GM purchased the facility from the Ford Motor Company to house its transmission manufacturing operations. Hydra-matic currently produces automatic transmissions for automobiles and trucks. The major production operations include machining, stamping, heat treating and assembly.

Hydra-matic has identified five areas of potential environmental contamination at their plant which they wish to investigate (see Figure 1-2). These five areas are as follows:

- Building #19 Tank Farm
- Powerhouse Tank Farm
- North Yard
- Bay Q-24; Main Manufacturing Building
- Transmission Subtest Area

In each area, a preliminary Phase I investigation will be conducted to collect information on groundwater and/or soil to assess environmental impacts due to various potential contaminant sources. Additional phases of data collection may be required at one or more of the five areas to adequately assess site conditions. If environmental impacts are identified, remedial actions will be evaluated and implemented, as appropriate, during subsequent phases not covered by this sampling plan.

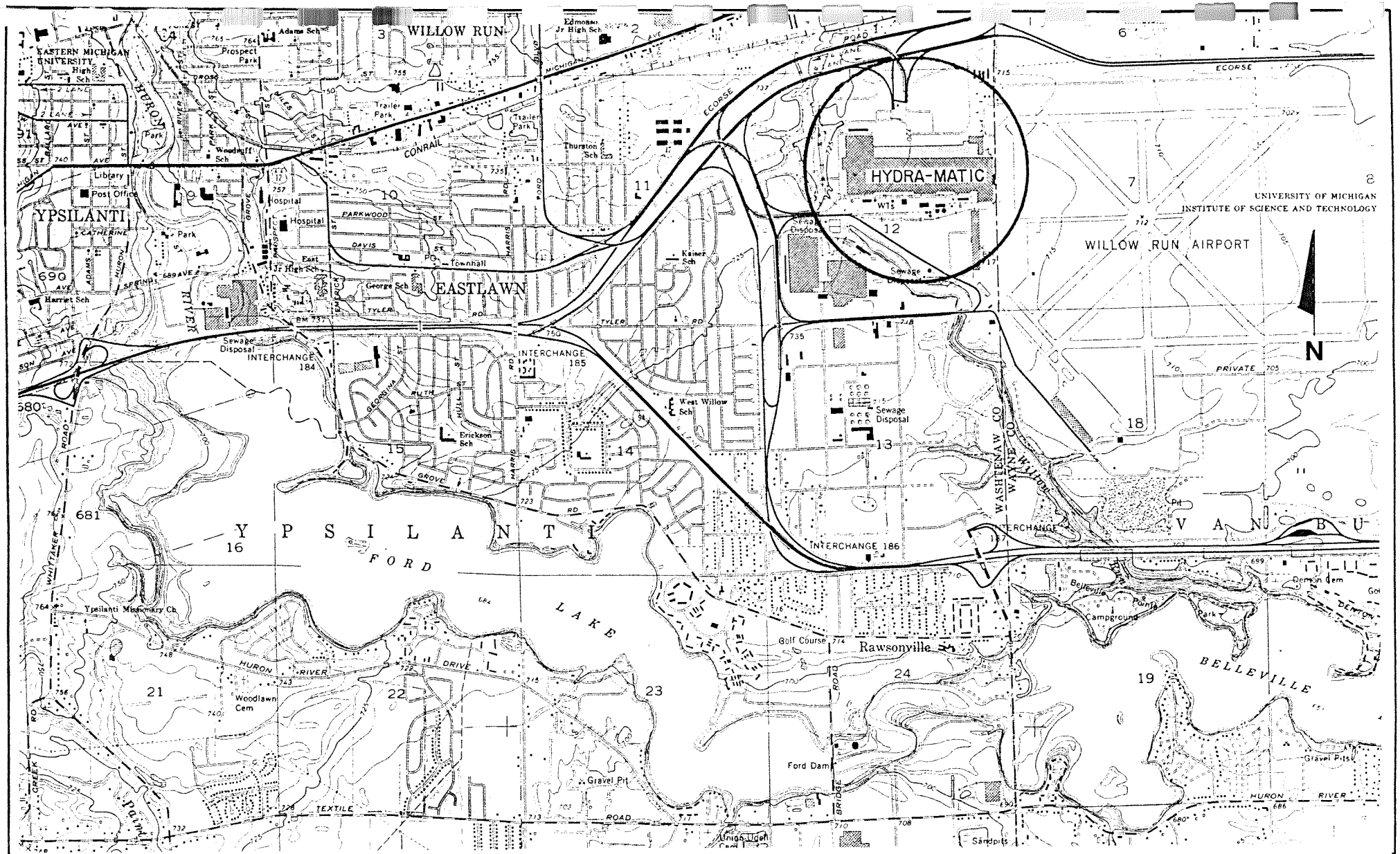
This sampling plan includes three sections after the introduction. Section 2.0 summarizes the Phase I activities to be completed in each area; Section 3.0 describes field procedures and sampling methodologies; and Section 4.0 presents the analytical program. The following paragraphs describe each area of investigation.

1.1 BUILDING #19 TANK FARM

Hydra-matic recently performed a leak check on an existing 15,000-gallon underground gasoline storage tank located south of the main manufacturing building between Building #17 and Building #19. The results of this test indicated that the tank will not maintain a constant level when full. Hydra-matic suspects that soil and/or groundwater contamination may have occurred as a result of this condition. Groundwater monitoring wells will be installed, and soil and groundwater samples will be collected and analyzed, to see if soil or groundwater in this area has been contaminated due to the underground tank.

1.2 POWERHOUSE TANK FARM

Hydra-matic is currently constructing a vaulted tank farm directly within the boundaries of the existing Powerhouse Tank Farm, located south of the main manufacturing building. As part of this construction project, the existing





QUADRANGLE LOCATION

0 1500 3000 6000 FEET

TAKEN FROM U.S.G.S. YPSILANTI EAST, MICH. 7.5' QUADRANGLE MAP.

FIGURE 1-1
LOCATION OF THE
GM HYDRA-MATIC PLANT
WILLOW RUN, MICHIGAN

EC JORDAN CO

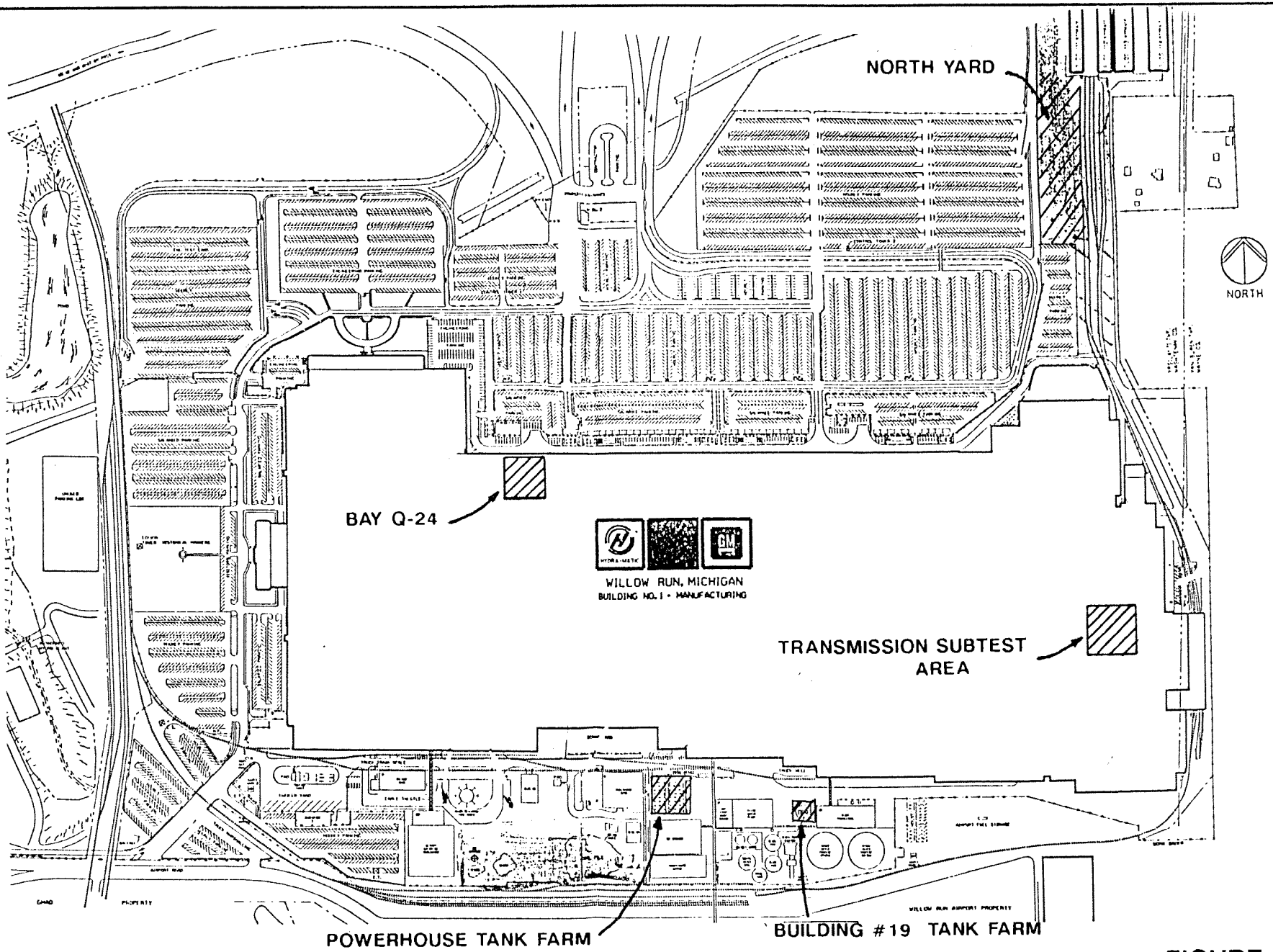


FIGURE 1-2
LOCATIONS OF THE FIVE AREAS OF INVESTIGATION
HYDRA-MATIC HYDROGEOLOGIC INVESTIGATIONS

E.C. JORDAN CO.

underground storage tanks are scheduled for removal. These tanks were installed in 1942 with the original facility. Since that time, these tanks have been used to store fuel oils, gasoline, a wide range of petroleum oils, and waste oils from the wastewater treatment plant.

During the excavation phase of the tank farm construction project, transmission fluid was detected in a groundwater pumping well that is being used to dewater the construction site. The underground storage tanks are the suspected source of this contamination. The Phase I investigation of this potential problem includes the installation of groundwater monitoring wells, the collection of soil and groundwater samples, and the analysis of those samples.

1.3 NORTH YARD

The North Yard is located on the northeast corner of Hydra-matic's property. This area was used to store production machinery and equipment that had been taken out of service. The equipment was stored directly on the soil surface, and residual metal-working fluids and various oils that remained in the equipment leaked into the soil.

To determine the extent of contamination in the North Yard, GM conducted a subsurface soil study. The results indicated that the contaminants were confined to the upper 24 inches of soil; this material was removed from the site. A groundwater monitoring well network will be installed during this phase to evaluate groundwater quality in the area.

1.4 BAY Q-24

Bay Q-24 is located in the main manufacturing building. Hydra-matic recently discovered a leak in a 5-gallon sump that is used to collect soluble oil coolant from a production machine pad. This soluble oil was found to be leaking into a void between the top of the sump and the concrete floor. Leaking occurred only when the sump was full. Based on available information, Hydra-matic has estimated that 1,000 gallons of coolant (3% oil, 97% water) leaked into the soil over a 4-year period. During Phase I, soil borings will be conducted, groundwater monitoring wells will be installed, and soil and groundwater samples will be collected and analyzed.

1.5 TRANSMISSION SUBTEST AREA

The Transmission Subtest Area is located in the northeast section of the main manufacturing building. This area consisted mainly of hydraulically operated test machines for several transmission components. Most of the equipment is currently being removed as part of a new product program.

During a previous hydrogeologic study at an adjacent area, an oil plume was discovered beneath the Transmission Subtest Area, and 14 wells were installed to delineate the plume and to locate its source. Due to various constraints, however, the plume boundaries have not yet been completely defined. The Phase

I investigation in the Transmission Subtest Area will consist of the installation of temporary monitoring wells to locate the oil plume boundaries and to develop an updated oil-thickness contour map.

2.0 PHASE I ACTIVITIES

The following paragraphs describe Phase I investigation activities proposed for each of the five areas. These activities may be altered in the field depending upon the conditions encountered.

2.1 BUILDING #19 TANK FARM

Field activities at the Building #19 Tank Farm will include groundwater monitoring well installation, groundwater sampling and analysis, soil sampling and analysis, and static water level measurements.

Four 15-foot-deep groundwater monitoring wells will be installed at the Building #19 Tank Farm at the approximate locations shown in Figure 2-1. The wells will be constructed to straddle the water table and to also screen the entire saturated zone. Each well will be finished at grade.

A total of 16 soil samples (plus two duplicates) will be collected from split-spoon samples and analyzed for benzene, toluene, and xylene (BTX). After measuring static water levels and checking for floating product, groundwater samples will be collected from each well. These four samples, plus one blank and one duplicate, will be analyzed for BTX.

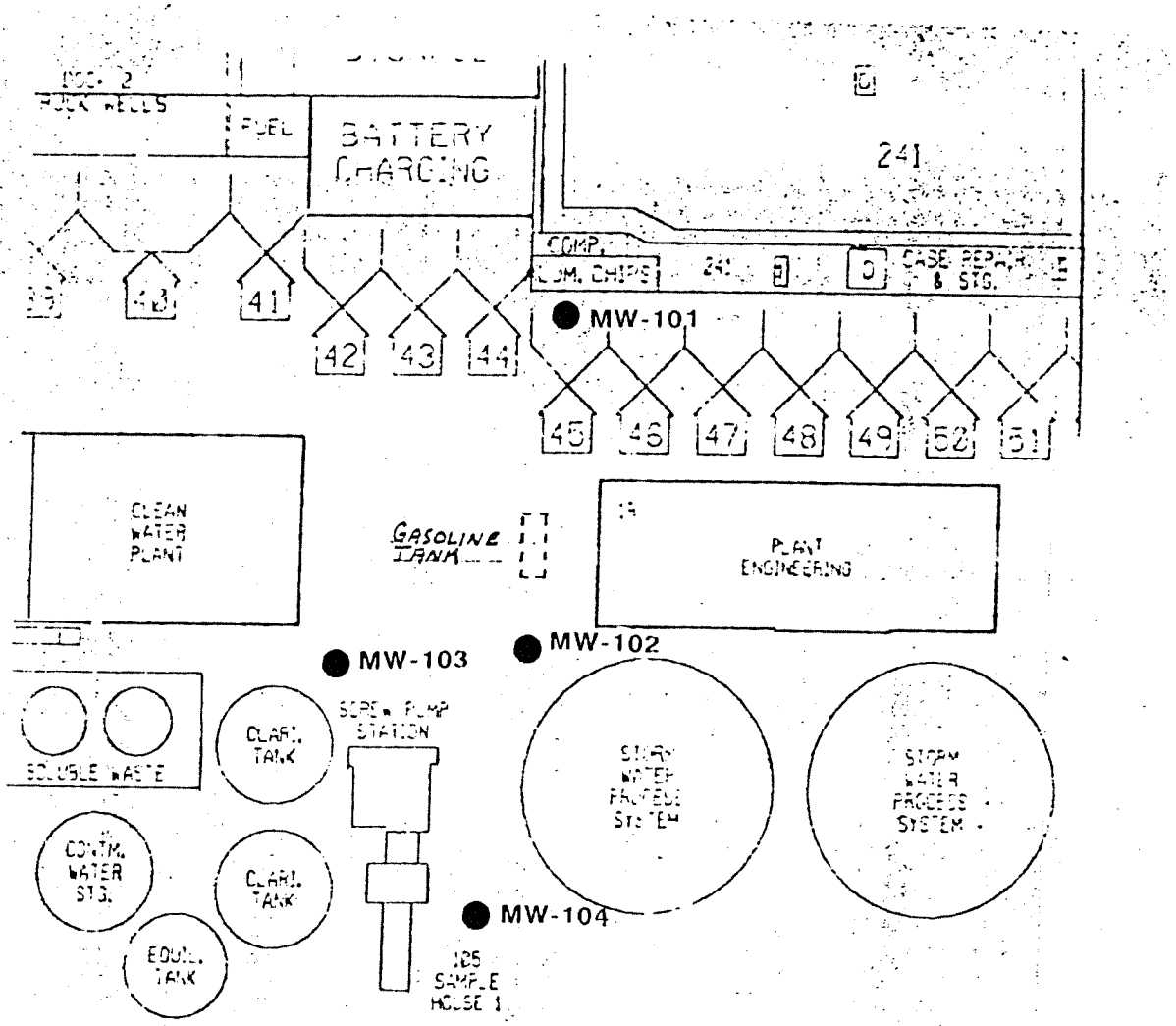
2.2 POWERHOUSE TANK FARM

Field activities at the Powerhouse Tank Farm will include groundwater monitoring well installation, groundwater sampling and analysis, and soil sampling and analysis.

Three 25-foot-deep groundwater monitoring wells will be installed at the Powerhouse Tank Farm at the approximate locations shown in Figure 2-2. The wells will be constructed so that the entire saturated zone is screened. Wells MW-1 and MW-2 will be finished at grade with a locking inner well cover and a water box cemented in place. Wells MW-3 will be finished above grade with a locking well protector cemented in place.

A total of 18 soil samples (plus two duplicates) will be collected from split-spoon samplers and analyzed for BTX and total hydrocarbons. Six samples will be selected from each 25-foot-deep boring.

After measuring static water levels and checking for floating product, groundwater samples will be collected from each well. These three samples, plus one blank and one duplicate, will be analyzed for BTX and total hydrocarbons. If oil is found on top of the water table, the samples will also be analyzed for polychlorinated biphenyls (PCBs).

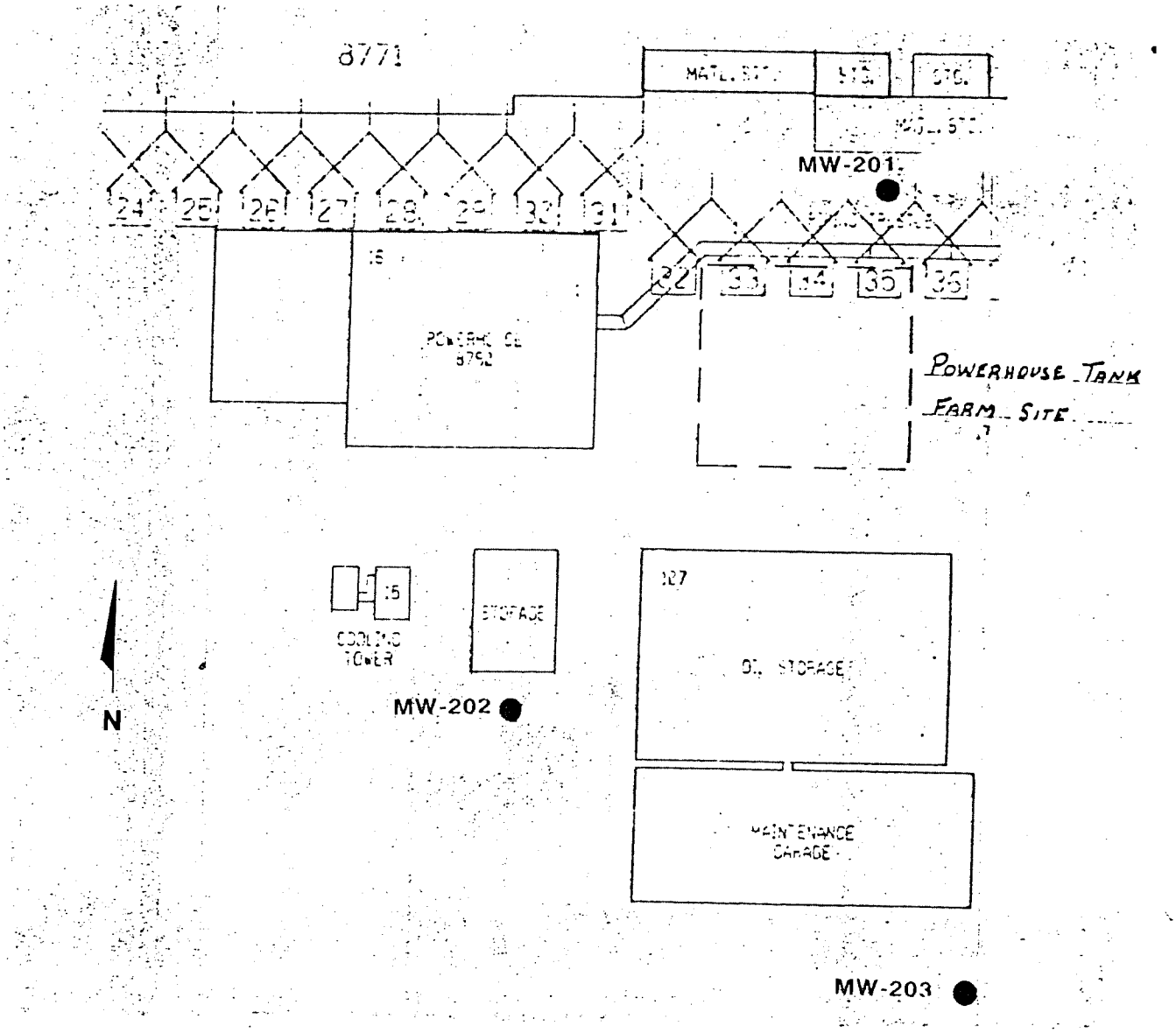


KEY

● MONITORING WELL

FIGURE 2-1
PROPOSED WELL LOCATIONS
BUILDING # 19 TANK FARM
HYDRA-MATIC HYDROGEOLOGIC INVESTIGATIONS

GM DRAWING # HWR-G1



KEY

● MONITORING WELL

FIGURE 2-2
PROPOSED WELL LOCATIONS
POWERHOUSE TANK FARM
HYDRA-MATIC HYDROGEOLOGIC INVESTIGATIONS

GM DRAWING # HWR-TF-1

2.3 NORTH YARD

Field activities for the North Yard investigation will include groundwater monitoring well installation, and groundwater sampling and analysis.

Three 15-foot-deep groundwater monitoring wells will be installed in the North Yard at the approximate locations shown in Figure 2-3. The wells will be constructed so that the entire saturated zone is screened. Each well will be finished above grade with a locking well protector cemented in place. Soil samples will not be collected during drilling.

After measuring static water levels, groundwater samples will be collected from each well. These three samples, plus one blank and one duplicate, will be analyzed for dissolved metals (Cd, Cr, Fe, Ni, Pb, and Zn), purgeable halocarbons (DNR Scan 1), and purgeable aromatic hydrocarbons (DNR Scan 2). If an oil layer is found on top of the water table, the samples will also be analyzed for PCBs.

Following this initial sampling event, a two-year quarterly groundwater sampling program (eight sampling events) will be implemented. This program will include the collection of groundwater samples from all three wells (plus one blank and one duplicate). The samples will be analyzed for the parameters listed above.

2.4 BAY Q-24

Field activities at Bay Q-24 will include groundwater monitoring well installation, groundwater sampling and analysis, and soil sampling and analysis.

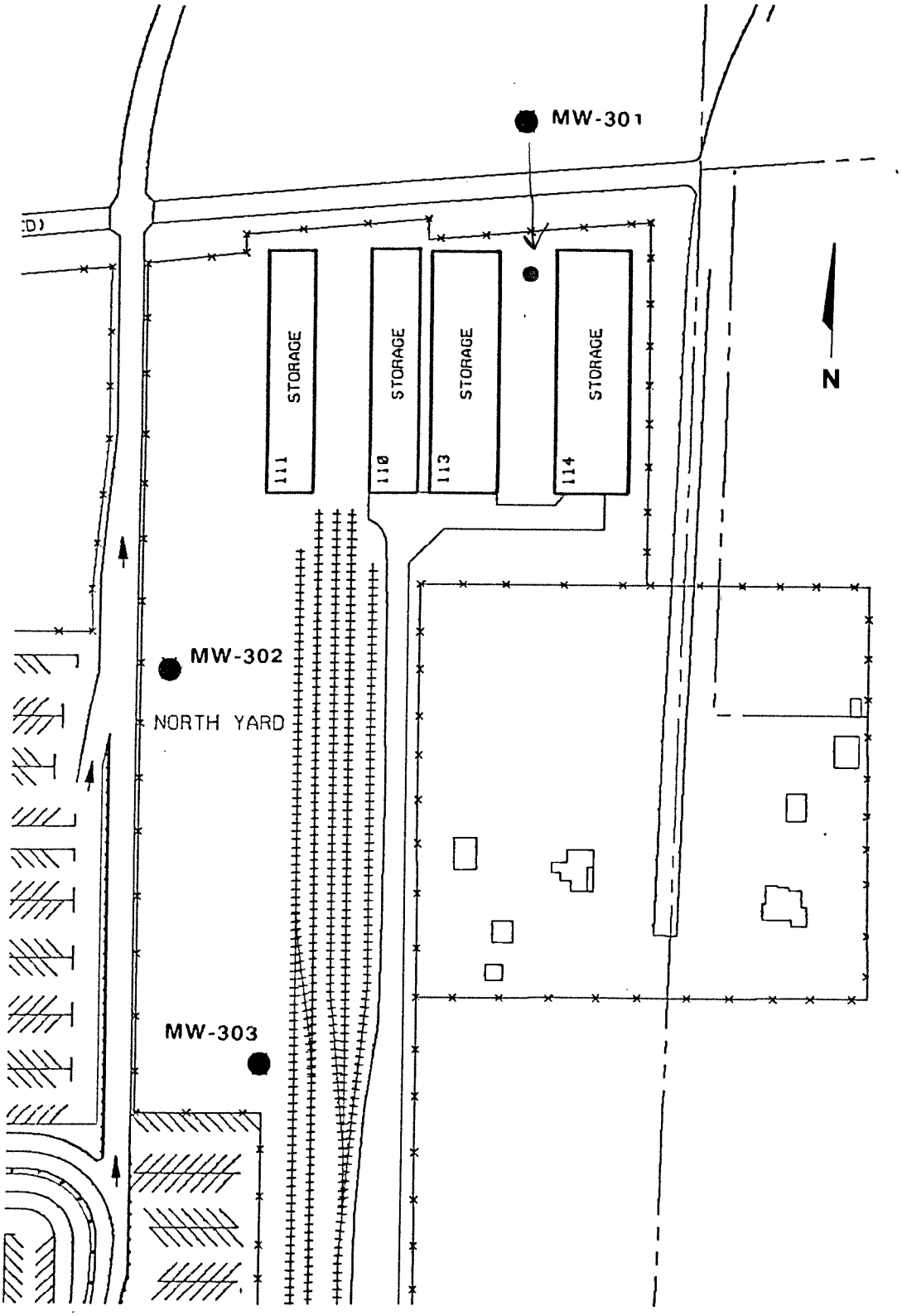
Two 15-foot-deep soil borings will be drilled, and three 15-foot-deep groundwater monitoring wells will be installed at Bay Q-24. Approximate locations are shown in Figure 2-4. The wells will be constructed so that the entire saturated zone is screened. Each well will be finished at grade with a locking inner well cover and a water box cemented in place.

A total of 20 soil samples (plus two duplicates) will be analyzed for total hydrocarbons and four metals (Cr, Cu, Pb, and Zn). Four samples will be selected from each of the five borings. The soil borings without monitoring well installations will be grouted upon completion.

After measuring static water levels and checking for floating product, groundwater samples will be collected from each well. These three samples, plus one blank and one duplicate, will be analyzed for total hydrocarbons and four dissolved metals (Cr, Cu, Pb, and Zn).

2.5 TRANSMISSION SUBTEST AREA

Field activities in the Transmission Subtest Area investigation will include groundwater monitoring well installation, oil-thickness measurements, and well abandonment.



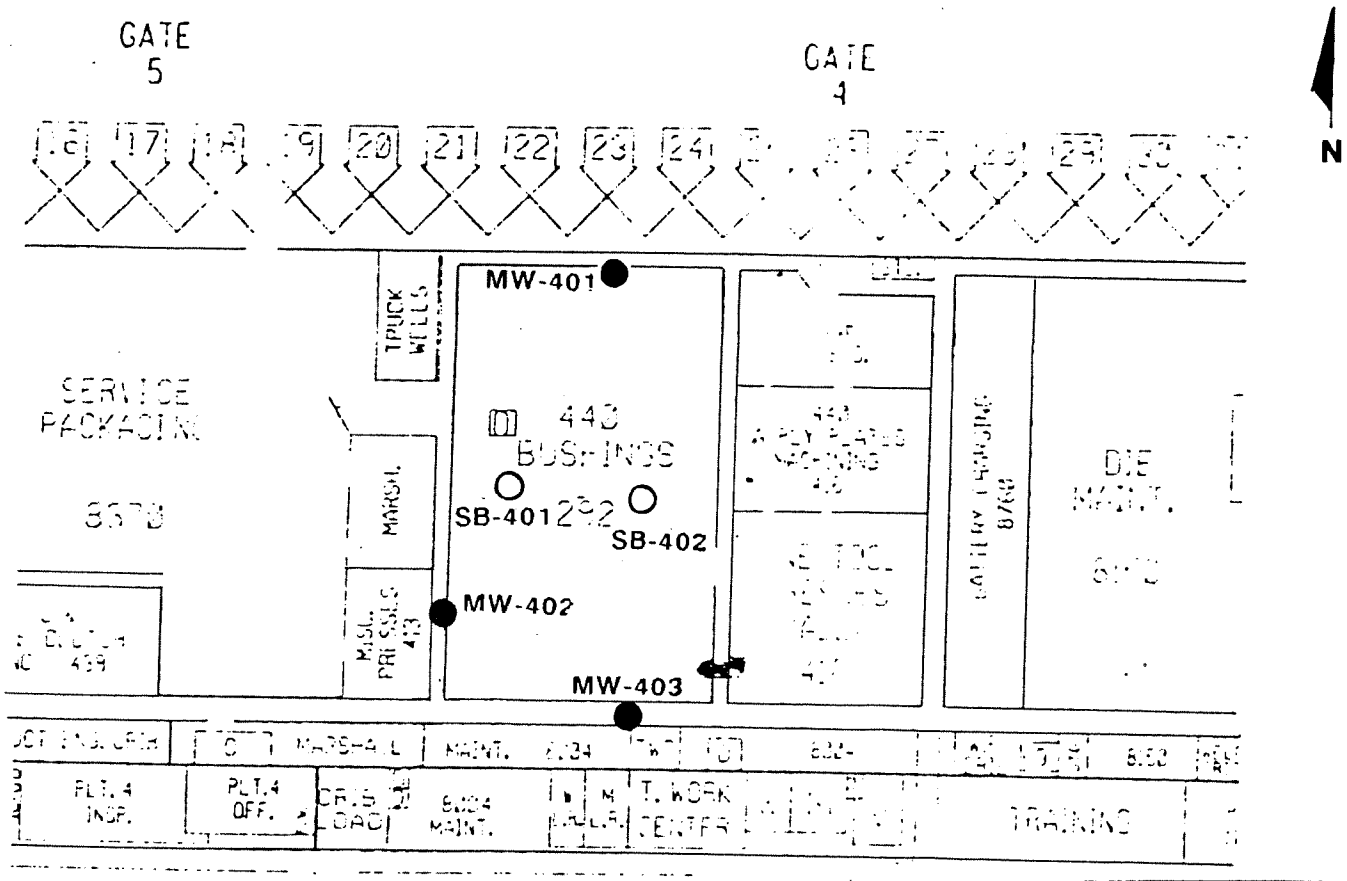
KEY

● MONITORING WELL

FIGURE 2-3
PROPOSED WELL LOCATIONS
NORTH YARD AREA
HYDRA-MATIC HYDROGEOLOGIC INVESTIGATIONS

GM DRAWING # HWR-NY-1

ECJORDANCO



KEY

● MONITORING WELL

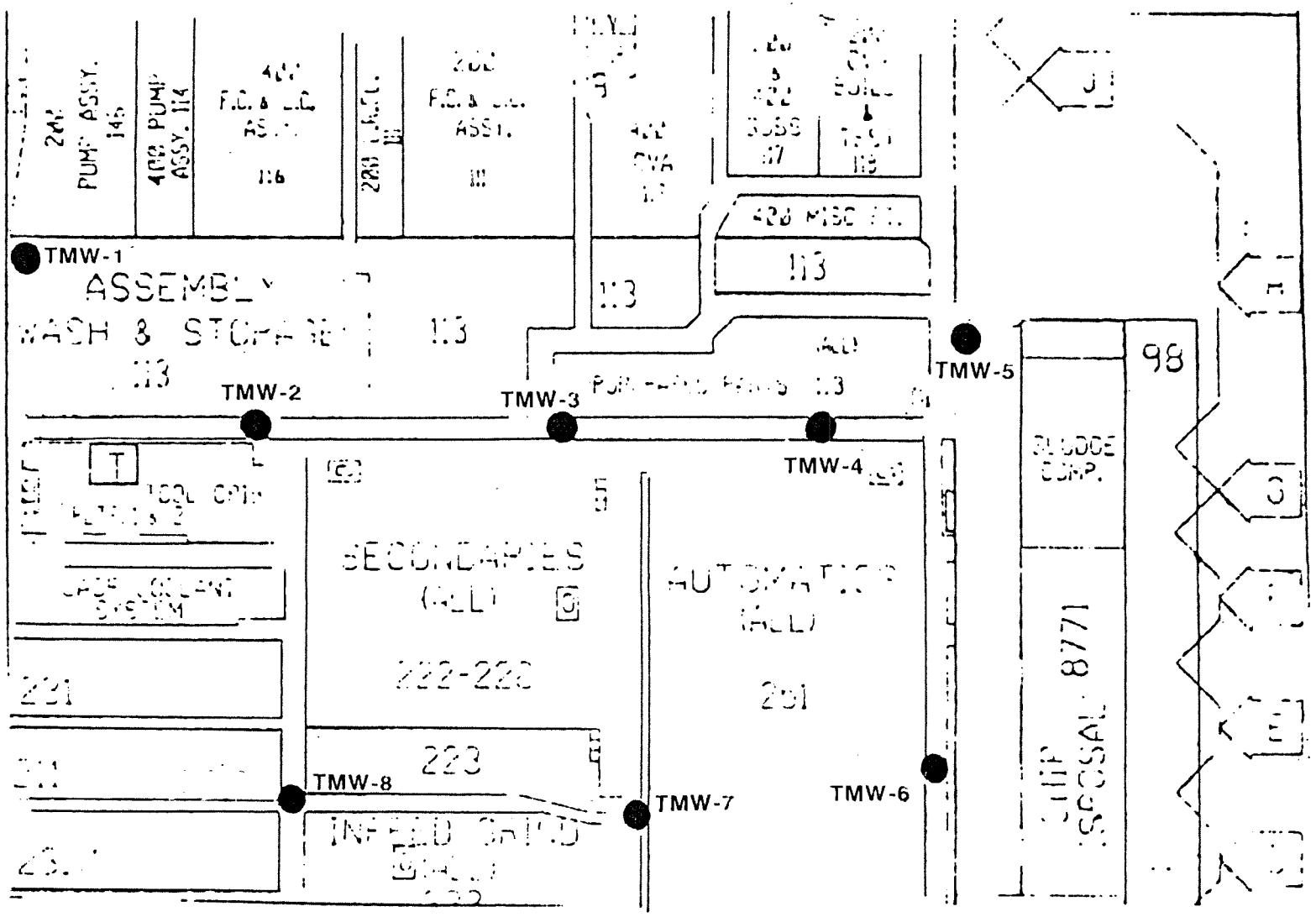
○ SOIL BORING

FIGURE 2-4
PROPOSED WELL AND SOIL BORING LOCATIONS
BAY Q-24
HYDRA-MATIC HYDROGEOLOGIC INVESTIGATIONS

GM DRAWING # HWR-Q24

Eight 15-foot-deep temporary groundwater monitoring wells will be installed in the Transmission Subtest Area at the approximate locations shown in Figure 2-5. The wells will be constructed so that the well screen straddles the water table. Because these wells are temporary, each well will be finished at grade by using the minimum amount of protection required for that location without jeopardizing the well. Soil samples will not be collected during drilling.

After well development, the thickness of oil existing on top of the water table will be measured in each well. After the measurements have been collected, each well will be abandoned by grouting.



KEY

● MONITORING WELL

GM DRAWING # HWR-SA2

FIGURE 2-5
PROPOSED WELL LOCATIONS
TRANSMISSION SUBTEST AREA
HYDRA-MATIC HYDROGEOLOGIC INVESTIGATIONS

ECJORDANCO

3.0 FIELD PROCEDURES

The following paragraphs describe the field procedures that Jordan will follow during each Phase I investigation at the Hydra-matic plant. Procedures for soil sampling, groundwater monitoring well installation, and groundwater sampling are described below. Jordan's subcontractor, Professional Service Industries, Inc. (PSI) will conduct all subsurface explorations.

3.1 SOIL BORINGS AND SOIL SAMPLING

Soil boring will be completed with truck-mounted CME-45 drilling rig using hollow-stem augers. Soil samples will be collected continuously in split-spoon samplers. Each split-spoon will be screened for the presence of volatile organic chemicals with a photoionization (PI) meter immediately upon opening the split-spoon. The soil sample will then be placed in the appropriate jars and visually observed and described by the onsite geologist.

A minimum of three grab samples from each split-spoon sampler will be composited to form one representative sample. The composite samples will be homogenized by mixing representative portions of each discrete soil sample in a stainless steel bowl. Samples for benzene, toluene and xylene (BTX) analysis will not be mixed because to do so could result in a loss of volatile organic chemicals from the sample. These samples will be composited by selecting portions of the sample from several discrete points in the sample interval and placing them directly into the sample container. After mixing, the samples will be transferred to the appropriate sample containers, labeled, and placed on ice in coolers until delivery to the laboratory.

Labels will include sample designation (e.g., SB-1), sampling interval (e.g., 5-10 feet), time and data of sampling, samplers initials, and Jordan's job number. Soil descriptions, groundwater observations, PI meter reading and other perrtinent informatin will be documented on Soil Boring Long/Monitoring Well Diagram forms (see Appendix A).

To reduce the potential for cross-contamination during drilling, down-hole drilling equipment will be steam-cleaned at the drilling location after the completion of each boring. During soil sampling, the split-spoon sampler will be decontaminated with trisodium phosphate (TSP) and water. Soil borings without monitoring wells will be grouted upon completion.

3.2 GROUNDWATER MONITORING WELLS

Groundwater monitoring wells will be constructed of 2-inch ID, flush-threaded, schedule 40, PVC riser pipe and 2-inch ID, 10-slot, 10-foot-long, PVC well screens. The screens will be sand-packed and the remaining annular space grouted to the surface. Most wells will be completed at grade with a locking inner well cover and a water box cemented in place, although some will be completed above grade with a locking well protector cemented in place.

After installation, each well will be developed to remove fine-grained sediment from the well and the aquifer material near the screen. This will be accomplished by bailing, or by the air-lift technique using an air compressor equipped with a hydrocarbon filter on the outlet. Groundwater will be removed from the well until the water appears to be free of fine-grained sediment.

After installation, the top of casing of each well will be surveyed to an accuracy of ± 0.01 foot. In addition, the relative location of each well and soil boring will be measured from existing reference points to an accuracy of ± 1.0 foot.

Well construction details will be documented on Jordan's Soil Boring Log/Monitoring Well Diagram form (see Appendix A). Information such as well materials, screen depth, grout type, etc., will be included on this form.

3.3 GROUNDWATER SAMPLING

After allowing the wells to stabilize following installation, groundwater samples will be collected. Prior to evacuation, static water levels and well depths will be measured to the nearest 0.01 foot. The wells will be evacuated by bailing or pumping three well volumes of groundwater (or until the well goes dry). While evacuating, pH, temperature, and specific conductance will be measured a minimum of three times (or until parameters stabilize) to check that stagnant water has been removed from the well. Samples will be collected using a stainless steel bailer fitted with a bottom-emptying device or a stainless steel submersible pump suitable for sampling groundwater that may contain organic compounds. If a bailer is used, new cord will be attached to the bailer before each well is sampled. Care will be taken to avoid contact between the bailer (and bailer cord) and the ground.

Water samples to be analyzed for metals will be field-filtered, preserved to a pH of less than 2 with nitric acid, and placed in the appropriate sample container. After processing and labeling, the samples will be kept in coolers with ice until delivery to the laboratory. Labels will include sample location (e.g., MW-1), date and time of sampling, sampler initials, type of analyses required, Jordan's job number, preservation, and information on whether or not the sample was filtered. Each sample will be documented on Jordan's groundwater field sample data record (see Appendix A).

The bailer or sampling pump will be decontaminated between samples with TSP and water followed by a distilled water rinse. Decontamination procedures will be checked by submitting sampler blanks for analysis. A sampler blank is a distilled water sample handled and processed in the same manner as a groundwater sample (i.e., it is poured into the bailer and into sample bottles, filtered, preserved, etc.).

4.0 ANALYTICAL PROGRAM

The analytical program for the Phase I investigations includes the analysis of soil and groundwater for various organic and inorganic parameters. Table 4-1 summarizes the number and types of samples to be collected in each area and the analytical methods to be used. Quality control samples will consist of the field duplicates and blanks listed on Table 4-1.

Table 4-4 shows sample container and preservation requirements for the analyses to be performed. Appropriate containers will be provided by Environmental Control Technology (ENCOTEC), the laboratory which will perform the analyses.

An example chain-of-custody record is included in Appendix A. This form includes information such as project number, project name, station number, date and time of sampling, type of sample (i.e., composite or grab sample), station location, number of containers, and media. At the bottom of the form, there are boxes for relinquishing and receiving signatures plus date and time. These forms will be initiated by Jordan when samples are collected.

Also included in Appendix A is Jordan's analysis request form. This form is submitted with each shipment of samples to assure that the proper analyses are performed.

TABLE 4-1
SAMPLE SUMMARY TABLE
HYDRA-MATIC WILLOW RUN PLANT
YPSILANTI, MICHIGAN

LOCATION SAMPLE TYPE ANALYSIS(METHOD #)	FIELD SAMPLES	FIELD DUPLICATES	SAMPLER BLANKS	TOTAL SAMPLES
BUILDING #19 TANK FARM				
Soil Samples				
Benzene, toluene, and xylene (5030/8020)	16	2	0	18
Groundwater Samples				
Benzene, toluene, and xylene (5030/8020)	4	1	1	6
POWERHOUSE TANK FARM				
Soil Samples				
Benzene, toluene, and xylene (5030/8020)	18	2	0	20
Total Hydrocarbons (GC) (ASTM 3328)	18	2	0	20
Groundwater Samples				
Benzene, toluene, and xylene (5030/8020)	3	1	1	5
Total Hydrocarbons (GC) (ASTM 3328)	3	1	1	5
* PCBs (3510/8080)	3	1	1	5
NORTH YARD				
Groundwater Samples				
DNR Scan 1 (Table 4-2)	3	1	1	5
DNR Scan 2 (Table 4-3)	3	1	1	5
Dissolved Metals	3	1	1	5
Cd (1310/6010)				
Cr (1310/6010)				
Fe (3010/7380)				
Ni (1310/6010)				
Pb (3010/7420)				
Zn (1310/6010)				
* PCBs (3510/8080)	3	1	1	5
BAY Q-24				
Soil Samples				
Total Hydrocarbons (GC) (ASTM 3328)	20	2	0	22
Total metals	20	2	0	22
Cu (1310/6010)				
Cr (1310/6010)				
Pb (3050/7420)				
Zn (1310/6010)				
Groundwater Samples				
Total Hydrocarbons (GC) (ASTM 3328)	3	1	1	5
Dissolved metals	3	1	1	5
Cu (1310/6010)				
Cr (1310/6010)				
Pb (3010/7420)				
Zn (1310/6010)				
TRANSMISSION SUBTEST AREA				
No analytical work to be done				

*Will be analyzed only if oil is found on top of the water table.

TABLE 4-2
DNR SCAN 1 COMPOUNDS
HYDRA-MATIC WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Bromodichloromethane
Bromoform
Carbon tetrachloride
Chlorobenzene
Chloroform
Dibromochloromethane
Dichlorodifluoromethane
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethene
cis-1,2-Dichloroethene
trans-1,2-Dichloroethene
1,3-Dichloropropene
1,1,2,2-Tetrachloroethane
Tetrachloroethene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethene

TABLE 4-3
DNR SCAN 2 COMPOUNDS
HYDRA-MATIC WILLOW RUN PLANT
YPSILANTI, MICHIGAN

Benzene
Ethylbenzene
Styrene
Toluene
Total Xylenes

TABLE 4-4
SAMPLE CONTAINER AND PRESERVATION REQUIREMENTS
HYDRA-MATIC WILLOW RUN PLANT
YPSILANTI, MICHIGAN

	Concentration	Container	Sample Size	Preservation	Maximum Holding Time
WATER					
Benzene, toluene, xylene	Low	Glass, Teflon-lined septum	2 x 40 mL	Cool to 4 C	7 days
Polychlorinated Byphenyls (PCBs)	Low	Glass, amber	1 L	Cool to 4 C	7 days to extraction, 40 days after extraction
Metals (dissolved)	Low	Polyethylene	1 L	HNO3 to pH<2	6 months
DNR Scans 1 and 2	Low	Glass, Teflon-lined septum	2 x 40 mL	Cool to 4 C	7 days
Total Hydrocarbons (GC)	Low/medium	Glass, Teflon-lined septum	1 L	Cool to 4 C	7 days to extraction, 40 days after extraction
SOILS/SOLIDS					
Benzene, toluene, xylene	Low	Wide-mouth glass, Teflon-lined cap	2 x 2 oz.	Cool to 4 C	10 days to extraction, 40 days after extraction
Metals (total)	Low/medium	Wide-mouth glass	4 oz.	Cool to 4 C	6 months
Total Hydrocarbons (GC)	Low/medium	Wide-mouth glass	4 oz.	Cool to 4 C	10 days to extraction, 40 days after extraction

Notes:

1. Holding times are from date of sample collection.

APPENDIX A

FIELD SAMPLING FORMS

SOIL BORING LOG / MONITORING WELL DIAGRAM

E.C. JORDAN CO.

PROJECT NO.:	PROJECT NAME:		BORING/WELL DESIGNATION:		BORING/WELL LOCATION:
DRILLING CONTRACTOR:		DRILLING METHOD:	BOREHOLE SIZE: IN.	BOREHOLE DEPTH: FT.	
DATE STARTED:	DATE COMPLETED:	GROUND ELEV.: FT.	MEASURING POINT ELEV: FT.	WELL DEPTH: FT.	
RIG:	DRILLER:	HELPER:	LOGGED BY:		

DEPTH (FT.)	SOIL DESCRIPTION	SAMPLE NO.	SAMPLE TYPE	BLOW COUNTS(N)	P.I. METER (ppm)	COMMENTS	WELL DATA
0							
5							
10							
15							
20							
25							
30							
35							

NOTES:

EC JORDAN CO

PAGE _____ OF _____

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT _____ JOB NO _____

STATION NO/LOCATION _____ DATE _____

SKETCH ON BACK YES ☐ NO ☐ PHOTOGRAPHS YES ☐ NO ☐ ROLL NO/EXPOSURE NO _____

FIELD DATA

TIME: START _____ AIR TEMP _____

END _____ WEATHER _____

WATER DEPTH _____ ☐ TOP WELL ☐ TOP CASING WELL DEPTH _____ WELL DIAM. _____ WELL MATERIAL _____

WELL STICK-UP _____ WELL/CASING _____ EQUIPMENT USED!

_____ FT. WATER X _____ {2" / 4" / 6"} X _____ CASING VOLUME = _____ VOL. PURGE _____

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL (PPM) AMBIENT _____

SAMPLE LOCATION _____

HEADSPACE _____

SAMPLE PURGE DATA

@ _____ GAL	@ _____ GAL	@ _____ GAL	@ _____ GAL
TEMP _____ °C	TEMP _____ °C	TEMP _____ °C	TEMP _____ °C
SP. COND _____ @25°C	SP. COND _____ @25°C	SP. COND _____ @25°C	SP. COND _____ @25°C
pH _____	pH _____	pH _____	pH _____
Eh _____	Eh _____	Eh _____	Eh _____

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED

REMARKS/OBSERVATIONS _____

SAMPLER _____

PAGE ___ OF ___

CHAIN OF CUSTODY RECORD

PROJECT NO.	PROJECT NAME

SAMPLERS (SIGNATURE)

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CON-TAINERS	SAMPLE TYPE												REMARKS INDICATE SOIL/WATER/AIR SEDIMENT/SLUDGE

RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)
RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)	RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED BY: (SIGNATURE)

RELINQUISHED BY: (SIGNATURE)	DATE / TIME	RECEIVED FOR DISPOSAL BY: (SIGNATURE)	DATE / TIME	REMARKS

E.C. JORDAN CO.

ANALYSIS REQUEST FORM

CLIENT INFORMATION: NAME _____

COMPANY _____

MAILING ADDRESS _____

_____

PURCHASE ORDER/JOB NUMBER _____

WHERE TO SEND REPORT: ☐ DIRECTLY TO CLIENT

☐ ECJ - NAME _____

ANALYSES REQUESTED BY: _____
TECHNICAL PROJECT MANAGER

APPROVED BY: _____
PROJECT MANAGER

DATE RECEIVED _____
LAB LOCATION _____
RESULTS DUE _____
CLIENT I.D. NO. _____

☐ SOLID WASTE DATA FILE
☐ DATA DOCUMENTATION REQUIRED
☐ ENTERED IN COMPUTER

TYPE OF SAMPLE _____
LIST ANY HAZARDS _____

☐ SPECIAL PROCEDURE

☐ FILTERED IN FIELD ☐ NON-FILTERED

ADDITIONAL INFORMATION OR SPECIAL PROCEDURES:

SAMPLE IDENTIFICATION	LAB NUMBERS	DATE SAMPLED	SAMPLED BY	ANALYSES REQUIRED

1003
2/89
ENV033:Binder # 047 Soil
Contaminated Machine Storage Area
9803-047

RESEARCH REPORT

EV-333

INVESTIGATION OF SOIL CONTAMINATION IN A MACHINE STORAGE AREA AT THE HYDRA-MATIC PLANT IN YPSILANTI, MICHIGAN

Thomas L. Gibson
Abdul S. Abdul

Environmental Science Department

February 20, 1989

GM
General Motors
Research Laboratories
Warren, Michigan 48090

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RESEARCH REPORT NO. ● EV-333

Title ● INVESTIGATION OF SOIL CONTAMINATION IN A MACHINE STORAGE AREA AT THE HYDRA-MATIC PLANT IN YPSILANTI, MICHIGAN

Date ● February 20, 1989

Reported by ● Thomas L. Gibson
Thomas L. Gibson 313-986-1615
8-226-1615

Abdul S. Abdul
Abdul S. Abdul

Approved by ● Nick Gallopoulos
N. E. Gallopoulos, Head
Environmental Science Department



General Motors Research Laboratories
Warren, Michigan 48090

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Title ■ May □ May Not Be Announced Within GM

PURPOSE

An outdoor area at the Hydra-matic Willow Run Plant in Ypsilanti, Michigan, was used for approximately 30 years to store machinery after removal from the plant. Oily fluids leaking or washed by precipitation from these hydraulic and metal-cutting machines contaminated the ground surface with organic and inorganic constituents. From the surface, these contaminants could spread downward through pores in the sandy unsaturated zone to the underlying soil and groundwater aquifer. Hydra-matic, with the agreement of the Michigan Department of Natural Resources, decided to implement a plan designed by the authors of this report to define the potential contamination problems. The purpose of this report is to present the results of investigations carried out during 1988, which showed that the contaminants that had leaked from stored machines did not pose any significant risk to the underlying soil and aquifer.

SUMMARY

An 800 by 200 foot storage yard for disused machinery at the Hydra-matic Willow Run plant was contaminated by oily fluids that leaked from the machines. The fluids were known to contain hydrocarbons, heavy metals, and polychlorinated biphenyls (PCBs). A phased approach was used to investigate contamination at the site. The following four phases were to be implemented sequentially, and the implementation of each phase depended on finding contamination in all the preceeding phases: phase 1, delineation of the areas with surface contamination; phase 2, delineation of the vertical spread of contaminants into the unsaturated soil zone;

phase 3, delineation of contamination in the shallow aquifer; and phase 4, delineation of vapor contamination. Only phases 1 and 2 proved to be necessary.

In phase 1, surface soil sampling was used to define the lateral extent of contamination. In phase 2, soil coring was used to determine the vertical spread of contaminants into the subsurface beneath the surface contaminated areas. Soil cores were taken by driving a specially designed coring device (the GMR sampler) to a depth of 4 feet using a truck-mounted drill rig. Surface and subsurface soil samples from each location were analyzed for oily hydrocarbons, heavy metals, and PCBs to determine the extent of contamination. These results demonstrated that the foreign constituents measured in the soil were most concentrated horizontally in an approximately 100 by 200 foot central region of the yard and were contained vertically within the upper 22 inches of soil. Other areas in and around the storage yard generally had lower concentrations, many of them equal to background levels. The results adequately defined the lateral and vertical extent of the contamination, showing that, in all areas, the unsaturated soil zone below the upper 22 inches was not contaminated. Therefore, phase 3, the investigation of the deeper perched aquifer system, which starts about 6 feet below the surface, was unneccesary. Furthermore, since no vapor-phase organics were detected in the surface or subsurface samples taken in phases 1 and 2, phase 4, involving determination of vapor contamination, was unnecessary.

Neither the hydrocarbon, heavy metal nor PCB contaminants had migrated from near the surface, probably because of retardation processes such as adsorption, cation exchange, and low contaminant solubiliy. Estimates of the effects of these processes indicated that they could prevent migration even in the central region of the site where surface concentrations were

maximum. Thus, the concern about contaminant migration beyond the storage area or into the aquifer was adequately addressed by the investigation.

Because of the low levels of PCBs (maximum 4 mg/kg of soil) and metals (usually close to soil background concentrations) and the immobility of all the contaminants, current regulations did not require cleanup action. Therefore, the GMR investigation concluded that site closure was possible without further action. However, Hydra-matic plant management decided to excavate to a depth of 1-2 feet in and near the central zone of the yard to remove PCB-contaminated surface soil. The shallow and limited extent of the excavation was based on the use of the GMR soil core sampler in place of the commonly-used standard split spoon method. The standard split spoon method, could cause cross-contamination of the subsurface samples by contaminated surface material, resulting in overestimating the depth of the contamination. Because of the precise delineation of the contaminated zones achieved with the GMR sampler and the phased investigative approach, there were savings in cleanup costs at the site.

CONCLUSION

This investigation showed that contamination by stored machinery at the Hydra-matic site was minimal, requiring no clean-up action under current environmental regulations.

INTRODUCTION

An outdoor area (about 800 by 200 feet), north of the General Motors Hydra-matic Plant at Ypsilanti, Michigan, was used for approximately 30 years to store machinery removed from the plant. A site map is shown in Figure 1. In some cases, the machinery, including hydraulic presses and metal cutting machines, was incompletely drained, and leaking fluids could have contaminated the surface soil with their organic and inorganic constituents. Further, in the unlikely event of a large spill or leak the contamination could have migrated through the sandy subsurface material to a shallow perched aquifer. After agreeing with the Michigan Department of Natural Resources to address the potential problem, Hydra-matic requested the help of the Environmental Science Department to plan and carry out the investigation.

To approach the problem definition systematically and rationally, available data were gathered to characterize the local hydrogeology and the potential contaminants. Hydrogeologic data from a nearby site indicated that the subsurface is comprised mainly of fine to medium sand and a shallow perched aquifer extends from a depth of about 6 feet to a dense clay layer at a depth of about 13 feet (Abdul et al., 1988a). Analysis of fluids sampled from pieces of machinery had shown the presence of oily hydrocarbons, heavy metals, and very low levels of PCBs.

From theoretical considerations and from the available data about the site and potential contaminants, it appeared possible that contamination would be contained near the surface sources, and migration laterally and below the surface might be restricted. A large volume of oil can be retained in the pores of a sandy matrix as residual saturation (approximately 16 gallons/yd^3, Abdul, 1988). The presence of small amounts

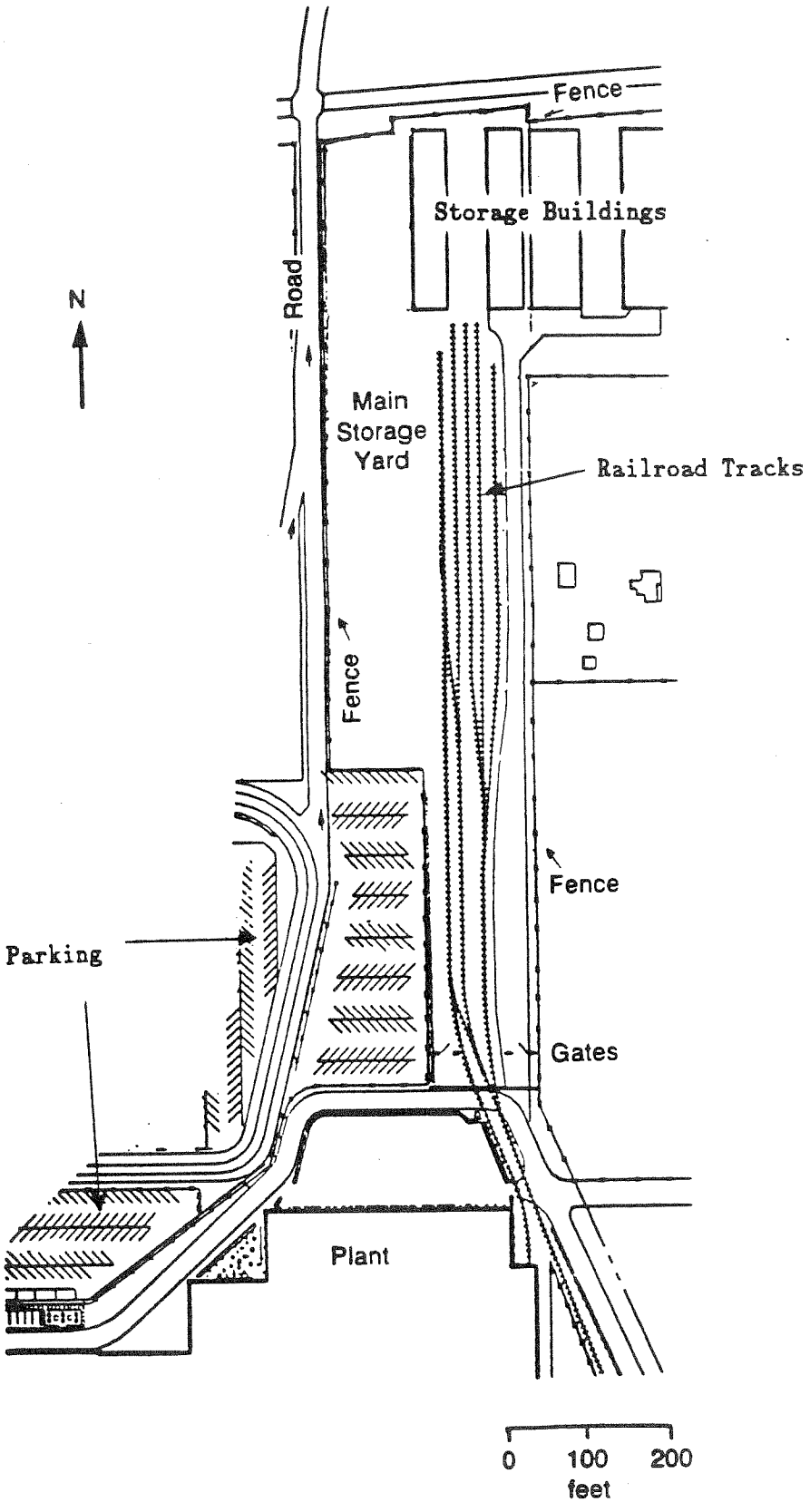


Figure 1. Map of the machine storage area at the Willow Run Hydra-matic Plant.

of clay, having a high cation exchange capacity, could tie up metal ions (Grimshaw, 1971), and PCBs are known to be strongly adsorbed and retarded by hydrophobic adsorption processes in sandy aquifer material (Abdul and Gibson, 1986; Abdul et al., 1987). Thus, extensive and costly investigations deep into the subsurface might be unnecessary at this site. In fact, coring and drilling through contaminated surface material to some arbitrary depth below the water table are common practice at contaminated sites, and should be avoided if possible because this can spread the contamination downward into otherwise clean layers.

APPROACH

To systematically assess the problem, the investigation was divided into the following four phases: phase 1- delineating the extent of surface contamination; phase 2- delineating the spread of contamination downward into the unsaturated zone and characterizing the geologic material in this zone; phase 3- delineating contamination in the perched aquifer and describing the hydrology and geology of this aquifer; and phase 4- delineating the extent of vapor contamination. It was decided that the implementation of any phase was to be based on the results of the preceeding phases. By this decision, phase 2 was to be implemented only if comtamination was found in the surface material, phase 3 was to be implemented only if contamination was found throughout the unsaturated zone, and phase 4 was to be implemented if volatile organic compounds were found in surface and subsurface materials.

Since the contaminants were released at the surface, it was appropriate in the first phase of investigation to sample and analyze only surface material. This was done by taking shallow soil samples from the

surface to a depth of 12 inches at locations 100 feet apart north to south and 50 feet apart east to west (Figure 2). Since this sampling scheme would cover the machine storage yard (800 by 200 ft), the concentrations of organic and inorganic constituents revealed by chemical analysis could be used to look for patterns of contamination in the surface material. By this method, we could judge where to concentrate our greatest efforts in delineating the lateral spread of the contaminants.

Because machinery was stored infrequently in other areas, adjacent to the yard, as well (Figure 2), it was decided to also investigate those areas. The same phased investigative approach was followed and samples were typically taken at intervals of about 100 feet.

After assessing the distribution of the contaminants in the surface material, deeper coring was planned in phase 2 of the investigation to determine the vertical distribution of the contaminants in the unsaturated zone down to the shallow water table. The GMR soil core sampler, used to take the samples, was designed specifically to take soil cores for delineating zones of subsurface contamination (Gibson and Abdul, 1989). With this device, it is possible to obtain soil cores through the shallow unsaturated soil zone without cross contamination by surface material, which the standard split spoon sampler (ASTM, 1988), most commonly used for soil sampling, is not designed to do.

Liquid or dissolved-phase contaminants in the unsaturated zone would spread mostly downward under the influence of gravity. The tendency of oils to leave behind residual contamination in the pore spaces between soil particles and the strong adsorption of hydrophobic contaminants by the soil would ensure that there could be no contamination below a surface location unless the same constituents were also found in the surface samples. Spread

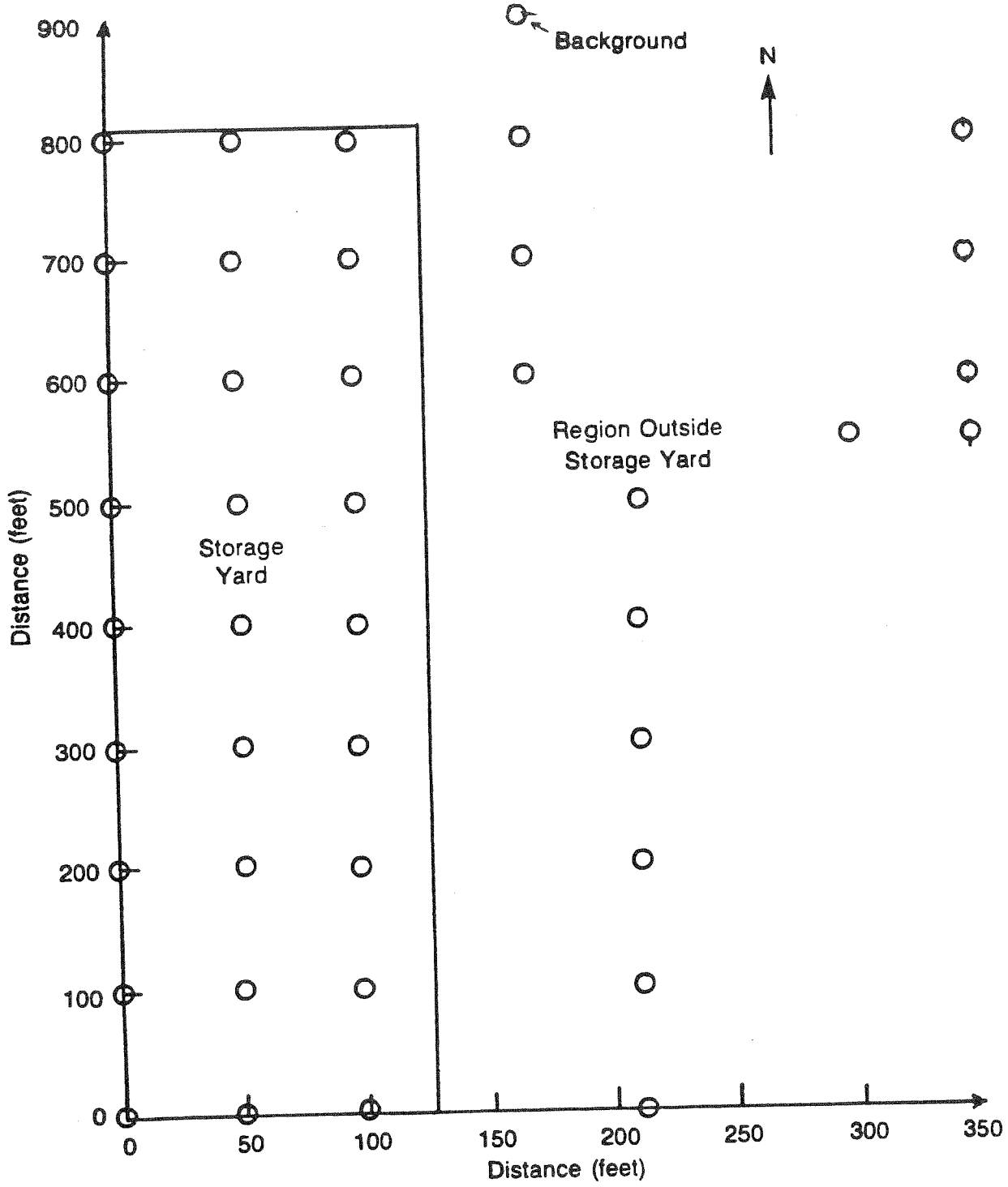


Figure 2. The surface material sampling grid at the machine storage area: Sampling locations (O).

of constituents by diffusion could likewise not contaminate underlying zones without leaving evidence of contamination in surface material. Thus, if contaminants are not present at the water table it is not necessary to implement phase 3 to look for comtamination of the aquifer.

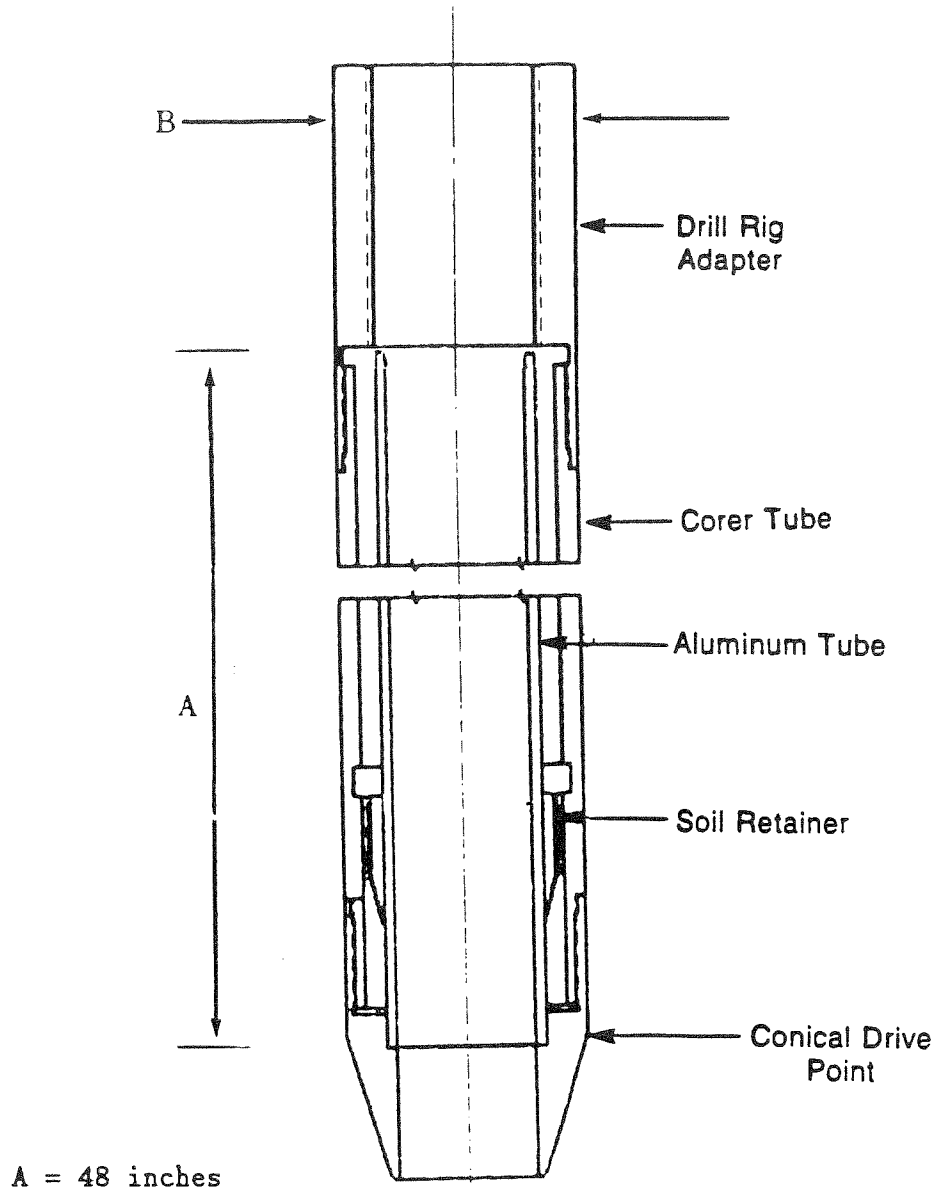
METHODS

Surface Material Samples

The split-spoon or split-barrel sampler (SSP), used to obtain grab samples of surface material from the surface to a depth of 12 inches, was that described in ASTM method D 1586 - 84, Standard Method for Penetration Test and Split-Barrel Sampling of Soils (ASTM, 1988). This device consisted of a steel sampler barrel, 3.0 inches O.D. and 2.4 inches I.D. by 24 inches long, which splits longitudinally, to be easily opened for inspection in the field. The split spoon was driven vertically into the ground by a truck-mounted drill rig. Each soil core, once taken out of the ground, was visually inspected and then mixed to provide a homogeneous grab sample.

Subsurface Material Samples

The GMR soil sampler used to core the unsaturated zone consists of three main parts: (1) an outer stainless steel corer tube (Figure 3), with a drill rig adapter, to mount the corer on a standard drill rod of a truck mounted rig, and a conical drive point, that can be driven into the ground; (2) an inner tube for collecting the soil made from 2.0-inch OD aluminum pipe; and (3) a metal soil retainer held in a recessed area in the bottom end of the corer tube, so that the aluminum tube extends through the retainer holding it open during soil coring (Figure 2). After the corer was driven into the ground, the leaves of the retainer could be made to



A = 48 inches

B = 3.00 inches

Figure 3. The GMR soil core sampler.

close by backing out the aluminum tube about one inch, thus preventing the soil from falling out (Figure 4).

To break through the uppermost layer of compacted surface material and old pavement and to reduce stresses on the sampler, a hollow-stem auger (10 inch OD by 6.5 inch ID) was first used to bore out the upper 12 inches of material. At the machine storage site, coring to a depth of 48 inches proved sufficient to delineate the shallow contaminated zone. After coring, the borehole was backfilled with bentonite clay. The drilling was performed by Professional Services Industries, Inc., Michigan Testing Engineers Division.

Vapor Phase Organics

A Model TIPI hand-held photoionization detector (Photovac, Inc.) was used to measure organic vapor concentrations in the surface and subsurface soil during the investigation. The TIPI can detect a minimum of 0.1 ppm hydrocarbon vapor by volume in air. Before use, the detector was calibrated with a standard gas mixture of isobutylene in air following the manufacturer's directions.

Total Hydrocarbons

Soil samples were first extracted with methylene chloride using a soxhlet apparatus. Total hydrocarbons were measured in the extracts by gas chromatography using a 30-m DB-5 capillary column and flame ionization detection, and by comparing the integrated area under the peaks with that obtained using Fuel Oil #6 as reference (modified Method 601, USEPA, 1986). A typical chromatogram is shown in Figure 5. These analyses were done under contract by Encotec, Inc., Ann Arbor, MI.

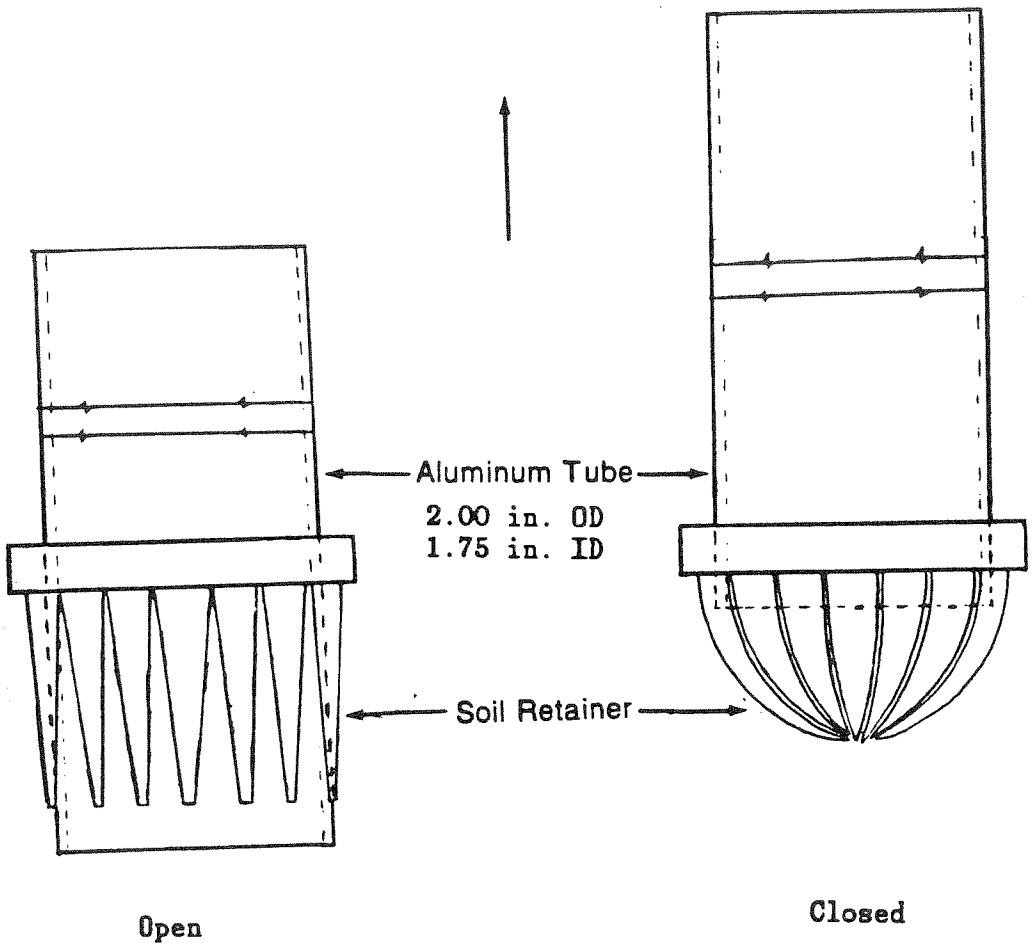


Figure 4. Operation of the soil retainer. Manually withdrawing the aluminum tube about one inch closes the retainer, holding the soil sample in the tube.

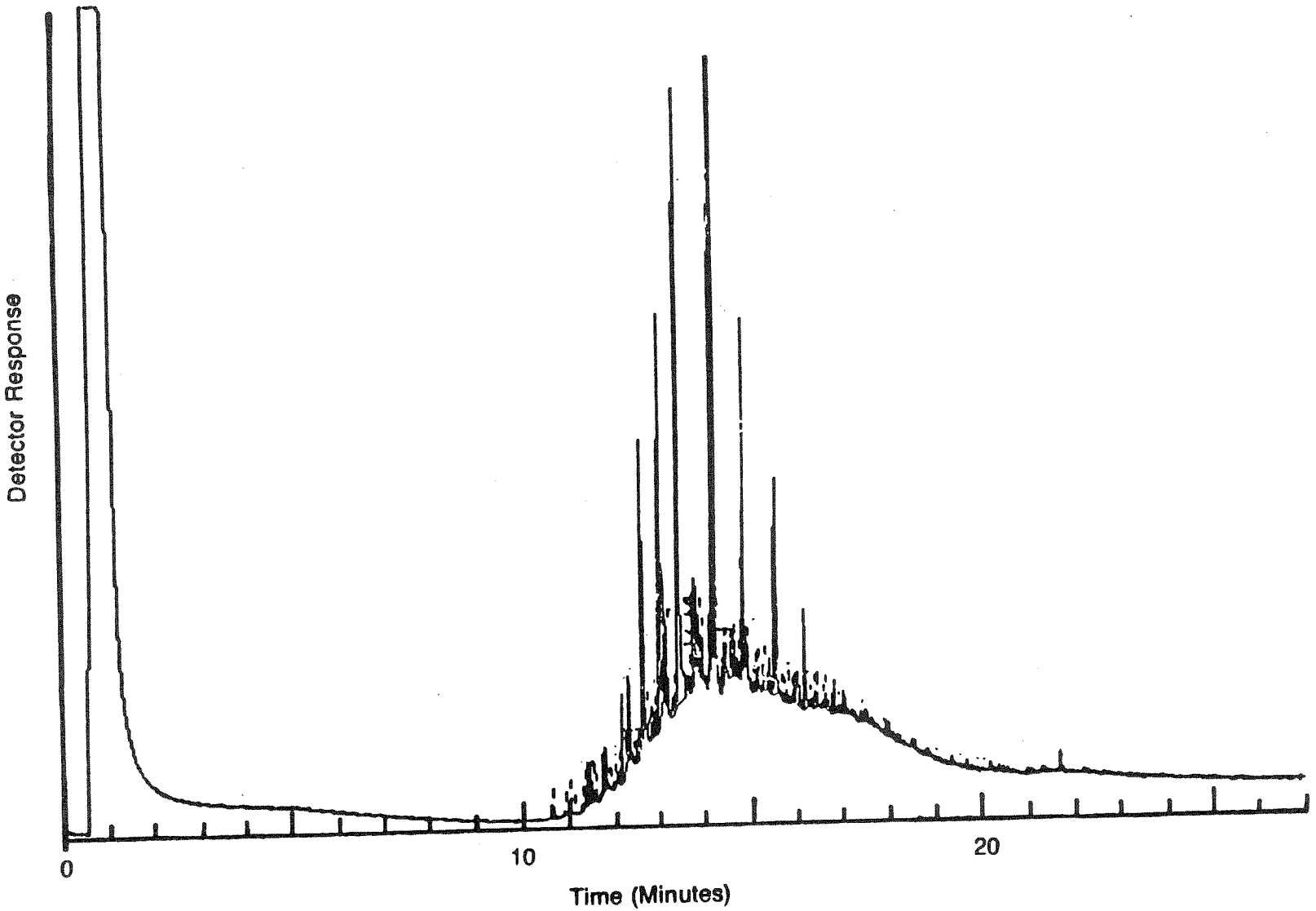


Figure 5. Typical gas chromatogram of the total hydrocarbon in a soil extract from the machine storage area (flame ionization detector). Concentration was determined from the integrated area under the peaks.

Freon Extractables

Soil samples were analyzed for total grease and oil by a procedure based on the partition-gravimetric and extraction methods described in Standard Methods for the Examination of Water and Wastewater (1985) and Method 418.1 (USEPA, 1979). Oil and grease are defined by the conditions used in the method, as any material extracted by the solvent and not volatilized when the solvent is removed. Using this method, the total Freon-extractable organic materials were measured by extracting each soil sample (approximately 100 g) with four 50-mL portions of 1,1,2-trichloro-1,2,2-trifluoroethane (Freon-113) with vigorous stirring for 5 min each. Freon was evaporated from the combined extracts by heating on a steam bath, and the residue was weighed.

Polychlorinated Biphenyls (PCBs)

PCBs were determined as Aroclors 1016, 1221, 1232, 1248, 1254, and 1260 by gas chomatography with electron capture detection in methylene chloride extracts of the soil samples , according to EPA Method 8080 (USEPA, 1986). The analyses were carried out under contract by Encotec, Inc., Ann Arbor, MI, and the results are reported as total PCBs.

Heavy Metals

The total concentrations of heavy metals, including chromium, nickel, lead, zinc, cadmium, and iron, were measured in the soil samples, after nitric acid digestion, by the inductively coupled plasma method, following EPA Methods 3050, 6010, and 7420 (USEPA, 1986). Examples of spectra for each of the metals are shown in Figure 6. Extraction Procedure (EP) toxicity tests (RCRA Method 1310, USEPA, 1986) were also performed on selected samples from the most contaminated surface material to determine

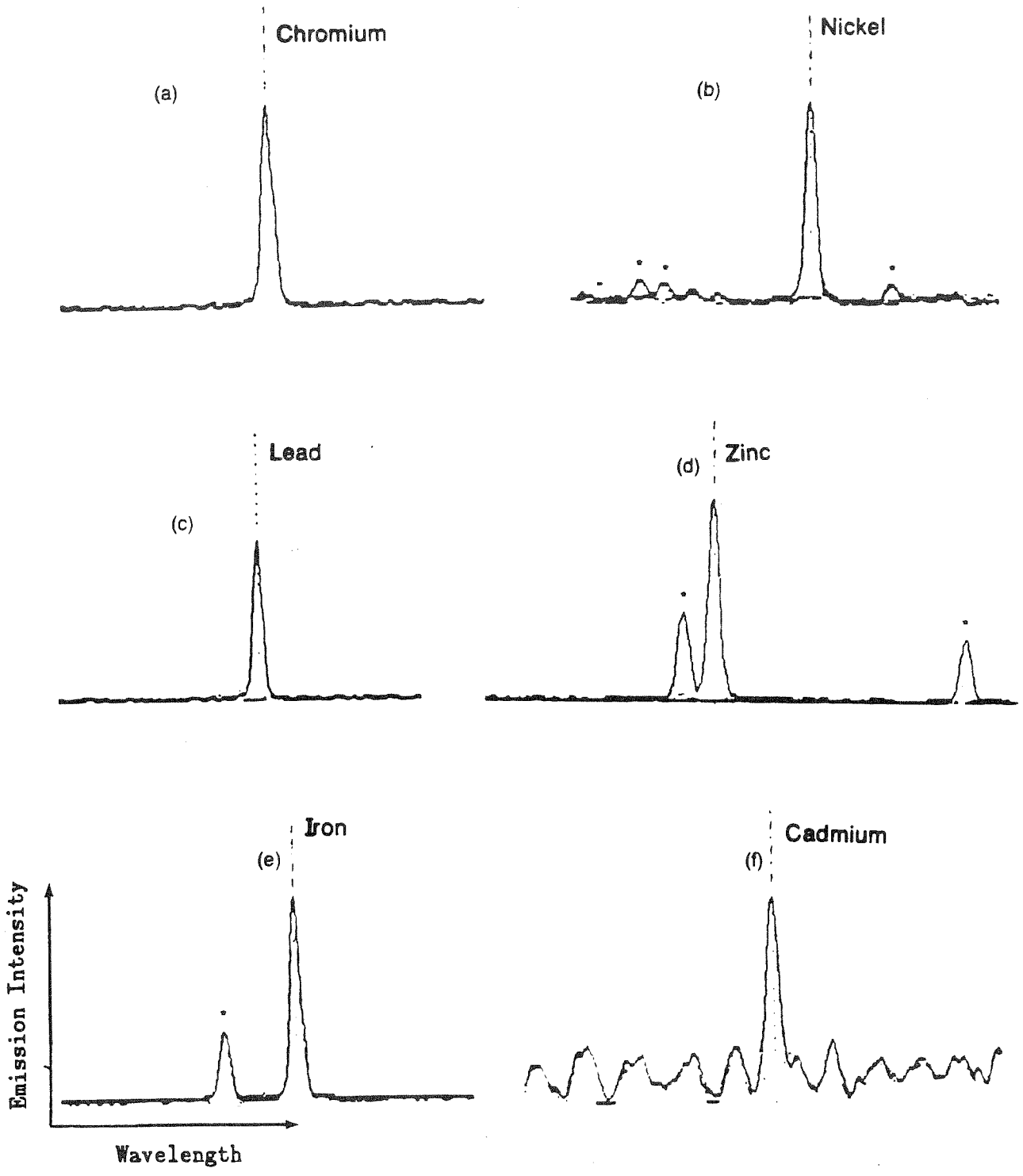


Figure 6. Typical inductively coupled plasma (ICP) spectra of heavy metals measured in soil samples from the machine storage area.
Metal, wavelength: (a) chromium, 205.552 nm; (b) nickel, 231.604 nm; (c) lead, 220.353; (d) zinc, 206.200 nm; (e) iron, 259.940 nm; and (f) cadmium, 214.438 nm. Other noninterfering metals (*).

the leachability of the metals under acidic conditions (pH about 5.0). The samples were treated with acetic acid, overnight in a rotary extractor. These analyses were carried out by Encotec, Inc., Ann Arbor, MI.

RESULTS

Contaminant Distribution in the Surface Material

The sampling grid for surface material is shown in Figure 2. This figure indicates two areas of interest: the storage yard and the area on the east side of the yard where machinery was less frequently stored. The area of primary interest is the storage yard. To identify any point on this grid, the x-(west-east) and y-(south-north) coordinates will be used, starting from the origin at the southwest corner of the site. For example, a surface sample taken 100 feet east and 400 feet north of the origin, will be labeled location (100, 400). The soil was sampled from the surface to a depth of 12 inches, and a homogenized subsample was analyzed for hydrocarbons, heavy metals, and PCBs.

Total Hydrocarbons: The total hydrocarbon concentrations in mg per kg of surface soil are shown in Figure 7 for 27 sampling locations within the storage yard and for 15 locations outside the yard. The concentrations of total hydrocarbons ranged from below the detection limit of 50 mg/kg to 14000 mg/kg. The area with the highest hydrocarbon concentration was in a central zone (shown as a hatched area in Figure 7) of the storage yard. In addition, seven locations outside the central zone, including five outside the storage yard to the east, had concentrations of hydrocarbons greater than 1000 mg/kg. Locations surrounding the central zone mostly had hydrocarbon levels of less than 300 mg/kg.

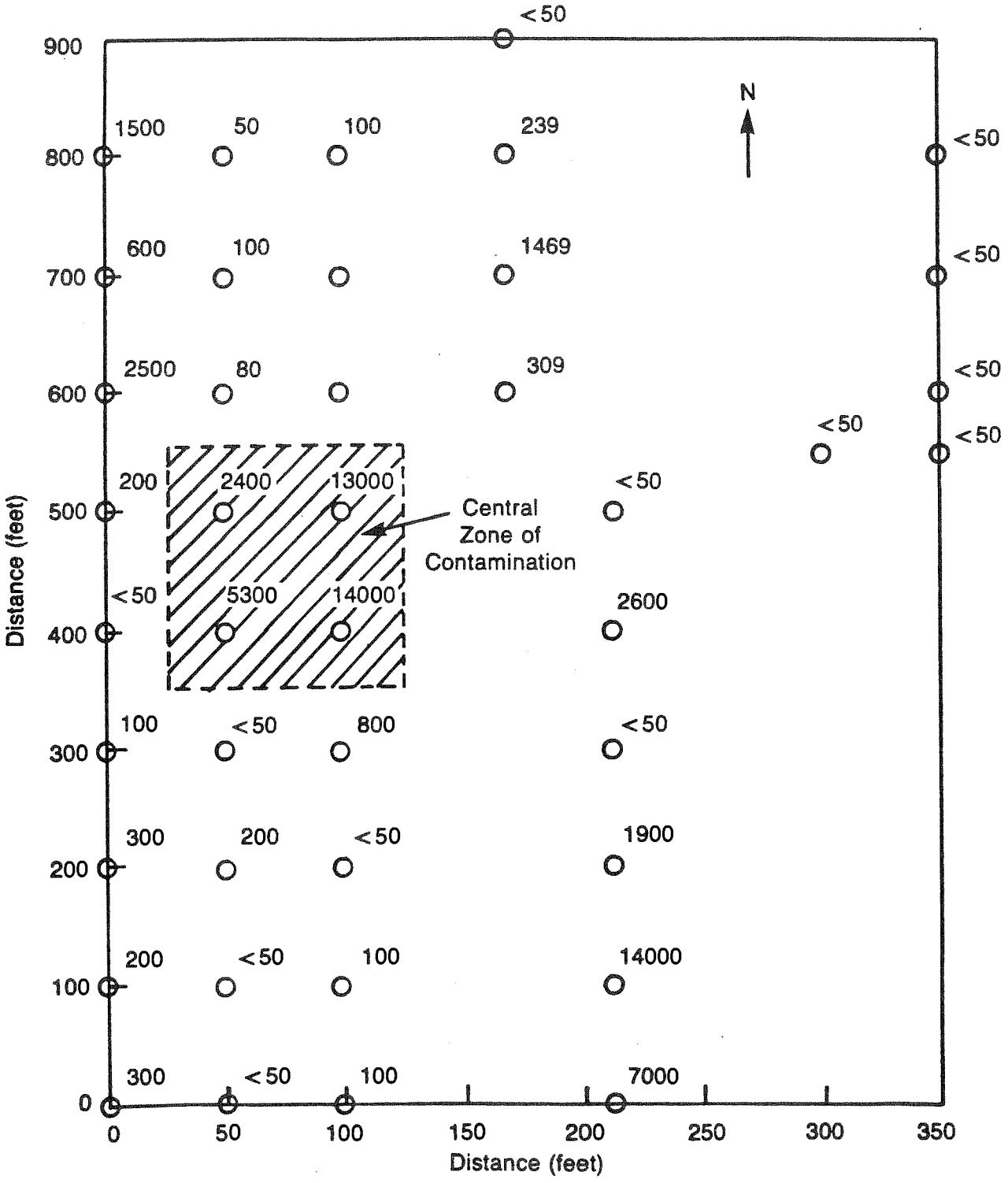


Figure 7. Concentrations of total hydrocarbons (mg/kg of soil) in surface samples from the machine storage yard. Sampling locations (○).

Heavy Metals: Figures 8 through 13 show the concentrations of individual metals in mg per kg of surface soil at 27 locations within the yard and 6 locations outside the yard. Chromium concentrations in the samples ranged from 1.5 to 74 mg/kg, nickel from 2.2 to 34 mg/kg, lead from 2.1 to 210 mg/kg, zinc from 10 to 140 mg/kg, iron from 2800 to 34000 mg/kg, and cadmium from <1 to 5.6 mg/kg. Chromium, nickel, lead, cadmiun, iron, and zinc were all found in highest concentrations in the central zone of the storage area. Concentrations about 4-20 times less than these maximum levels were found at most locations in the peripheral regions. The significance of these levels in relation to background soil concentrations will be discussed in a subsequent section.

Polychlorinated Biphenyls (PCBs): Samples from 27 surface locations in the storage yard and 6 locations outside the yard to the east were analyzed for PCBs. PCBs were found in low concentrations (4 mg/kg or less) at 4 locations in the storage yard and 2 outside (Figure 14). Again the higher concentrations were clustered in the central zone of the yard, where hydrocarbons and metals were also highest.

Contaminant Distribution in the Unsaturated Zone

Since hydrocarbons, heavy metals, and PCBs were found in surface samples, the second phase of investigation was implemented. The main objective of phase 2 was to delineate the vertical spread of contaminants beneath the upper 12 inches of surface material through the unsaturated zone toward the water table. The locations for sampling in the second phase were selected on the basis of the previously determined distribution of contaminants in the surface material. Eleven soil cores were taken

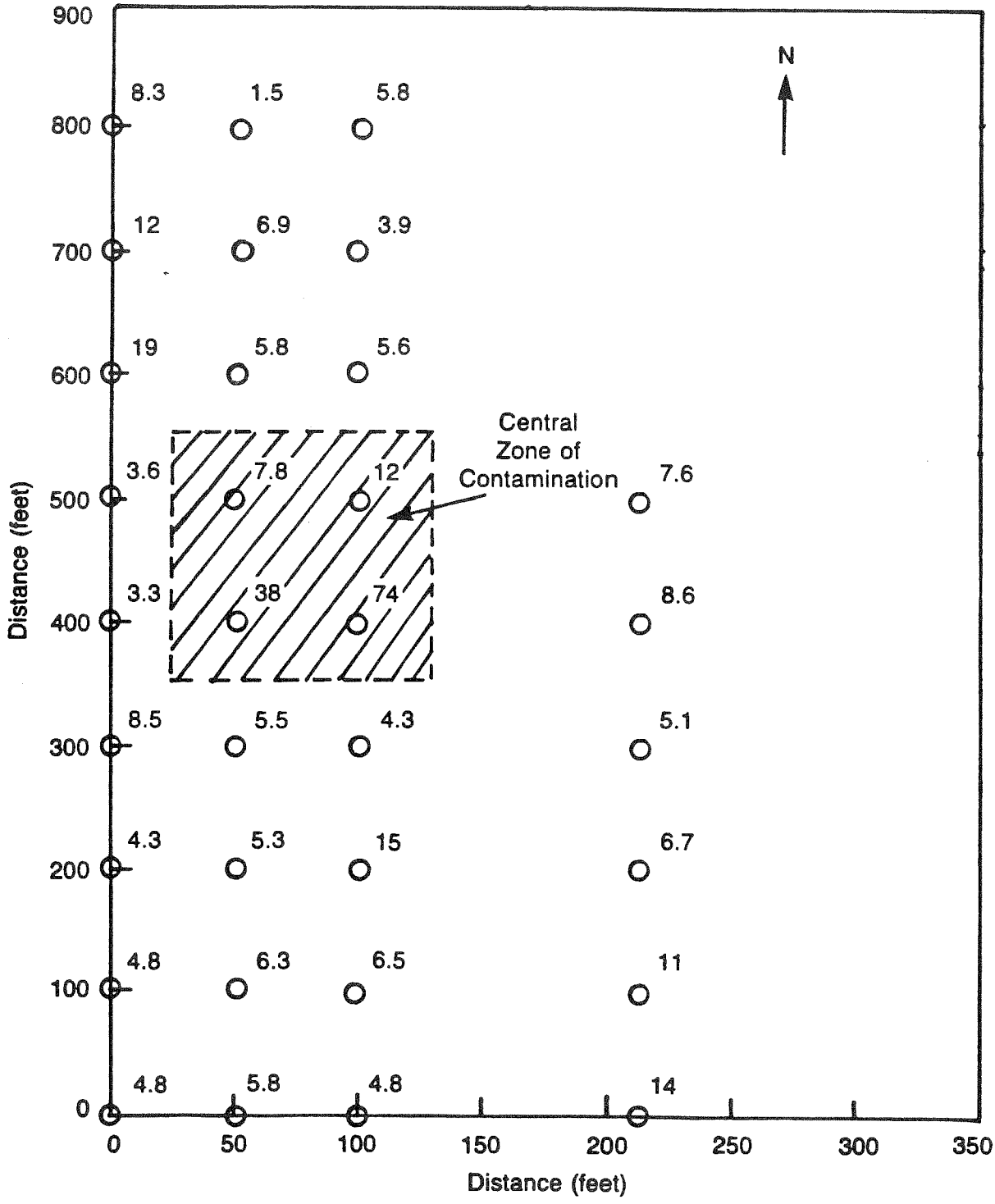


Figure 8. Concentrations of chromium (mg/kg) in surface samples. Sampling locations (○).

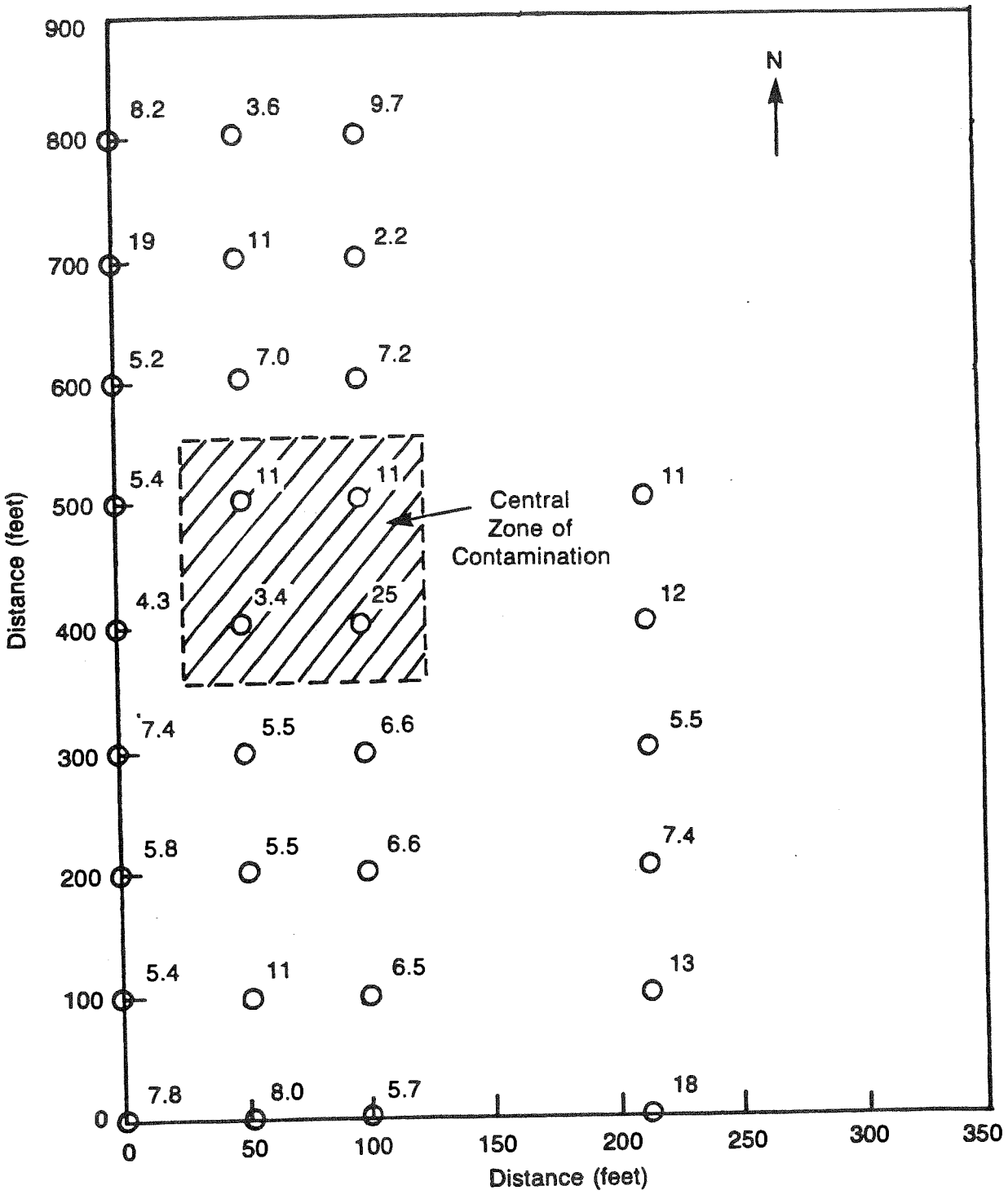


Figure 9. Concentrations of nickel (mg/kg) in surface samples. Sampling locations (○).

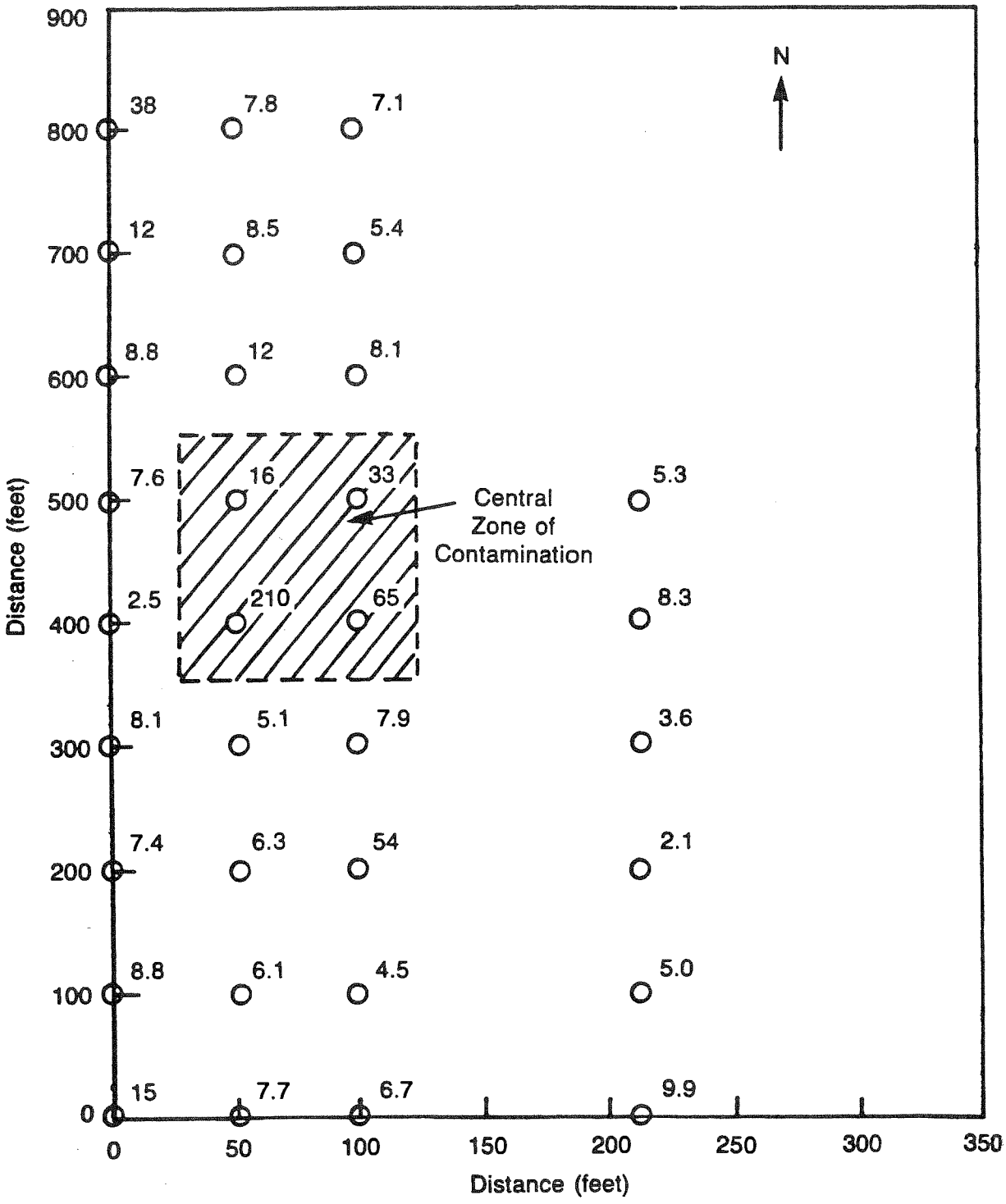


Figure 10. Concentrations of lead (mg/kg) in surface samples. Sampling locations (○).

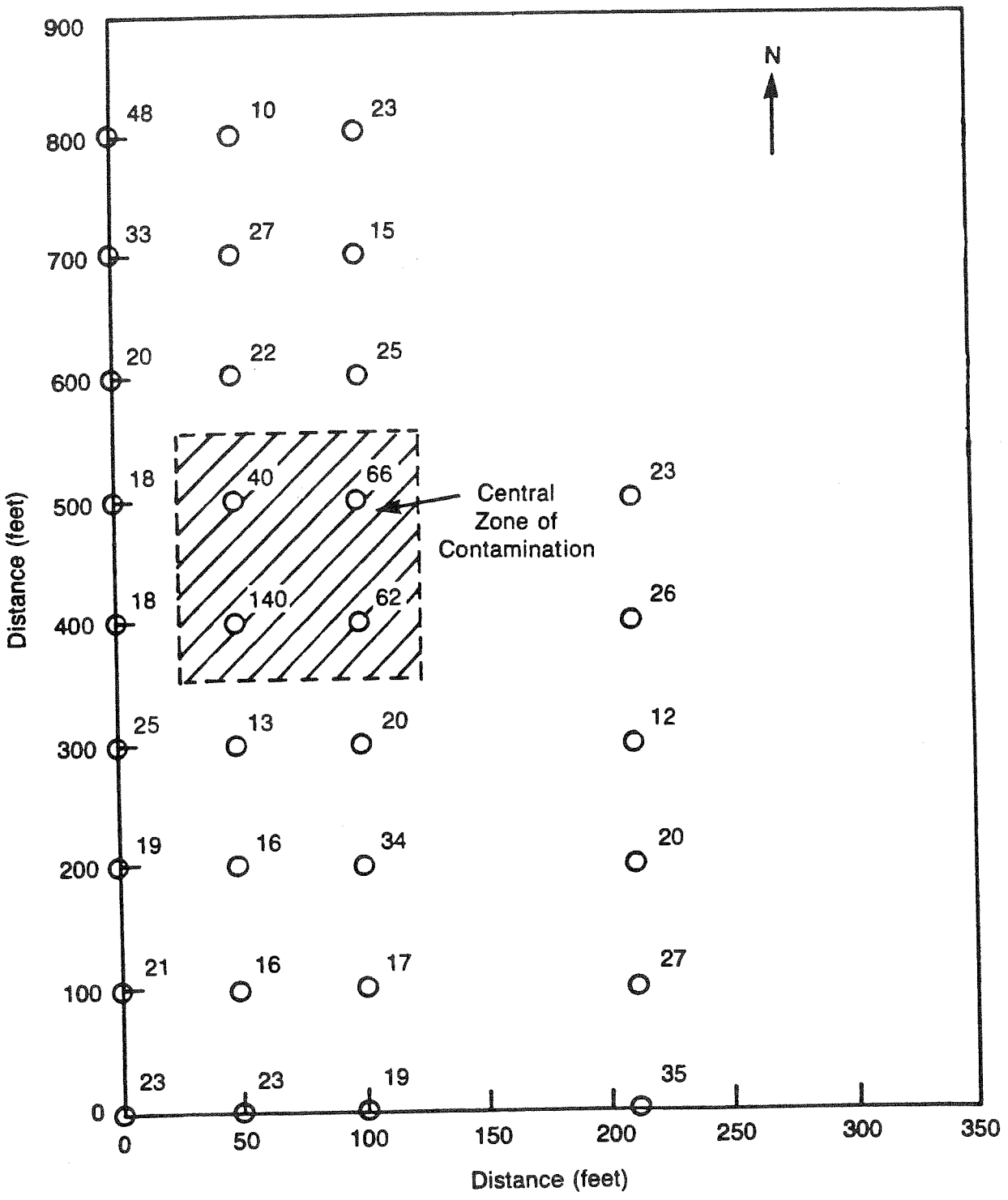


Figure 11. Concentrations of zinc (mg/kg) in surface samples. Sampling location (○).

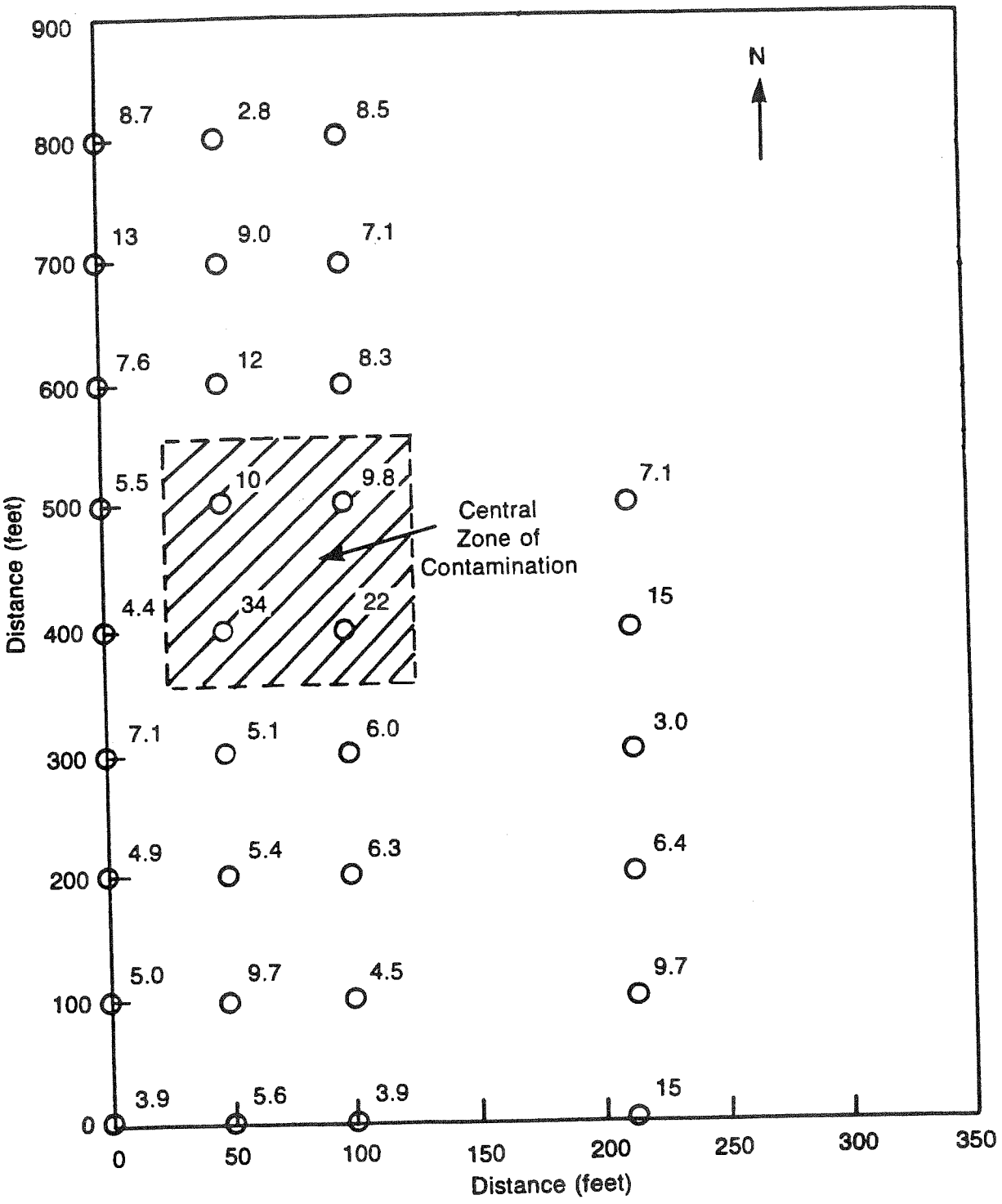


Figure 12. Concentrations of iron (mg/kg x 10^{-3}) in surface samples.

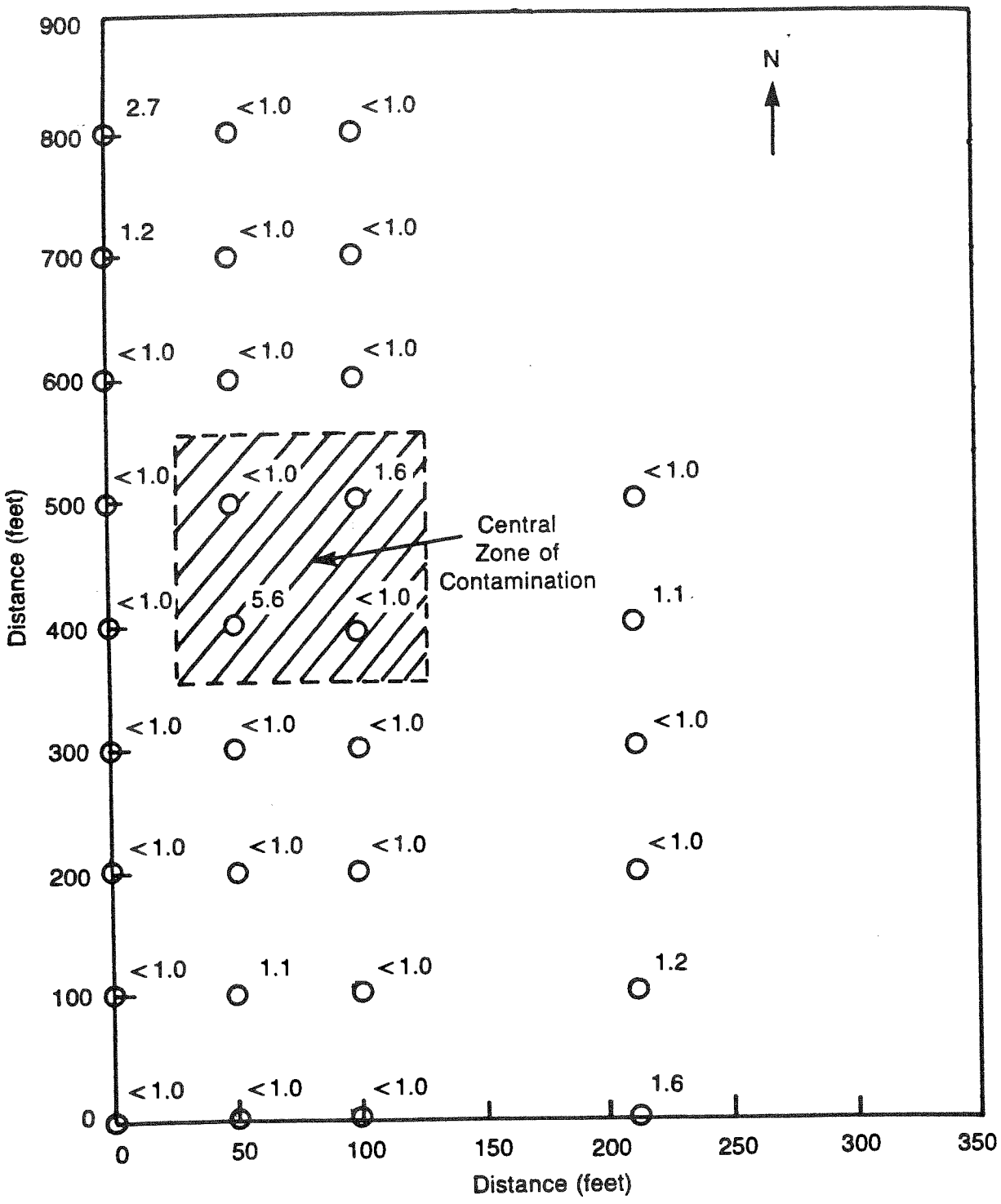


Figure 13. Concentrations of cadmium (mg/kg) in surface samples. Sampling locations (O).

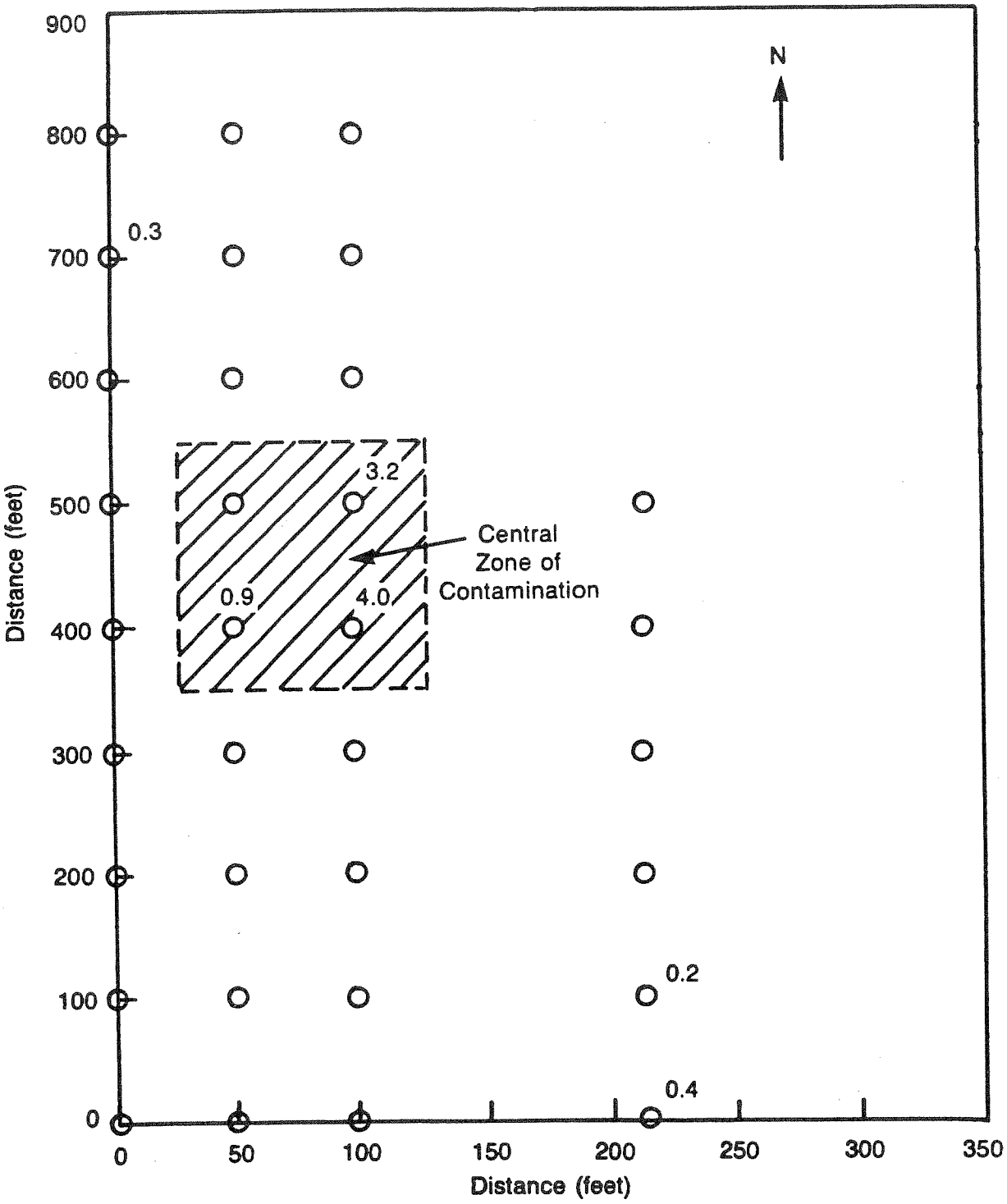


Figure 14. Concentrations of polychlorinated biphenyls (PCBs) (mg/kg) in the surface samples. The concentrations at the unlabeled sampling locations were less than the detection limit (0.2 mg/kg).

along two north-south cross-sections in the storage yard, while 10 soil cores were taken outside the yard (see Figure 15) Typically, the soil cores were taken from a depth of 1 to 4 feet using the GMR soil sampler.

Each subsurface soil core was collected in a 1.75-inch ID aluminum tube, which was then sealed at each end and taken to the laboratory for careful study. There, the tubes were split lengthwise to expose the soil core, which was examined and divided into 5-inch sections. Visual soil characteristics were recorded, and each section was extracted with Freon to determine the concentration of Freon-extractable organics. Two cores from the central zone (*locations in Figure 15) were also analyzed for metals and PCBs.

Freon Extractables: The results for Freon extractables along two north-south sections (A and B) within the storage yard and one north-south section outside the yard (C) are shown in Figure 16. The concentrations of Freon extractables range from less than 50 mg/kg to about 4000 mg/kg of soil. The vertical spread of measureable Freon extractables (>50 mg/kg) was confined to the upper 22 inches of the subsurface. The maximum concentration was found in a soil sample at a depth from 12 to 17 inches at one of the locations (75, 350) adjacent to a surface location (100, 400) with the highest total hydrocarbon level (14,000 mg/kg).

Heavy Metals: To determine the vertical spread of metals at the site, chromium, lead, nickel, cadmium, iron, and zinc were measured in soil cores at locations (75, 350) and (75, 450) in the central zone where the highest levels of surface contamination were found. The results from both locations are similar. Figure 17 shows the concentrations of chromimum, lead, nickel, and zinc at various depths of location (75, 450). The

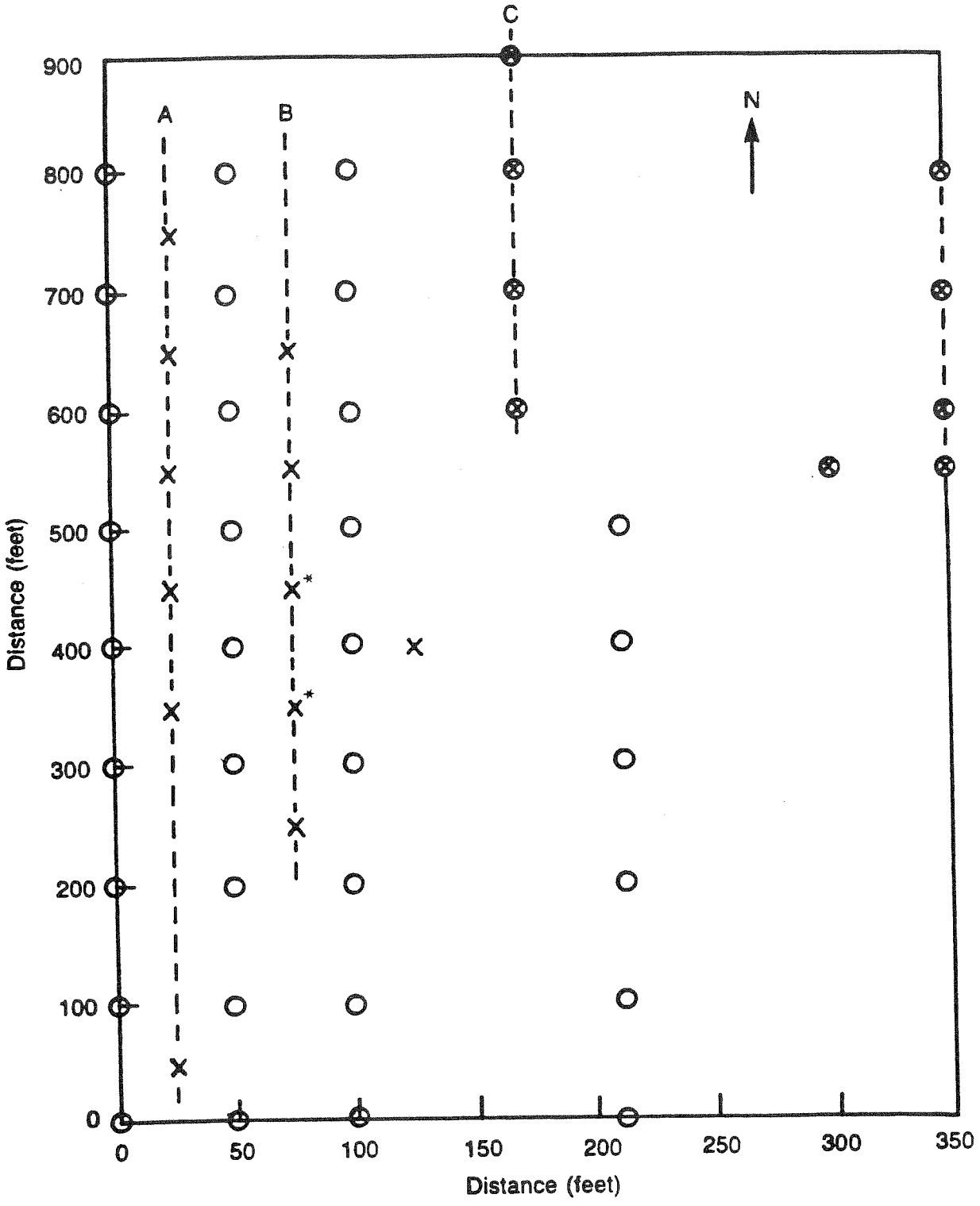


Figure 15. Phase 2 coring locations (X) used to investigate the subsurface zone (GMR soil core sampler). North-south cross-sections; A, B, C. Two coring locations for vertical distributions of metals, PCBs, and particle sizes (*).

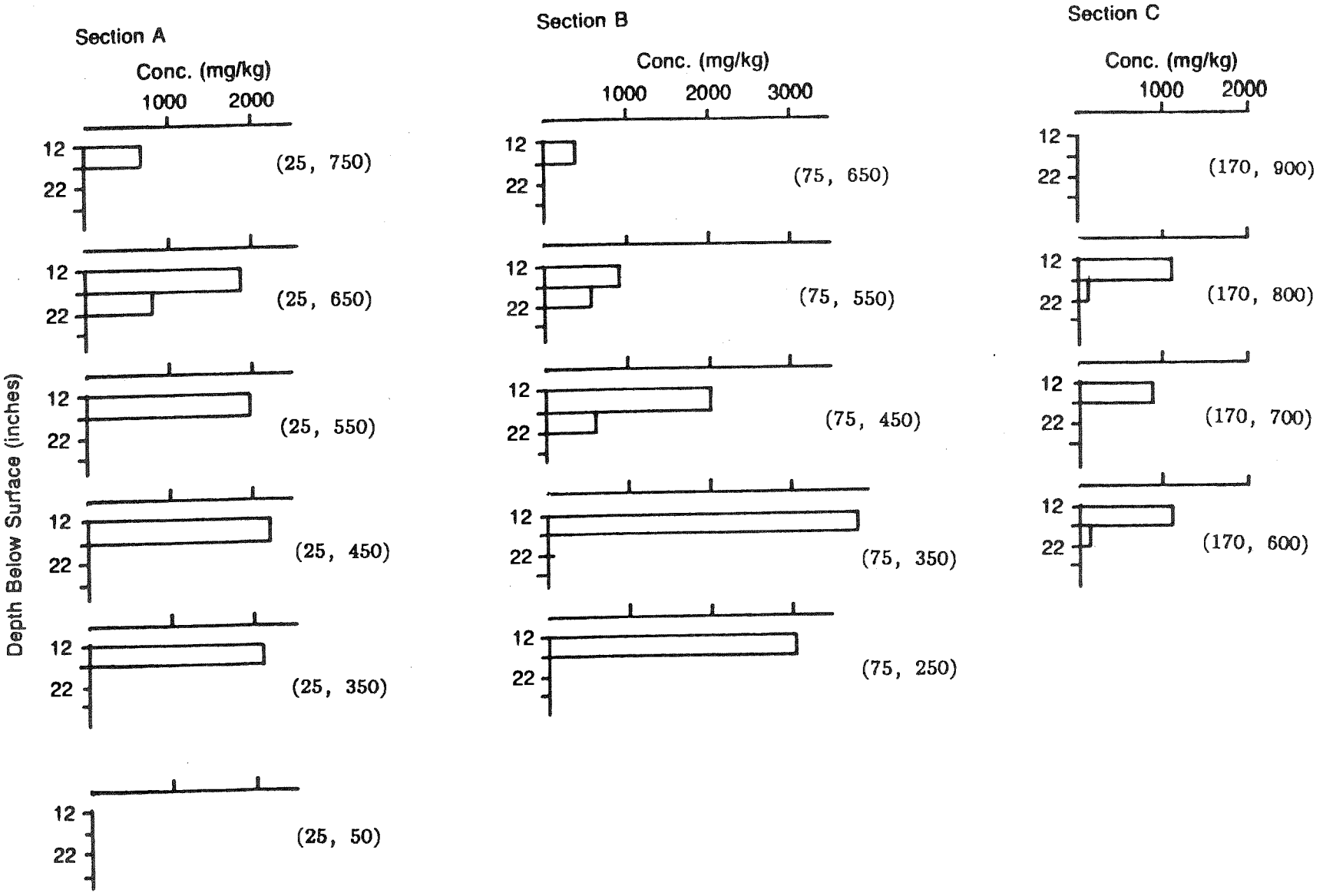


Figure 16. The vertical distribution of Freon extractables in the subsurface zone. Each bar graph corresponds to a soil core from one of the locations on north-south cross-sections shown in the previous figure. Coordinates are given in feet from the SW corner of the yard. The concentrations were measured in 5-in. core segments.

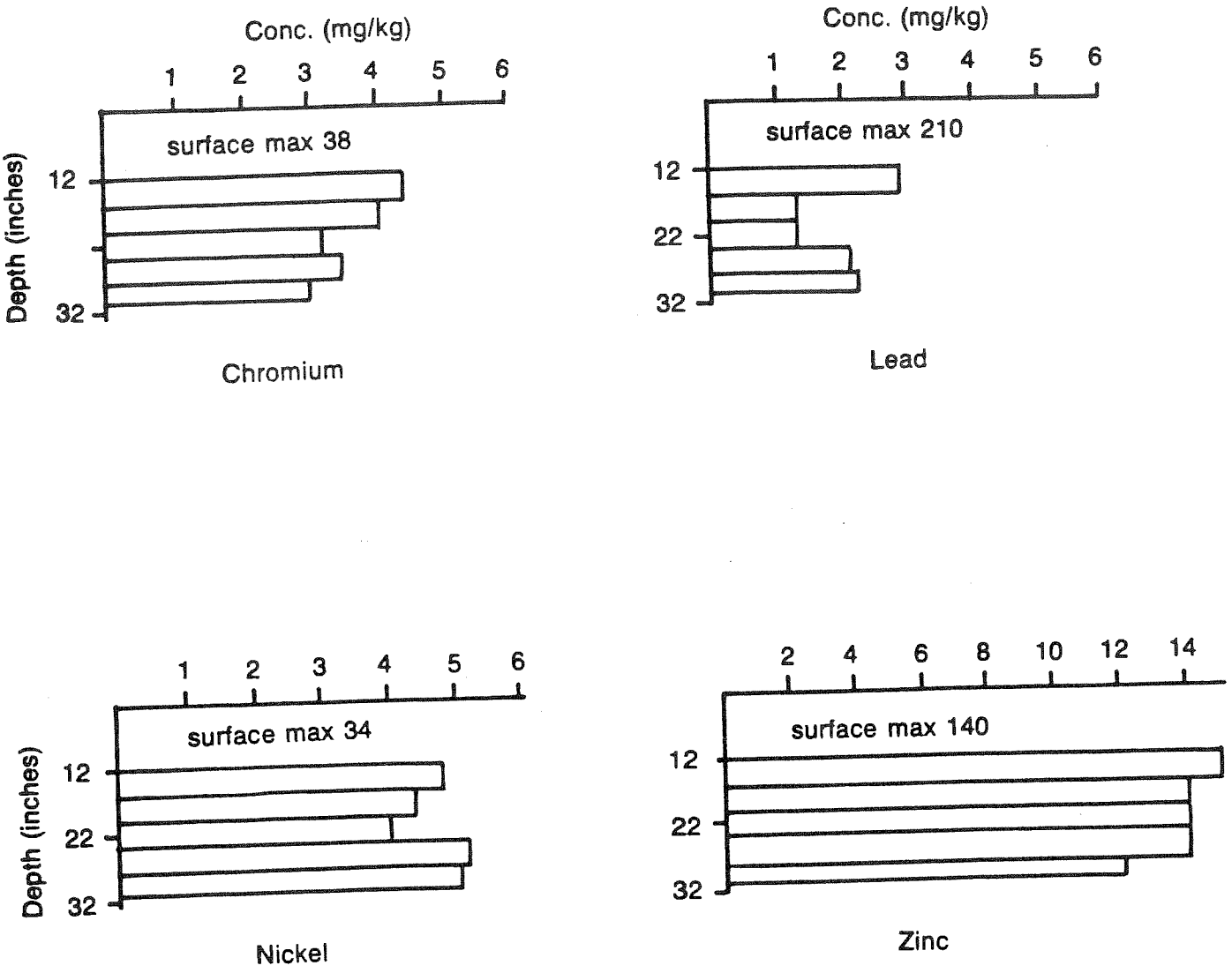


Figure 17. The vertical distribution of heavy metals in the subsurface zone at coring location (75,450).

results show that the concentrations below a depth of 12 inches are always much less than the adjacent surface concentrations. Moreover, the vertical profiles show only slight changes from depths of 1 to 4 feet, suggesting that the concentrations may be background. The results for cadimum and iron are similar to those for the other four metals.

Polychlorinated Biphenyls (PCBs): The two soil cores analyzed for metals were also analyzed for PCBs. PCBs could not be detected (<0.2 mg/kg) in any of the samples taken from below the surface (12 inches).

Vapor Phase Organics

No volatile organic compounds (VOCs) were detected by the portable photoionization detector. Samples of soil from the surface to a depth of 4 feet were tested during the surface sampling and coring investigation.

Site Characterization

The site material was first characterized by visual inspection of the surface soil samples and subsurface soil cores. Several distinct subsurface soil layers were observed in all regions of the machine storage area with only minor variations in their depth and thickness. Like the other areas at the plant, the shallow subsurface material at the site consisted mainly of sand and some gravel with less than 1% of clay and silt. The upper 12 inches of surface material in the storage yard was coarse sand, gravel and stones. However, areas outside the yard are typically covered with grass and have natural soil.

The particle size distribution of subsurface materials from locations (75, 350) and (75, 450) at the storage yard was investigated more precisely by fractionating soil core samples from various depths. The masses of

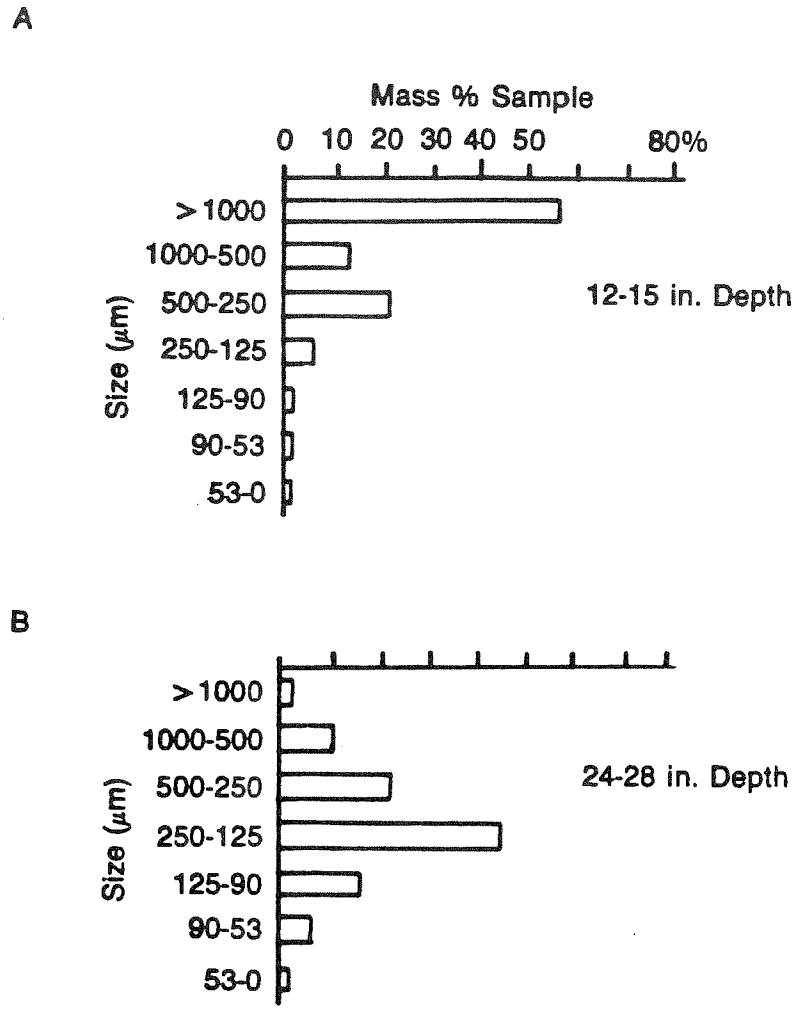


Figure 18. Particle size distribution in subsurface samples from the machine storage yard at coring location (75, 450). (A) The sample nearest the surface zone, containing fine gravel. (B) Fine-medium sand most typical of the subsurface material.

seven size fractions (>1000, 1000-500, 500-250, 250-125, 125-90, 90-53, and 53-0 μm) were determined by first sieving a section of soil core through a series of standard size steel meshes and then weighing each size fraction. Although the core segments contained varying distributions of particle sizes, the subsurface material was predominantly fine and medium sand with considerable gravel mainly near the surface. The results from the two cores are similar; therefore, two typical particle size distributions in core segments from location (75, 450) are shown in Figure 18: (A) material nearest the surface containing substantial amounts of fine gravel and (B) sandy material from a depth below 2 feet. The mean particle size of the sandy material was typically about 200 μm.

The hydraulic conductivity of water through two soil samples from the lower region of the unsaturated zone was measured in the laboratory by the falling head method (Freeze and Cherry, 1979). In these measurements, about 50 g of soil was added to a glass column that was fitted at the base with a fritted-glass plate and connected at the top to an upright burette. While water from the burette flowed through the sand, the change in water head in the burette and the flow rate were measured. The saturated hydraulic conductivity (k_s) was calculated by using Equation (1) (Freeze and Cherry, 1979):

$$k_s = (aL/A\delta t)\ln(h_i/h_t) \qquad (1)$$

where, L is the thickness of the soil column, δt is the time interval, h_i is initial head of fluid in the burette, h_t is the head of fluid in the burette after time δt, and a and A are the cross-sectional areas of the burette and soil column, respectively. From these tests the average saturated hydraulic conductivity of the soil to water was 5×10^{-3} cm/sec.

The organic carbon content of a sample of sandy material from the deeper region of the unsaturated zone was measured using a carbon analyser (Abdul et al, 1987) and was approximately 0.5 percent.

DISCUSSION

Based on the distributions and concentrations of contaminants measured at the site, it was possible to assess the problem and to determine what cleanup steps were needed, if any.

Polychlorinated Biphenyls (PCBs): Of 27 sampling locations in the storage yard and 6 outside the yard, PCBs were detected at only six locations. The total PCB levels ranged from undetectable to 4 mg/kg and exceeded 1 mg/kg at only two locations, both being in the certral zone of the storage yard. At this time, there are no regulations which apply directly to low level soil contamination by small oil leaks over a long period. Federal spill cleanup policy (Federal Register, 1987) applies only to spills of oils with more than 50 ppm PCBs, occurring after 1987. However, the concentrations of PCBs found at the time of the site investigation can at least be compared to the levels that the policy requires after site cleanup. The machine storage yard represented a fenced, restricted access area. According to the policy, when a spill has occurred in a restricted-access area, it is necessary to clean the contaminated plot to a soil PCB concentration of 25 ppm (mg/kg) by weight. The stricter requirements for decontaminating spills in nonrestricted-access areas would also not remove PCBs to the 4 ppm (mg/kg) level. At such places, contaminated soil should be decontaminated to 10 ppm (mg/kg) PCBs by weight. At the machine storage yard the levels of PCBs are less

than the levels to be left behind after cleanup of either the restricted or nonrestricted areas.

Moreover, the low level PCBs, if left in place at the storage site could not migrate through the unsaturated zone to the underlying perched water table (below a depth of 6 feet). The migaration of PCBs, due to leaching by rainfall, through soils is retarded by the strong adsorption of PCBs on soil particles. Adsorption is determined by the K_d, i.e. the adsorption coefficients of the compounds. K_d defines the concentration of contaminant in water (C_w) in equilibrium with contaminant adsorbed on soil (C_s) according to equation 2.

$$C_s = K_d \times C_w \qquad (2)$$

The value of K_d can be estimated from the octanol-water partition coefficient (Kow) and the organic carbon content of the soil (Foc) using equations 3 and 4 (Abdul et al., 1987).

$$K_d = Foc \times Koc \qquad (3)$$

$$\log Koc = 1.04 \log Kow - 0.88 \qquad (4)$$

For the machine storage site, where the Foc of the surface material is about 0.5% and for PCBs whose Kow is about 4×10^5, a value of $K_d = 442$ was calculated. Based on this value of K_d, infiltrating water in equilibrium with surface soil having 4 mg/kg PCBs could remove an aqueous concentration of just 9.0×10^{-3} mg/L. As soon as these dissolved PCBs contacted clean soil, however, perhaps one centimeter deeper, the aqueous concentration of 9.0×10^{-3} mg/L would be reduced to 20.5×10^{-6} mg/L at equilibrium,

according to the same equations. Thus, water percolating down from the contaminated surface soil would be readily cleansed when it had migrated a very short distance.

Heavy Metals: The mobility of metals through soils is dependent on the cation exchange capacity (CEC) of the soil. The CEC is defined as the quantity of exchangeable cations in milliequivalents per 100 g of soil that can adsorb on the negatively charged particles (clay minerals). Typically in the approximately neutral environment of surface soils at the site (pH 6-7), where the CEC is expected to range from 5 to 10 meq/100 g of soil, the mobility of metals is insignificant (Abdul et al., 1988b; Grimshaw, 1971). The cation exchange of metals, including chromium, nickel, lead, cadimum, iron, and zinc, with soil cations such as Ca^{+2} and Mg^{+2} can explain why they were contained in the thin upper layer above 12 inches at the contaminated site. Table 1 summarizes the results of measuring these six metals at the machine storage yard in the surface and subsurface layers and compares their concentrations with average background values found in Michigan (MDNR, 1988), and in Pennsylvania and Tennessee (EPRI, 1986). From a comparison of the results at the site with the reference values, it apppears that the subsurface concentrations of these metals represented background levels, and even the surface concentrations exceeded the reference ranges only for lead, cadmium and perhaps zinc.

The results of measurements of heavy metals in the leachate from the most contaminated surface soil (EP Toxicity test) are given in Table 2. These results indicate that none of the six metals in the surface soil was leached under the conditions of the test, which uses acetic acid to lower the pH to 5. Thus, the influx of even acid precipitation could not cause significant migration of the metals. Further, the concentrations of the

Table 1. Heavy metal concentrations in soils from the machine storage area and typical background averages.

Metal	Storage Yard Maximum conc.[1] (mg/kg soil)		Michigan avg.[2] (mg/kg soil)		Pennsylvania[3] Soils (mg/kg soil)	Tennessee[3] Soils (mg/kg soil)
	Surface	Subsurf.	Sand	Clay		
Chromium	74	5.7	3-4	9-25	66-100	26-74
Nickel	34	5.2	3-10	25-34	25-45	6-17
Lead	210	2.9	9-14	13-23	25-32	5-19
Zinc	140	16	--	41-51	81-115	25-168
Iron	34000	5000	--	--	37000-56000	13000-47000
Cadmium	5.6	<1	1-1.4	1-1.6	--	--

[1]Total metal concentration in soil sample measured by the inductively coupled plasma method after nitric acid digestion.

[2]MDNR (1988).

[3]EPRI (1986).

Table 2. Metal leaching measurements for the most contaminated surface soil at the machine storage yard.

Metal	Concentration (mg/kg)[1] Soil sample locations (50, 400)	(100, 400)	(200, 100)	RCRA[2] stds	Drinking[3] water stds
Chromium	<0.03	<0.03	<0.03	5.0	0.05
Nickel	<0.05	0.07	<0.05	--	--
Lead	0.05	0.06	<0.02	5.0	0.05
Zinc	0.08	0.25	0.02	500	5.0
Iron	4.1	5.5	0.33	--	--
Cadmium	0.01	0.01	<0.005	1.0	0.01

[1]Metal concentration in leachate after overnight extraction (pH 5) following the EP Tox Test, RCRA Method 1310 (USEPA, 1986).

[2]Title 40, CFR, Sec. 141.

[3]Title 40, CFR, Sec. 261.24.

metals in the acidic leachate were within the RCRA and Federal Drinking Water Standards (Title 40, CFR). Based on these results, like those for PCBs, there was no need for site remediation due to contamination by metals.

Total Hydrocarbons - Freon Extractables: When oily hydrocarbon mixtures, such as the Freon extractable material or total hydrocarbons measured at the machine storage yard, drain through soils, they leave behind a residual fraction trapped in the pore spaces between soil grains. The residual oil is not continuous and cannot migrate under the influence of gravity (Abdul, 1988). This residual fraction could occupy about 22% of the pore volume as determined by laboratory measurements on the soil at the Hydra-matic site. A residual oil volume of 22% is equivalent to 50,000 mg of oil per kg of soil (57 mL oil/kg of soil). Even this relatively low, immobile concentration of oil is much higher than the levels found in the surface soil at the most contaminated locations in the storage yard. The maximum concentration of total hydrocarbon found at the site (at location 100, 400) was only 14,000 mg/kg of soil. This level of contamination is equivalent to 5.8% saturation of the pore spaces. As an example, based on similar theoretical considerations, it would take about 11,000 gallons of oil to fill the residual volume of a soil layer 200 ft by 100 ft by 1 ft. Since the surface layer (1 ft) had much less oil than that required for residual saturation, the results suggested that there had never been a massive spill of oils to form a surface pool to cause significant migration through the unsaturated zone. Instead, the minor drips and spills from the disused machinery could not saturate the surface region in the yard. The lower levels of hydrocarbon contamination (about 200 mg/kg) typical of much of the yard were equivalent to less than 0.1% pore saturation and would be

even less able to migrate under the influence of processes such as rainwater percolation.

No evidence of contamination by volatile organic compounds (VOCs) was found during coring at the machine storage yard and regions outside the yard when the surface and subsurface soil were tested using a portable photoionization detector, able to detect <1 ppm organic vapor in air. Since residual VOCs were not found in the soil, easily dissolved and vaporized organic contaminants such as gasoline were unlikely to have been present. The absence of both volatile and oily contaminants in the lower subsurface zone further demonstrated that contamination did not spread in any form beyond the upper 22 inches of the site.

SITE CLOSURE

Because of the low concentrations and limited vertical migration of the contaminants, and their insignificant potential for future migration, the site could have been left in its then current state. However, Hydramatic plant management decided to excavate the surface soil in PCB-containing areas, prior to grading the site. With the agreement of the Michigan Department of Natural Resources, an area of about 27,000 ft^2 including the central zone of higher contaminant concentrations in the storage yard, was excavated to a depth of 2 ft (Figure 19). Another more lightly affected area, about 5,000 ft^2, was excavated to 1 ft. The soil was excavated and disposed of, as nonhazardous waste, at a total cost of $72,000. This excavated soil represented only a small part of the surface and subsurface material in the machine storage area. The limited extent of the excavation was possible only because of the precise delineation of the shallow contaminated zone demonstrated by the phased soil-coring

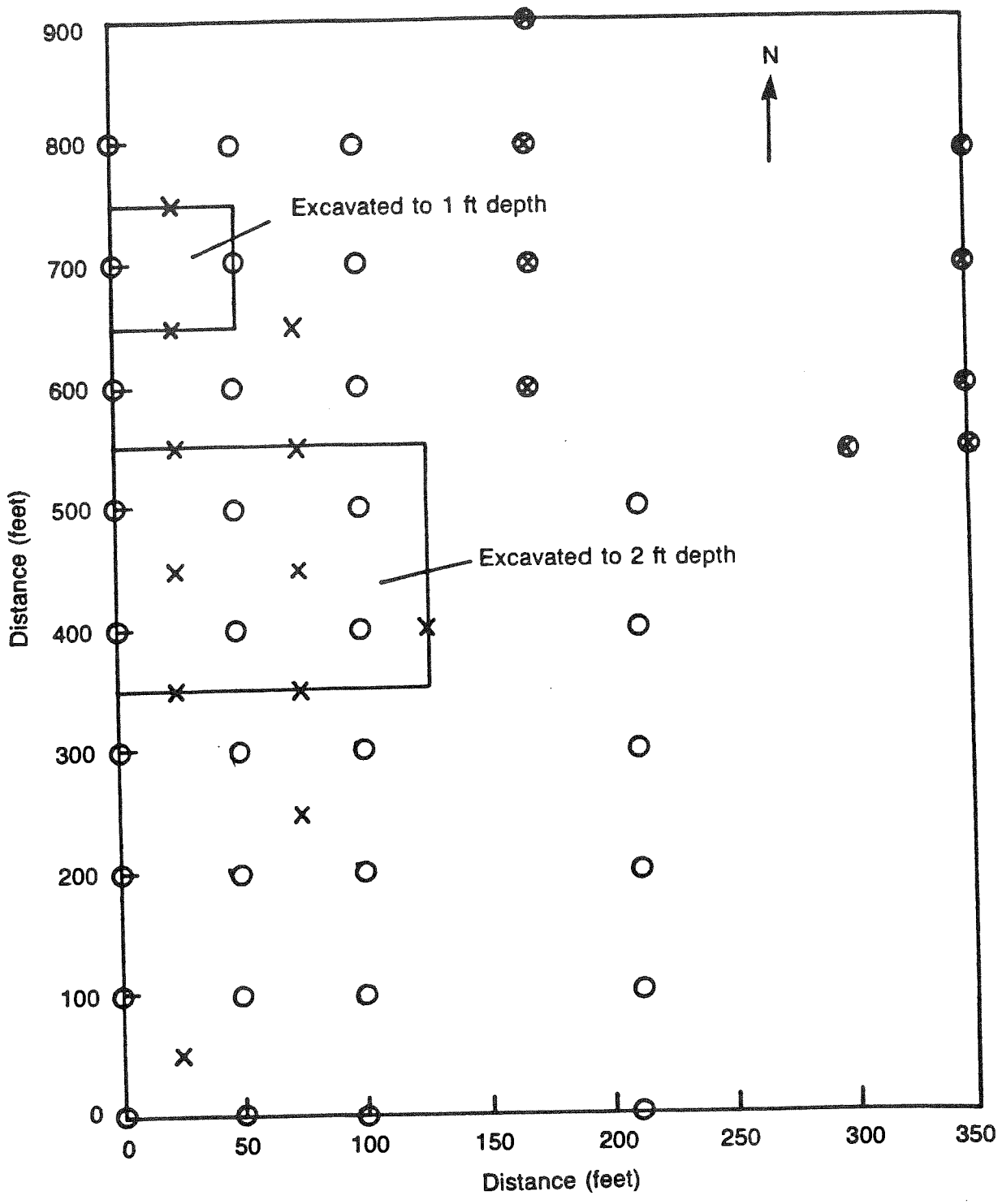


Figure 19. Areas excavated at the machine storage yard (1988).

investigation at the site. The limited excavation represented a saving compared to the greater cost of excavating the same areas down to the water table at 6 feet. This deeper excavation would have involved about four times more material at a total cost of about $270,000 for excavation, transportation, and disposal as nonhazardous waste. The cleanup cost would have reached about $2 million if the same volume of excavated soil had been declared a hazardous waste, as commonly happens at sites with higher contaminant concentrations.

In fact, using the wrong methods of investigation could have overestimated the amount of contaminated soil, thus leading to greater disposal costs for hazardous or nonhazardous waste. The standard device, most commonly used to sample subsurface material, is the split spoon sampler. In field tests of the GMR sampler and split spoon sampler at the storage yard, the GMR sampler showed contamination only in the upper portion of the soil core down to a depth of 22 inches, but the split spoon sampler showed cross-contamination by surface material in samples taken as deep as 6 feet (Gibson and Abdul, 1989). Thus, the contamination would have appeared to extend much deeper based on erroneous results if the split spoon method had been used to investigate the unsaturated zone at the site.

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C-E ENVIRONMENTAL, INC.

HYDROGEOLOGIC INVESTIGATION at the NORTH YARD

FINAL REPORT

Prepared for

GENERAL MOTORS CORPORATION
HYDRA-MATIC DIVISION
Ypsilanti, Michigan

July 1989

COMBUSTION ENGINEERING

HYDROGEOLOGIC INVESTIGATION
AT THE
NORTH YARD

FINAL REPORT

Prepared For:

GENERAL MOTORS CORPORATION
HYDRA-MATIC DIVISION
YPSILANTI, MICHIGAN

Prepared By:

C-E ENVIRONMENTAL, INC./E.C. JORDAN CO.
Farmington Hills, Michigan

Job No. 5883-00

July 1989

TABLE OF CONTENTS

SECTION NO.	TITLE	PAGE NO.
1.0	INTRODUCTION	1
2.0	PROJECT OBJECTIVES	4
3.0	FIELD INVESTIGATION	5
	3.1 MONITORING WELL INSTALLATION	5
	3.2 SURVEYING	7
	3.3 GROUNDWATER SAMPLING	8
4.0	RESULTS AND DISCUSSIONS	10
	4.1 HYDROGEOLOGY	10
	4.2 GROUNDWATER QUALITY	13
5.0	CONCLUSIONS AND RECOMMENDATIONS	15

APPENDIX A - BORING LOGS
APPENDIX B - GROUNDWATER SAMPLING FIELD DATA RECORDS
APPENDIX C - ANALYTICAL RESULTS

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
1-1	LOCATION OF THE GM HYDRA-MATIC PLANT.....	2
1-2	INVESTIGATION LOCATION MAP.....	3
3-1	MONITORING WELL LOCATIONS.....	6
4-1	GROUNDWATER ELEVATION.....	11

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
4-1	STATIC WATER ELEVATIONS - MARCH, 1989.....	12
4-2	ORGANIC AND INORGANIC CHEMICALS IN GROUNDWATER.....	14

1.0 INTRODUCTION

The General Motors (GM) Hydra-matic Willow Run plant is located in Ypsilanti, Michigan, within Washtenaw County (see Figure 1-1). In 1953, GM purchased the facility to house its transmission manufacturing operations. Hydra-matic currently produces automatic transmissions for automobiles and trucks. The major production operations include machining, stamping, heat treating, and assembly. The facility is located adjacent to the Willow Run Airport in close proximity to the GMC Willow Run Assembly plant. The majority of plant property is covered by buildings, pavement, and other structures.

The focus of this study was the North Yard which is located in the northeast corner of Hydra-matic's property (see Figure 1-2). This area was used to store production machinery and equipment that had been taken out of service. The equipment was stored directly on the soil surface and, as a result, residual metal-working fluids and various oils leaked from the equipment and into the soil.

To determine the extent of contamination in the North Yard, GM conducted a subsurface soil study which was completed in April 1988. The results indicated that the fluids and oils from the machinery were confined to the upper 24 inches of soil. This material was subsequently removed from the site in August 1988.

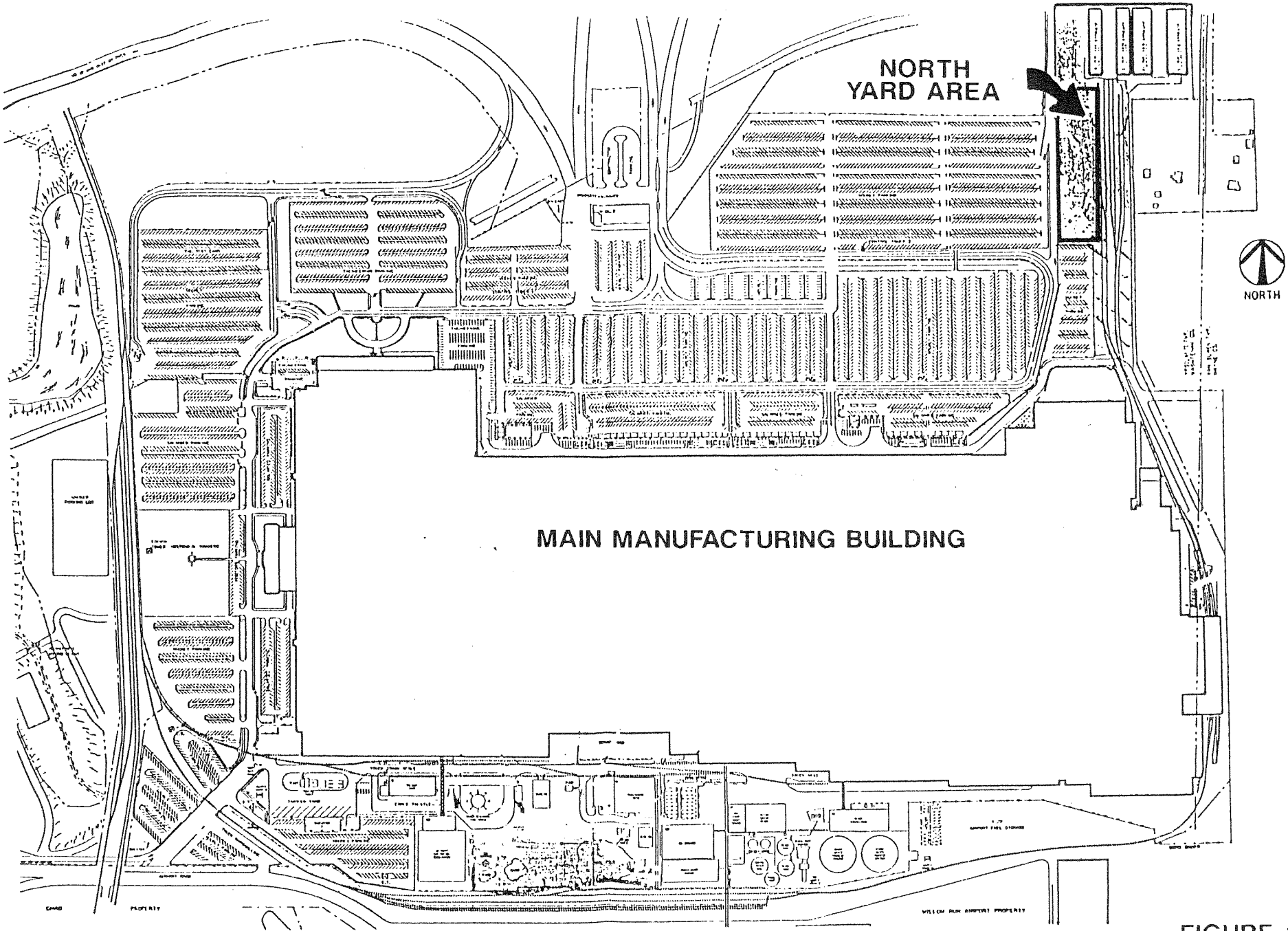
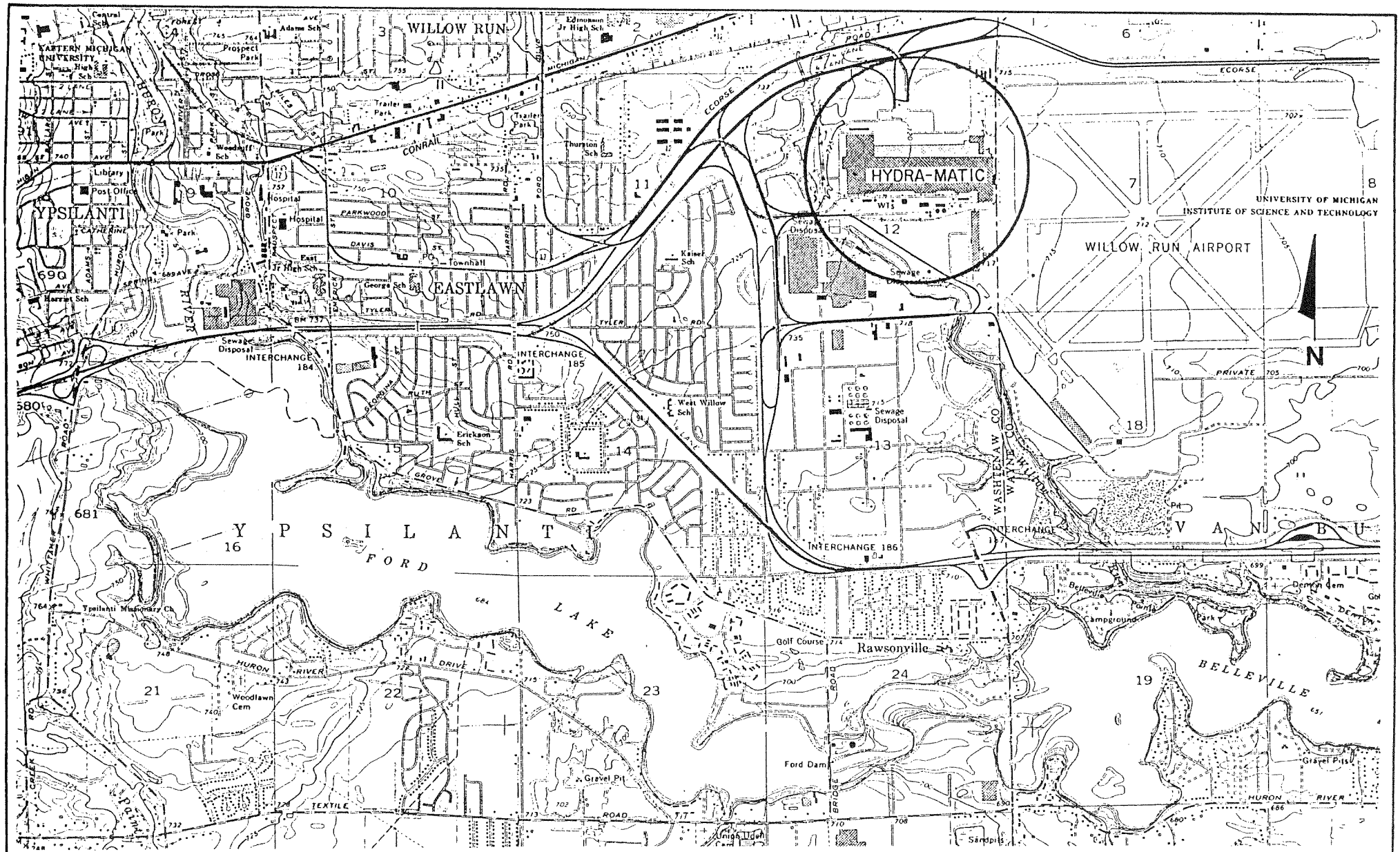


FIGURE 1-2
INVESTIGATION LOCATION MAP
GM HYDRA-MATIC PLANT
YPSILANTI, MICHIGAN

E.C. JORDAN CO.





QUADRANGLE LOCATION

0 1500 3000 6000 FEET

TAKEN FROM U.S.G.S. YPSILANTI EAST, MICH. 7.5' QUADRANGLE MAP.

FIGURE 1-1
LOCATION OF THE GM HYDRA-MATIC PLANT YPSILANTI, MICHIGAN

EC JORDAN CO

2.0 PROJECT OBJECTIVES

The primary objective of this study was to sample and analyze shallow groundwater in the North Yard area for organic chemicals and inorganic consitituents. This objective was achieved by conducting the following tasks:

- Installation of three groundwater monitoring wells;
- Collection of three groundwater samples for chemical analysis; and
- Survey of monitoring well elevations and locations.

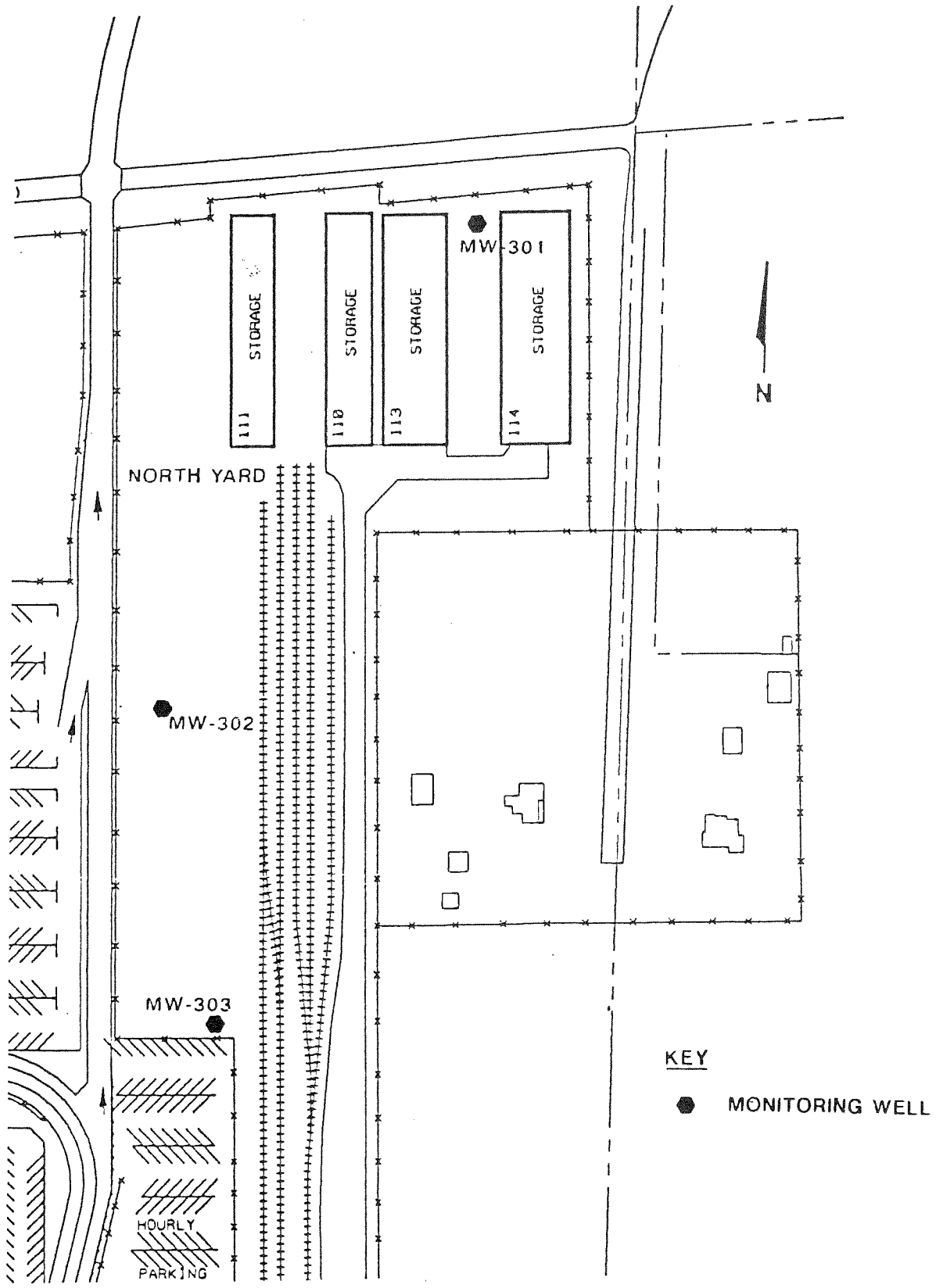
3.0 FIELD INVESTIGATION

The groundwater investigation in the North Yard was conducted by E.C. Jordan Co. (Jordan) from February 14 through March 22, 1989. Analytical services were provided by Environmental Control Technology Corporation (ENCOTEC), Ann Arbor, Michigan. Drilling services were provided by Professional Services Industries (PSI), Redford, Michigan.

3.1 MONITORING WELL INSTALLATION

Three monitoring wells, MW-301, MW-302, and MW-303, were installed on February 14, 1989, to provide piezometric and groundwater quality data (see Figure 3-1). The borings were completed by PSI with a truck-mounted CME-55 drilling rig using 6.25-inch ID hollow-stem augers. Soil samples were not collected. The borings were advanced until a dense silty clay was encountered at approximately 10 to 13 feet below the ground surface. Each borehole was logged visually from soil cuttings. To reduce the potential for cross-contamination during drilling, down-hole drilling equipment was steam-cleaned after the completion of each boring.

The wells were constructed of 2-inch ID, flush-threaded, PVC casing and 2-inch ID, 10-slot, PVC well screens ranging in length from 7 to 10 feet. Well screens were set on top of the dense silty clay at depths ranging from 10 to 13 feet. The wells were constructed so that the entire saturated zone was



SCALE

0 100 200 400 FEET

FIGURE 3-1
MONITORING WELL LOCATIONS
NORTH YARD
GM HYDRA-MATIC PLANT
YPSILANTI, MICHIGAN

GM DRAWING # HWR-NY-1

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screened. The annular space around the screen was packed with silica sand from the bottom of the screen to approximately 2 feet above the top of the screen, and the remaining annular space was sealed with bentonite pellets. Each well was finished above grade with a lockable well protector cemented in place. Boring/monitoring well logs with construction diagrams are included in Appendix A.

After installation, each well was developed to remove fine-grained sediment from the well and the aquifer material near the screen. This was accomplished by bailing and/or pumping with a submersible pump until the groundwater appeared to be free of fine-grained sediment.

3.2 SURVEYING

The vertical elevations and horizontal positions of the monitoring wells were surveyed by Jordan. Elevations were measured at the top of each well casing to an accuracy of $\pm$ 0.01 foot. In addition, the relative location of each well was measured from existing reference points to an accuracy of $\pm$ 1.0 foot.

3.3 GROUNDWATER SAMPLING

Groundwater samples were collected from the three wells on March 22, 1989. Each sample was analyzed for dissolved metals (Cd, Cr, Fe, Ni, Pb, and Zn), purgeable halocarbons (DNR Scan 1), and purgeable aromatic hydrocarbons (DNR Scan 2). Samples were also to be analyzed for polychlorinated biphenyls (PCBs) if an oil layer was found on top of the water table. Oil was not evident during well development or purging; therefore, none of the groundwater samples were analyzed for PCBs.

Prior to sampling, the static water level and depth of each well was measured from the top of the well casing. The volume of water standing inside the well casing was calculated, and three well volumes were evacuated from the well using a submersible pump equipped with teflon tubing. Groundwater temperature, pH, and specific conductance were recorded and monitored until these parameters stabilized. Stabilization of these parameters indicated that stagnant water had been removed from the well casing so that a representative groundwater sample could be taken. These parameters were recorded on the Groundwater Field Data Sampling Records contained in Appendix B.

After evacuating each well, groundwater samples were collected with the submersible pump. Samples to be analyzed for dissolved metals were pressure-filtered with nitrogen in a 2.4-liter barrel filter using a membrane filter with a 0.45-micron pore size. The samples were filtered directly into laboratory prepared bottles, pre-preserved with nitirc acid. Between samples, the

filter assembly was rinsed with a dilute nitric acid solution followed by distilled water. The membrane filter was replaced between samples. After processing and labeling, all samples were kept on ice in coolers until delivery to the laboratory.

The submersible pump was decontaminated with trisodium phosphate (TSP) and distilled water solution, followed by a distilled water rinse. The decontamination procedures were checked by submitting a distilled water sampler blank (MW-350) to the laboratory for analysis. The sampler blank was handled and processed in the same manner as the groundwater samples (i.e., run through the submersible pump, pressure-filtered for metals analysis, placed in the appropriate laboratory bottles, etc.). In addition to the sampler blank, one duplicate sample, MW-351 (a duplicate of MW-301), and one trip blank were also submitted for analysis. The sampler blank and the duplicate sample were analyzed for dissolved metals and DNR Scans 1 and 2. The trip blank was only analyzed for volatile organic chemicals (i.e., DNR Scans 1 and 2).

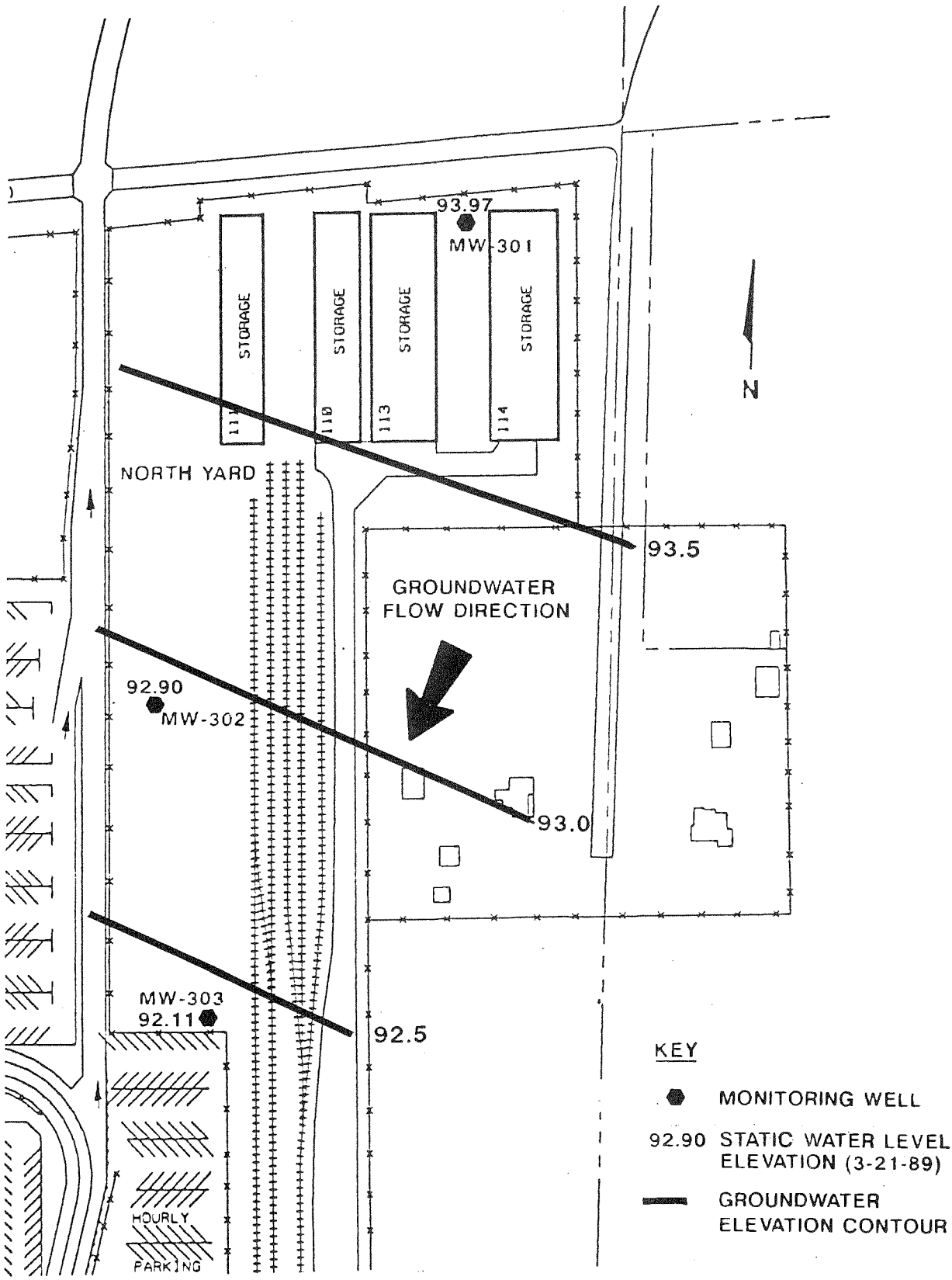
4.0 RESULTS AND DISCUSSION

4.1 HYDROGEOLOGY

The Hydra-matic plant is located in the Huron River drainage basin which empties into Lake Erie near the mouth of the Detroit River. The geology is characterized by approximately 140 feet of unconsolidated glacial deposits which overlie the Mississippian Antrim Shale. Locally, the surficial geologic materials are primarily fine-grained lacustrine sands, silts and clays of moderate to low permeability.

Based upon observations made during drilling, the geologic materials at the GM site consist of poorly sorted fine to medium-grained sand with silt to a depth of approximately 12 feet. At approximately 12 feet, a dense silty clay till was encountered.

Groundwater was encountered in the North Yard at depths ranging from approximately 3 to 8 feet below ground surface. Elevational data and static water level measurements (obtained on March 21, 1989) are included in Table 4-1, and Figure 4-1 illustrates the groundwater flow direction. The average horizontal hydraulic gradient was calculated at approximately 0.0019 feet/foot with groundwater flowing generally to the southwest.



SCALE

0 100 200 400 FEET

FIGURE 4-1
GROUNDWATER ELEVATION AND FLOW DIRECTION MAP
NORTH YARD
GM HYDRA-MATIC PLANT
YPSILANTI, MICHIGAN

GM DRAWING # HWR-NY-1

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TABLE 4-1

STATIC WATER ELEVATIONS - MARCH, 1989
NORTH YARD
GM HYDRA-MATIC, YPSILANTI, MI

WELL DESIGNATION	TOP OF CASING ELEVATION	DEPTH TO WATER	STATIC WATER LEVEL
MW-301	97.79	3.82	93.97
MW-302	100.13	7.23	92.90
MW-303	100.02	7.61	92.41

Notes:

1. All measurements are relative and expressed in feet.

4.2 GROUNDWATER QUALITY

Floating product was not observed at any of the well locations during drilling or groundwater sampling. Groundwater evacuated prior to sampling was described as silty to clear and without noticeable odor with the exception of MW-302 which had a slight sulfur odor.

The results of the chemical analysis of groundwater are summarized in Table 4-2, and laboratory analysis reports from ENCOTEC are contained in Appendix C. Organic chemicals were not detected in groundwater from any of the wells located in the study area. The duplicate sample, MW-351, and the sampler blank, MW-350, and the trip blank, were also free of organic chemicals.

The results of the inorganic groundwater analysis indicated that iron was the only metal present in groundwater from the North Yard at concentrations above the detection limits. Iron was detected in MW-302 at 2.8 mg/L, and in MW-303 at 8.1 mg/L. All other metals were undetected.

TABLE 4-2 ORGANIC AND INORGANIC CHEMICALS IN GROUNDWATER
NORTH YARD
GM HYDRA-MATIC, YPSILANTI, MI

Compound	Detection Limit (mg/L)	MW-350 SAMPLER BLANK	MW-301	MW-351 DUP OF MW-301	MW-302	MW-303	TRIP BLANK 3
Bromodichloromethane	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon Tetrachloride	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene Chloride	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,1-Trichloroethane	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl Chloride	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Benzene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Styrene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Xylene	0.001	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Xylene and 1,4-Xylene	0.002	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Dissolved Chromium	0.03	0.03 U	0.03 U	0.03 U	0.03 U	0.03 U	NA
Dissolved Copper	0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA
Dissolved Iron	0.05	0.05 U	0.05 U	0.05 U	2.8	8.1	NA
Dissolved Lead	0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA
Dissolved Nickel	0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA
Dissolved Zinc	0.02	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	NA

Notes:
1. All concentrations in mg/L.
2. U - Compound was analyzed for but not detected.
3. NA - Not analyzed.

5.0 CONCLUSIONS AND RECOMMENDATIONS

Based upon the information collected during this investigation, it appears that the oils and fluids contained in production machinery and equipment stored in the North Yard area have not contributed organic chemicals to groundwater. Although the levels of dissolved iron found in MW-302 and MW-303 are above background, such concentrations are commonly found in Michigan groundwater.

To confirm the analytical results of this sampling event, Jordan recommends that another full round of groundwater samples be taken and similarly analyzed. Jordan understands that Hydra-matic has agreed to monitor groundwater in the North Yard area for a period of two years. The sampling event described in this report constitutes the first quarterly sampling of this program.

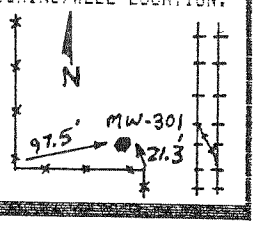
APPENDIX A

BORING LOGS

BORING LOG / MONITORING WELL DIAGRAM

C-E ENVIRONMENTAL, INC.

PROJECT NO.: 5883-00	PROJECT NAME: HYDRA-MATIC WILLOW RUN		BORING/WELL DESIGNATION: MW-301	BORING/WELL LOCATION:
DRILLING CONTRACTOR: P.S.I.	DRILLING METHOD: HOLLOW STEM AUGER		BOREHOLE SIZE: 8 IN.	BOREHOLE DEPTH: 11 FT.
DATE STARTED: 2/14/89	DATE COMPLETED: 2/14/89	GROUND ELEV.: 99.79 FT.	MEASURING POINT ELEV: 97.79 FT.	WELL DEPTH: 10.0 FT.
RIG: CME-55	DRILLER: P. LIBBY	HELPER: M. BOND	LOGGED BY: C KIELTY	



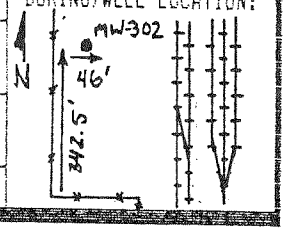
DEPTH (FT.)	DESCRIPTION	SAMPLE NO.	SAMPLE TYPE	BLOW COUNTS(N)	P.I. METER	COMMENTS	WELL DATA
0	SAND (FILL)	N/A	N/A	N/A	(ppm) BG	WELL FINISHED ABOVE GRADE W/A LOCKABLE PROTECTIVE CASING	XXX
						CEMENT	XX
	SAND - orange-brown, medium grained, moist.					BENTONITE SEAL	//
2.5	(groundwater encountered @ approx. 3 feet)					TWO-INCH SCHEDULE 40 FLUSH-THREADED PVC WELL CASING	...
5.0						SAND FILTER PACK	==
	SAND - gray-brown, wet, trace silt.						
7.5						TWO-INCH 10-SLOT PVC WELL SCREEN	==
10.0	CLAY - gray, moist, some silt.						
	END OF BORING AT 11 FEET						
12.5							
15.0							

NOTES: BG - BACKGROUND
N/A - NOT APPLICABLE
SAMPLES LOGGED FROM CUTTINGS

BORING LOG / MONITORING WELL DIAGRAM

C-E ENVIRONMENTAL, INC.

PROJECT NO.: 5883-00	PROJECT NAME: HYDRA-MATIC WILLOW RUN	BORING/WELL DESIGNATION: MW-302	BORING/WELL LOCATION:
DRILLING CONTRACTOR: P.S.I.	DRILLING METHOD: HOLLOW STEM AUGER	BOREHOLE SIZE: 8 IN.	BOREHOLE DEPTH: 13 FT.
DATE STARTED: 2/14/89	DATE COMPLETED: 2/14/89	GROUND ELEV.: 102.63 FT.	MEASURING POINT ELEV: 100.13 FT.
WELL DEPTH: 12.5 FT.			
RIG: CME-55	DRILLER: P. LIBBY	HELPER: M. BOND	LOGGED BY: C KIELTY



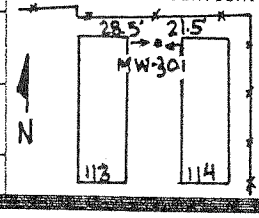
DEPTH (FT.)	DESCRIPTION	SAMPLE NO.	SAMPLE TYPE	BLOW COUNTS(N)	P.I. METER	COMMENTS	WELL DATA
0	ASPHALT DEBRIS SAND & GRAVEL (FILL)	N/A	N/A	N/A	BG (ppm)	WELL FINISHED ABOVE GRADE W/A LOCKABLE PROTECTIVE CASING; CEMENT; BENTONITE SEAL	
2.5	SAND - orange-brown, medium grained, moist, some fine gravel.					TWO-INCH SCHEDULE 40 FLUSH-THREADED PVC WELL CASING	
5.0						SAND FILTER PACK	
	SAND - gray-brown, wet, trace fine gravel and silt. (groundwater encountered @ approx. 6-feet)						
7.5						TWO-INCH 10-SLOT PVC WELL SCREEN	
10.0							
12.5	CLAY - gray, moist, some silt.						
	END OF BORING AT 13 FEET						
15.0							

NOTES: BG - BACKGROUND
N/A - NOT APPLICABLE
SAMPLES LOGGED FROM CUTTINGS

BORING LOG / MONITORING WELL DIAGRAM

C-E ENVIRONMENTAL, INC.

PROJECT NO.: 5883-00	PROJECT NAME: HYDRA-MATIC WILLOW RUN	BORING/WELL DESIGNATION: MW-303	BORING/WELL LOCATION:
DRILLING CONTRACTOR: P.S.I.	DRILLING METHOD: HOLLOW STEM AUGER	BOREHOLE SIZE: 8 IN.	BOREHOLE DEPTH: 13.5 FT.
DATE STARTED: 2/14/89	DATE COMPLETED: 2/14/89	GROUND ELEV.: 102.02 FT.	MEASURING POINT ELEV: 100.02 FT.
WELL DEPTH: 13 FT.			
RIG: CME-55	DRILLER: P. LIBBY	HELPER: M. BOND	LOGGED BY: C KIELTY



DEPTH (FT.)	DESCRIPTION	SAMPLE NO.	SAMPLE TYPE	BLOW COUNTS(N)	P.I. METER	COMMENTS	WELL DATA
0					(ppm)		
	ASPHALT DEBRIS; SAND & GRAVEL (FILL)	N/A	N/A	N/A	BG	WELL FINISHED ABOVE GRADE W/A LOCKABLE PROTECTIVE CASING	
	SAND - orange-brown, medium grained, moist, some fine gravel.					CEMENT	
2.5						BENTONITE SEAL	
						TWO-INCH SCHEDULE 40 FLUSH-THREADED PVC WELL CASING	
5.0	SAND - gray-brown, fine-medium grained, moist, some silt.						
7.5						SAND FILTER PACK	
	SAND - gray, medium grained, wet, some silt.						
10.0	(groundwater encountered @ approx. 9 feet)					TWO-INCH 10-SLOT PVC WELL SCREEN	
12.5	CLAY - gray, moist, some silt.						
	END OF BORING AT 13.5 FEET						
15.0							

NOTES: BG - BACKGROUND
N/A - NOT APPLICABLE
SAMPLES LOGGED FROM CUTTINGS

APPENDIX B

GROUNDWATER SAMPLING FIELD DATA RECORDS

EC JORDAN CO

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT GM HMD YPSI JOB NO 5883-00

STATION NO/LOCATION MW-301 DATE 3/22/89

SKETCH ON BACK ☐ YES ☒ NO PHOTOGRAPHS ☐ YES ☒ NO ROLL NO/EXPOSURE NO —

WELL DATA

WATER DEPTH 3.82 ☐ TOP WELL ☒ TOP CASING WELL DEPTH 12' WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED

PURGE	SAMPLE
KECK X	KECK X
QED	QED
SSBAIL	SSBAIL
OTHER	OTHER

PURGE TIME START 0935 END _____

SAMPLE TIME START _____ END 1000

WEATHER Sunny

9 FT. WATER X .163 (2"=.163gal/ft) (4"=.653gal/ft) (6"=1.47gal/ft) X 3 CASING VOLUME = 4.5 GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL (PPM) AMBIENT _____ SAMPLE LOCATION _____ HEADSPACE _____

SAMPLE PURGE DATA

@ 1 GAL	@ 2 GAL	@ 3 GAL	@ 4 GAL
TEMP 13.3 °C	TEMP 13.0 °C	TEMP 13.0 °C	TEMP 12.7 °C
SP. COND 188 @25°C	SP. COND 194 @25°C	SP. COND 200 @25°C	SP. COND 200 @25°C
pH 7.5	pH 7.5	pH 7.4	pH 7.3
Eh _____	Eh _____	Eh _____	Eh _____

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
DNR SCANS 1&2	80ml	glass	NO	—	
Dissolved Metals	1l	plastic	yes	HNO_3 pre	

REMARKS/OBSERVATIONS Water cloudy (silty) Will pump to develop more. Cleared up well.

SAMPLER DHB/CSK

EC JORDAN CO

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT GM HMD YPSI JOB NO 5883-00

STATION NO/LOCATION MW-302 DATE 3/22/89

SKETCH ON BACK YES ☐ NO ☒ PHOTOGRAPHS YES ☐ NO ☒ ROLL NO/EXPOSURE NO —

WELL DATA

WATER DEPTH 7.23 ☐ TOP WELL ☒ TOP CASING WELL DEPTH 15' WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED

PURGE	SAMPLE
KECK X	KECK X
QED ___	QED ___
SSBAIL ___	SSBAIL ___
OTHER ___	OTHER ___

PURGE TIME START 1005 END _____

SAMPLE TIME START _____ END 1020

WEATHER Sunny

8 FT. WATER X .163 (2"=.163gal/ft) (4"=.653gal/ft) (6"=1.47gal/ft) X 3 CASING VOLUME = 4 GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL (PPM) AMBIENT _____ SAMPLE LOCATION _____ HEADSPACE _____

SAMPLE PURGE DATA

@ 1 GAL	@ 2 GAL	@ 3 GAL	@ 4 GAL
TEMP 5.1 °C	TEMP 5.2 °C	TEMP 5.4 °C	TEMP ___ °C
SP. COND 879 @25°C	SP. COND 981 @25°C	SP. COND 1020 @25°C	SP. COND ___ @25°C
pH 7.0	pH 7.0	pH ___	pH ___
Eh ___	Eh ___	Eh ___	Eh ___

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
DNR Scans 1+2	80ml	glass	No	—	
Diss. metals	1l	plastic	yes	HNO3 pre	

REMARKS/OBSERVATIONS Water Slightly Silty to → Clear "Sulfur" smell

SAMPLER DHB/CSK

EC JORDAN CO North Yard

PAGE 1 OF 1

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT GM HMD YPSI JOB NO 5883-00

STATION NO/LOCATION MW-303 DATE 3/22/89

SKETCH ON BACK YES ☐ NO ☑ PHOTOGRAPHS YES ☐ NO ☑ ROLL NO/EXPOSURE NO —

WELL DATA

WATER DEPTH 7.61 ☐ TOP WELL ☑ TOP CASING WELL DEPTH 15' WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED

	PURGE	SAMPLE
KECK	X	X
QED		
SSBAIL		
OTHER		

PURGE TIME START 1046 END _____

SAMPLE TIME START _____ END 1100

WEATHER Sunny

8 FT. WATER X .163 (2"=.163gal/ft) (4"=.653gal/ft) (6"=1.47gal/ft) X 3 CASING VOLUME = 4 GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL(PPM) AMBIENT _____ SAMPLE LOCATION _____ HEADSPACE _____

SAMPLE PURGE DATA

@ 1 GAL	@ 2 GAL	@ 3 GAL	@ 4 GAL
TEMP 5.3 °C	TEMP 5.2 °C	TEMP 5.1 °C	TEMP 5.1 °C
SP. COND 673 @25°C	SP. COND 689 @25°C	SP. COND 692 @25°C	SP. COND 686 @25°C
pH 6.9	pH 6.9	pH 6.9	pH 6.9
Eh _____	Eh _____	Eh _____	Eh _____

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
DNR SCAN 1&2	80ml	glass	NO	—	
Dissolved Metals	1l	plastic	yes	HNO3 pre	

REMARKS/OBSERVATIONS Water Slightly Cloudy → clear

SAMPLER DHB/CSK

EC JORDAN CO North Yard

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT GM HMD YPSI JOB NO 5883-00

STATION NO/LOCATION MW-[redacted]350 DATE 3/22/89

SKETCH ON BACK YES ☐ NO ☑ PHOTOGRAPHS YES ☐ NO ☑ ROLL NO/EXPOSURE NO —

WELL DATA

WATER DEPTH — ☐ TOP WELL ☑ TOP CASING WELL DEPTH — WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED	PURGE	SAMPLE
KECK	✓	X
QED		
SSBAIL		
OTHER		

PURGE TIME START _____ END _____

SAMPLE TIME START _____ END 0930

WEATHER Sunny

____FT. WATER X .163 (2"=.163gal/ft, 4"=.653gal/ft, 6"=1.47gal/ft) X 3 CASING VOLUME = ____GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL(PPM) AMBIENT _____ SAMPLE LOCATION _____ HEADSPACE _____

SAMPLE PURGE DATA

@ ____ GAL	@ ____ GAL	@ ____ GAL	@ ____ GAL
TEMP ____ °C	TEMP ____ °C	TEMP ____ °C	TEMP ____ °C
SP. COND ____ @25°C	SP. COND ____ @25°C	SP. COND ____ @25°C	SP. COND ____ @25°C
pH ____	pH ____	pH ____	pH ____
Eh ____	Eh ____	Eh ____	Eh ____

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
DNR Scans 1+2	8oz	glass	No	NO —	
Dissolved Metals	1l	plastic	Yes	Yes pre	

REMARKS/OBSERVATIONS Blank taken @ start of day w/ Keck

SAMPLER DHB/CSK

EC JORDAN CO

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT GM HMD YPSI JOB NO 5883-00

STATION NO/LOCATION MW-351 DATE 3/22/89

SKETCH ON BACK YES ☐ NO ☑ PHOTOGRAPHS YES ☐ NO ☑ ROLL NO/EXPOSURE NO —

WELL DATA

WATER DEPTH — ☐ TOP WELL ☑ TOP CASING WELL DEPTH — WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP — WELL/CASING —

EQUIPMENT USED

PURGE	SAMPLE
KECK X	KECK X
QED	QED
SSBAIL	SSBAIL
OTHER	OTHER

PURGE TIME START — END —

SAMPLE TIME START — END —

WEATHER Sunny

— FT. WATER X .163 (2"=.163gal/ft, 4"=.653gal/ft, (6"=1.47gal/ft) X 3 CASING VOLUME = — GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL(PPM) AMBIENT —

SAMPLE LOCATION —

HEADSPACE —

SAMPLE PURGE DATA

@ — GAL	@ — GAL	@ — GAL	@ — GAL
TEMP — °C	TEMP — °C	TEMP — °C	TEMP — °C
SP. COND — @25°C	SP. COND — @25°C	SP. COND — @25°C	SP. COND — @25°C
pH —	pH —	pH —	pH —
Eh —	Eh —	Eh —	Eh —

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
DNR Scans 1+2	80ml	glass	NO	—	
Dissolved metals	1 l	plastic	yes	HNO3 pre	

REMARKS/OBSERVATIONS Duplicate of MW-301 (Keck)

SAMPLER DHB/CSK

APPENDIX C

ANALYTICAL RESULTS

ENCOTEC
3985 RESEARCH PARK DR.
ANN ARBOR, MI 48108
(313) 761-1389

DATA SUMMARY SHEET

PROJECT: E. C. Jordan
PROJECT NO.: 40650
SAMPLE TYPE: Dissolved Metals - Water
REPORT DATE: April, 1989

SAMPLE NAME		MW-350	MW-301	MW-351	MW-302	MW-303
SAMPLE DATE		3/22/89	3/22/89	3/22/89	3/22/89	3/22/89
PARAMETER	UNITS	ENCOTEC SAMPLE I.D. NUMBER				
		29669	29670	29671	29672	29673
Chromium	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03
Copper	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Iron	mg/L	<0.05	<0.05	<0.05	2.8	8.1
Lead	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E. C. Jordan
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: April 20, 1989

Sample: MW-350
ENCOTEC Number: 29664
Sample Date: 3/22/89
Date Received: 3/22/89
Date Extracted: N/A
Date Analyzed: 4/7/89

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
Dichlorodifluoromethane	75-71-8	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E. C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: April 20, 1989

Sample: MW-350
ENCOTEC Number: 29664
Sample Date: 3/22/89
Date Received: 3/22/89
Date Extracted: N/A
Date Analyzed: 4/7/89

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Styrene	100-42-5	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E. C. Jordan
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: April 20, 1989

Sample: MW-301
ENCOTEC Number: 29665
Sample Date: 3/22/89
Date Received: 3/22/89
Date Extracted: N/A
Date Analyzed: 4/7/89

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
Dichlorodifluoromethane	75-71-8	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E. C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: April 20, 1989

Sample: MW-301
ENCOTEC Number: 29665
Sample Date: 3/22/89
Date Received: 3/22/89
Date Extracted: N/A
Date Analyzed: 4/7/89

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Styrene	100-42-5	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E. C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: April 20, 1989

Sample: MW-351
ENCOTEC Number: 29666
Sample Date: 3/22/89
Date Received: 3/22/89
Date Extracted: N/A
Date Analyzed: 4/7/89

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Styrene	100-42-5	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E. C. Jordan
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: April 20, 1989

Sample: MW-302
ENCOTEC Number: 29667
Sample Date: 3/22/89
Date Received: 3/22/89
Date Extracted: N/A
Date Analyzed: 4/7/89

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
Dichlorodifluoromethane	75-71-8	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E. C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: April 20, 1989

Sample: MW-302
ENCOTEC Number: 29667
Sample Date: 3/22/89
Date Received: 3/22/89
Date Extracted: N/A
Date Analyzed: 4/7/89

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Styrene	100-42-5	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E. C. Jordan
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: April 20, 1989

Sample: MW-303
ENCOTEC Number: 29668
Sample Date: 3/22/89
Date Received: 3/22/89
Date Extracted: N/A
Date Analyzed: 4/7/89

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
Dichlorodifluoromethane	75-71-8	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E. C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: April 20, 1989

Sample: MW-303
ENCOTEC Number: 29668
Sample Date: 3/22/89
Date Received: 3/22/89
Date Extracted: N/A
Date Analyzed: 4/7/89

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Styrene	100-42-5	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E. C. Jordan
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: April 20, 1989

Sample: Trip Blank #3
ENCOTEC Number: 29674
Sample Date: 3/22/89
Date Received: 3/22/89
Date Extracted: N/A
Date Analyzed: 4/7/89

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
Dichlorodifluoromethane	75-71-8	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E. C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: April 20, 1989

Sample: Trip Blank
ENCOTEC Number: 29674
Sample Date: 3/22/89
Date Received: 3/22/89
Date Extracted: N/A
Date Analyzed: 4/7/89

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Styrene	100-42-5	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

ENCOTEC
3985 RESEARCH PARK DR.
ANN ARBOR, MI 48108
(313) 761-1389

July 1990 Sampling

DATA SUMMARY SHEET

PROJECT: ABB Environmental

PROJECT NO.: 40650

SAMPLE TYPE: Water

REPORT DATE: August, 1990

SAMPLE NAME		MW 301	MW 302	MW 303	MW 350	MW 351
SAMPLE DATE		7-20-90	7-20-90	7-20-90	7-20-90	7-20-90
PARAMETER	UNITS	ENCOTEC SAMPLE I.D. NUMBER				
		55832	55833	55834	55835	55836
Cadmium	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Copper	mg/L	<0.02	<0.02	<0.02	0.14	<0.02
Iron	mg/L	0.31	5.3	11	<0.05	10
Lead	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	mg/L	<0.02	0.11	<0.02	0.11	<0.02

C-E ENVIRONMENTAL, INC.

GROUNDWATER MONITORING REPORT DECEMBER 1989, MARCH 1990, AND JULY 1990

NORTH YARD

Prepared For:

GENERAL MOTORS CORPORATION
HYDRA-MATIC DIVISION
GM Hydra-Matic, Ypsilanti, Michigan

October 1990

Job No. 5883-00

COMBUSTION ENGINEERING

GROUNDWATER MONITORING REPORT
DECEMBER 1989, MARCH 1990, AND JULY 1990

NORTH YARD

Prepared For:

GENERAL MOTORS CORPORATION
HYDRA-MATIC DIVISION
GM Hydra-Matic, Ypsilanti, Michigan

Prepared By:

C-E ENVIRONMENTAL INC.
Farmington Hills, Michigan

October 1990

5883-00

TABLE OF CONTENTS

SECTION NO.	TITLE	PAGE NO.
1.0	INTRODUCTION	1
2.0	SCHEDULE	1
3.0	PERSONNEL	1
4.0	SAMPLING LOCATIONS	1
5.0	FIELD PROCEDURES	1
6.0	SAMPLE HANDLING	5
7.0	QUALITY CONTROL SAMPLES	5
8.0	RESULTS	5
8.1	GROUNDWATER FLOW	5
8.2	QUALITY CONTROL SAMPLES	6
8.3	GROUNDWATER QUALITY	6

APPENDIX A - GROUNDWATER SAMPLE DATA RECORDS - DECEMBER 1989
APPENDIX B - GROUNDWATER SAMPLE DATA RECORDS - MARCH 1990
APPENDIX C - GROUNDWATER SAMPLE DATA RECORDS - JULY 1990
APPENDIX D - ANALYTICAL METHODS
APPENDIX E - LABORATORY ANALYTICAL REPORTS - DECEMBER 1989
APPENDIX F - LABORATORY ANALYTICAL REPORTS - MARCH 1990
APPENDIX G - LABORATORY ANALYTICAL REPORTS - JULY 1990

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
1	LOCATION OF THE GM HYDRA-MATIC WILLOW RUN PLANT	2
2	INVESTIGATION LOCATION MAP	3
3	MONITORING WELL LOCATIONS	4
4	MONITORING WELL LOCATIONS AND WATER LEVEL MEASUREMENTS	7

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
1	SUMMARY OF WATER LEVELS AND GROUNDWATER FLOW DIRECTIONS OBSERVED DURING 1989 AND 1990	6
2	ORGANIC AND INORGANIC CHEMICALS IN GROUNDWATER AT THE NORTH YARD	8

1.0 INTRODUCTION

The General Motors (GM) Hydra-matic Willow Run Plant is located in Ypsilanti, Michigan, within Washtenaw County (see Figure 1). The North Yard, previously used to store production machinery and equipment, is located in the northeast corner of Hydra-matic's property (see Figure 2). The equipment was stored directly on the ground; as a result, residual metal-working fluids and various oils leaked from the equipment and into the soil.

GM conducted a subsurface soil study in April 1988 to determine the extent of contamination in the North Yard. The results indicated that the fluids and oils from the machinery were confined to the upper 24 inches of soil. This material was removed from the site in August 1988.

As part of the North Yard remediation program, Hydra-matic implemented a quarterly groundwater monitoring program for a two year period beginning in 1989[1]. In February 1989, C-E Environmental, Inc. (formerly E.C. Jordan Co.) installed three groundwater monitoring wells in the North Yard. Groundwater samples were collected in March 1989, June 1989, September 1989, December 1989, March 1990, and July 1990. All samples were analyzed for selected dissolved metals, purgeable halocarbons (DNR Scan 1), and purgeable aromatic hydrocarbons (DNR Scan 2). In addition, samples collected in December 1989, March 1990, and July 1990 were analyzed for polychlorinated biphenyls (PCBs). The results of the first three sampling events were reported previously. This report documents the last three groundwater sampling events which occurred in December 1990, March 1990, and July 1990.

2.0 SCHEDULE

The fourth groundwater sampling event was conducted on December 28, 1989, the fifth on March 27, 1990, and the sixth on July 20, 1990.

3.0 PERSONNEL

C-E Environmental staff collected groundwater samples during each sampling event. Groundwater samples in December 1989 and March 1990 were collected by C. Kielty and T. Winebrenner. C. Kielty and C. Cantwell collected the samples in July, 1990.

4.0 SAMPLING LOCATIONS

Figure 3 shows the locations of the three monitoring wells in the North Yard.

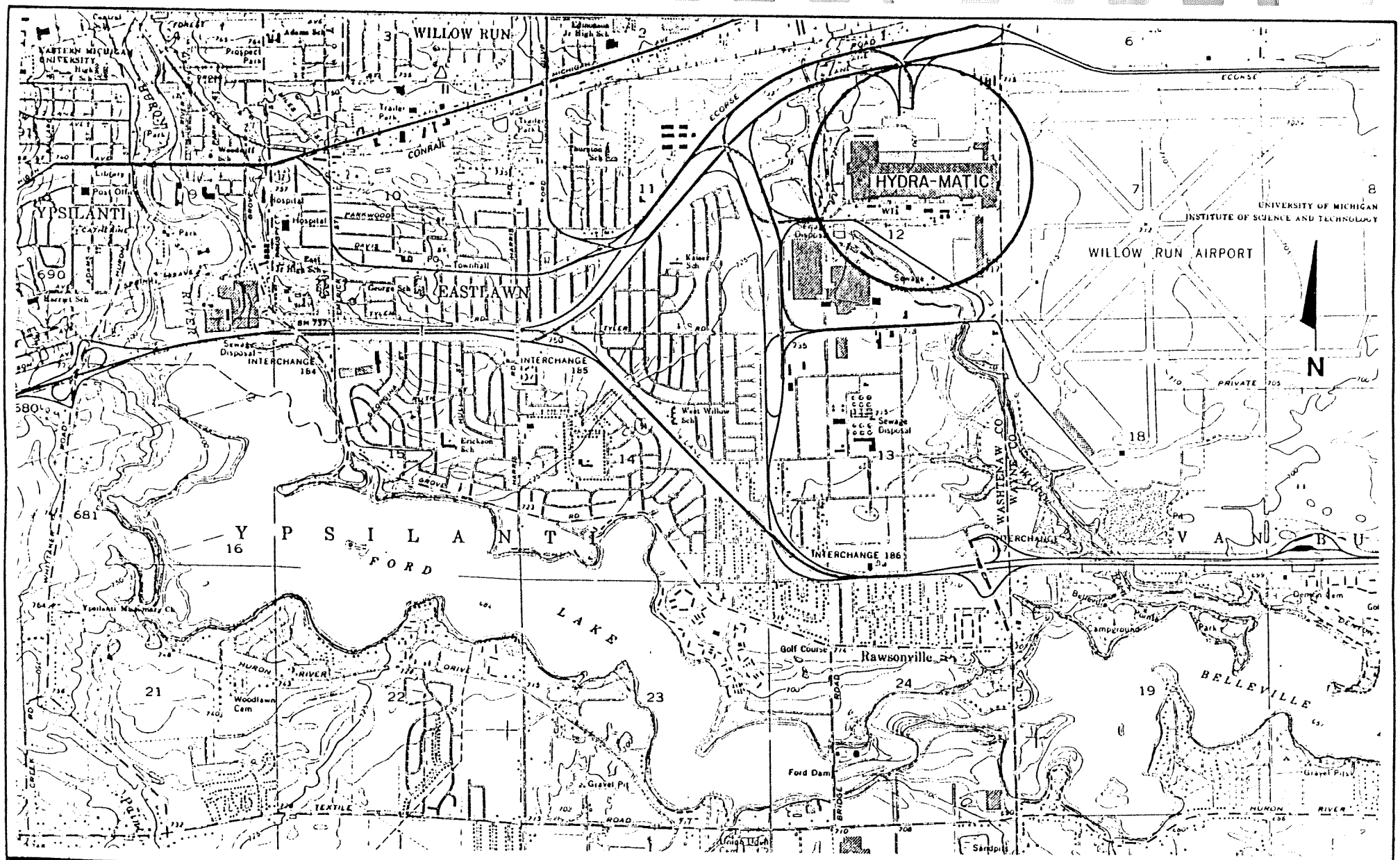
5.0 FIELD PROCEDURES

Field procedures for each sampling event were identical. Prior to sampling, the water level and depth of each well was measured from the top of the well casing. The volume of water standing inside the well casing was calculated, and three well volumes were evacuated from the well using a Teflon or stainless-steel bailer.

Groundwater temperature, pH, and specific conductance were recorded three times during evacuation. Stabilization of these parameters indicated that stagnant water had been removed from the well casing so that a representative groundwater sample could be taken. These parameters were recorded on the Groundwater Sampling Records contained in Appendices A, B, and C, for December 1989, March 1990, and July 1990, respectively.

---

[1]For additional information, see: "Hydrogeologic Investigation at the North Yard," July 1989. Prepared for General Motors Corporation, Hydra-matic Division, by C-E Environmental, Inc.



TAKEN FROM U.S.G.S. YPSILANTI EAST, MICH. 7.5' QUADRANGLE MAP.

FIGURE 1
LOCATION OF THE GM HYDRA-MATIC PLANT YPSILANTI, MICHIGAN

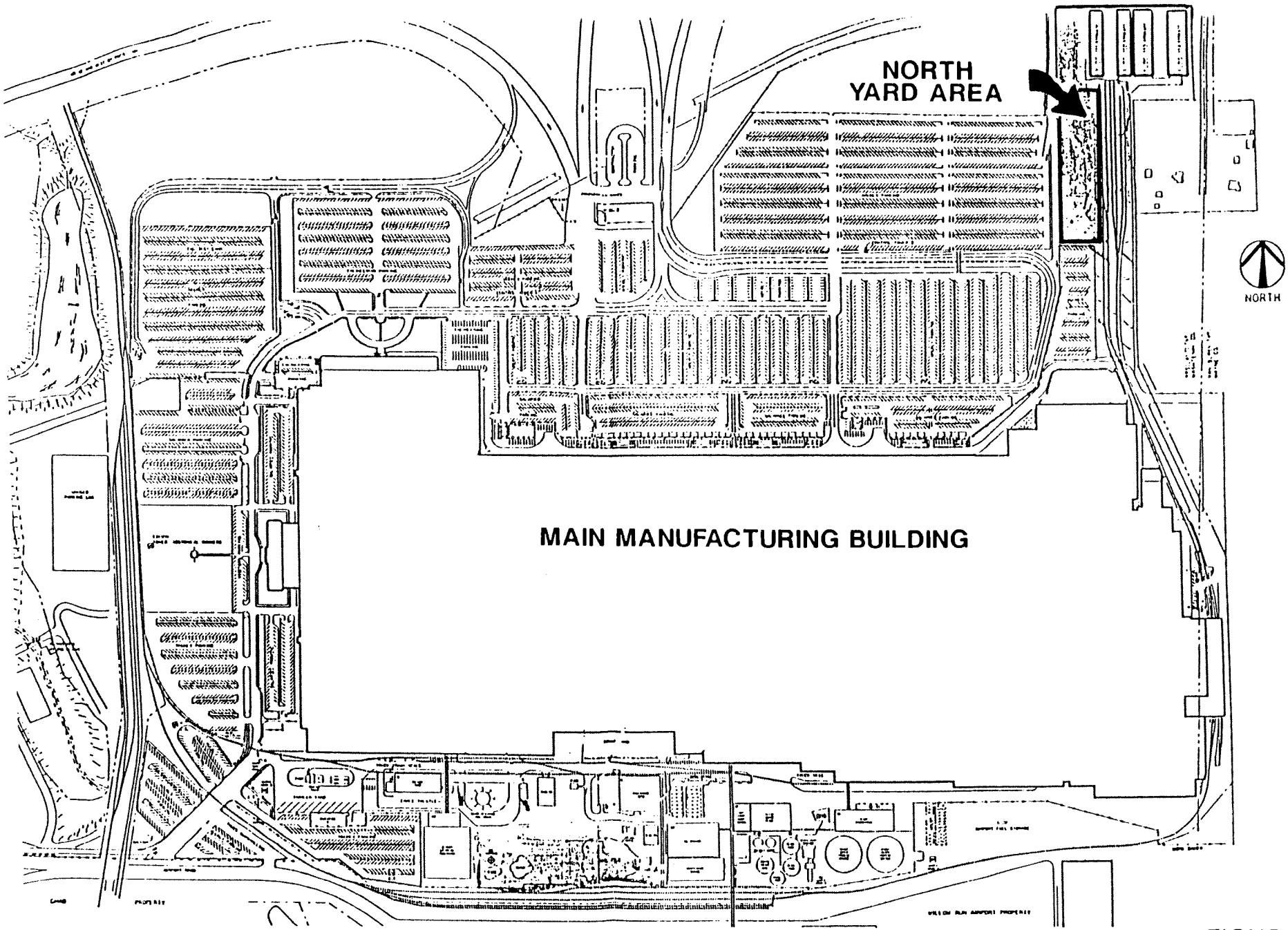
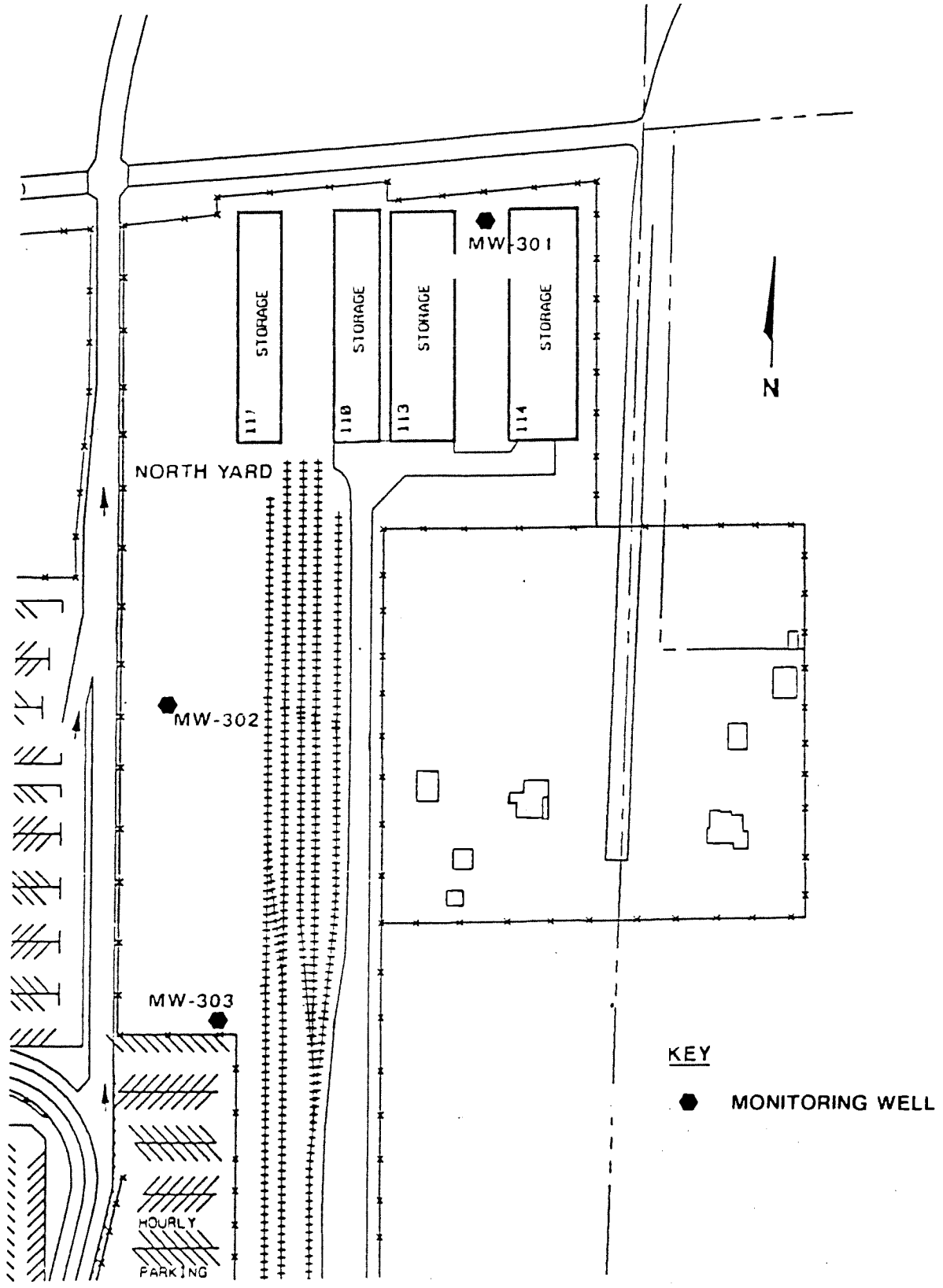


FIGURE 2
INVESTIGATION LOCATION MAP
GM HYDRA-MATIC PLANT
YPSILANTI, MICHIGAN

C-E Environmental, Inc.



SCALE

0 100 200 400 FEET

FIGURE 3
MONITORING WELL LOCATIONS
NORTH YARD
GM HYDRA-MATIC PLANT
YPSILANTI, MICHIGAN

GM DRAWING # HWR-NY-1

C-E ENVIRONMENTAL, INC.

After evacuating each well, groundwater samples were collected with a Teflon or stainless-steel bailer. Samples to be analyzed for dissolved metals were pressure-filtered with nitrogen in a 2.4-liter Geotech polycarbonate barrel filter using a membrane filter with a 0.45-micron pore size. The samples were filtered directly into laboratory prepared bottles that were pre-preserved with nitric acid. Between samples, the filter assembly was rinsed with a dilute nitric acid solution followed by distilled water. The membrane was replaced between samples. After processing and labeling, all samples were kept on ice in coolers until delivery to the laboratory.

The bailer was decontaminated with a solution of trisodium phosphate and distilled water, followed by a final distilled water rinse.

6.0 SAMPLE HANDLING

After processing and labeling, a chain-of-custody record and an analytical request form was completed. The samples were then transported to Environmental Control Technology Corporation (ENCOTEC), Ann Arbor, Michigan, for analysis of selected dissolved metals (cadmium, chromium, copper, iron, lead, nickel, and zinc), purgeable halocarbons (DNR Scan 1), and purgeable aromatic hydrocarbons (DNR Scan 2). In addition, at the request of the MDNR, the samples collected in December 1989 were also analyzed for Hazardous Substance List (HSL) pesticides and polychlorinated biphenyls (PCBs). March and July 1990 samples were analyzed for PCBs only. The analytical methods used and lists of organic analytes are presented in Appendix D.

7.0 QUALITY CONTROL SAMPLES

For quality control purposes, one blind duplicate sample and one sampler blank (taken prior to sampling) were collected during each sampling effort. Similar to the groundwater samples, each quality control sample was analyzed for dissolved metals and organic chemicals. A blind duplicate sample is a duplicate sample labeled in a manner such that the laboratory is unaware that it is a duplicate. The purpose of a duplicate sample is to check the homogeneity of the sample in addition to the precision of the laboratory. A sampler blank is a sample of distilled water that is handled in the same manner as a groundwater sample - it is poured into the sampling equipment, filtered, preserved, placed into laboratory-prepared bottles, etc. The purpose of a sampler blank is to check the effectiveness of the decontamination procedures.

8.0 RESULTS

8.1 GROUNDWATER FLOW

Table 1 and Figure 4 summarize water level measurements and groundwater flow directions observed in the North Yard during the six sampling events conducted thusfar. The groundwater flow directions were determined by using the triagulation method.

TABLE 1
Summary of Water Levels and Groundwater Flow Directions
Observed in the North Yard During 1989 and 1990

	3/89	6/89	9/89	12/89	3/90	7/90
MW-301	93.97	93.03	92.45	92.09	93.50	91.94
MW-302	92.90	93.20	92.89	92.33	93.15	92.70
MW-303	92.41	92.75	92.63	92.11	92.80	92.48
Direction of Flow	S	SE	ESE	ESE	SSE	SE

In general, groundwater beneath the North Yard moves in a southeasterly direction with an average hydraulic gradient of 1.7 x 10-3 feet per foot. Previous studies have shown that groundwater in other locations at the Willow Run Plant generally flows toward the southwest. Due to local variations in hydrogeologic conditions, the small variations in flow direction exhibited in the North Yard are not unexpected, especially in an industrial plant setting where recharge from preciptiation is often prevented in some areas and concentrated in others. The relatively low gradient is also conducive to local and seasonal variations in groundwater flow direction.

8.2 Quality Control Samples

The analytical data generated during December 1989, March 1990, and July 1990 have been compiled with data from all previous sampling events and summarized in Table 2. Laboratory analytical reports for December 1989, March 1990, and July 1990 are contained in Appendicies E, F, and G, respectively.

Zinc was detected in all sampler blanks, but its presence did not effect the data interpretation in any way. It is likely that the zinc was present in the distilled water used to decontaminate the sampling equipment. All duplicate samples exhibited good correlation with the original samples.

8.3 GROUNDWATER QUALITY

Similar to previous sampling events, iron was the only potentially site-related metal observed in groundwater above the limits of detection during December 1989, March 1990, and July 1990. In December 1990, iron was found in wells MW-302 and MW-303 at 8.9 mg/L and 7.2 mg/L, respectively. In March 1990, iron was detected in MW-302 and MW-303 at 5.1 mg/L and 7.5 mg/L, respectively. Iron was not detected in well MW-301 in March or December. In July 1990, iron was found all three monitoring wells at concentrations of 0.31, 5.3 and 11 mg/L in MW-301, MW-302 and MW-303, respectively. In general, these concentrations are comparable to those observed during previous sampling events, and they are not unusual or unexpected in shallow groundwater in Michigan.

Also similar to the previous groundwater sampling efforts, no site-related organic chemicals were found in December 1989, March 1990, and July 1990 with the exception of the PCB compound Aroclor 1248. In

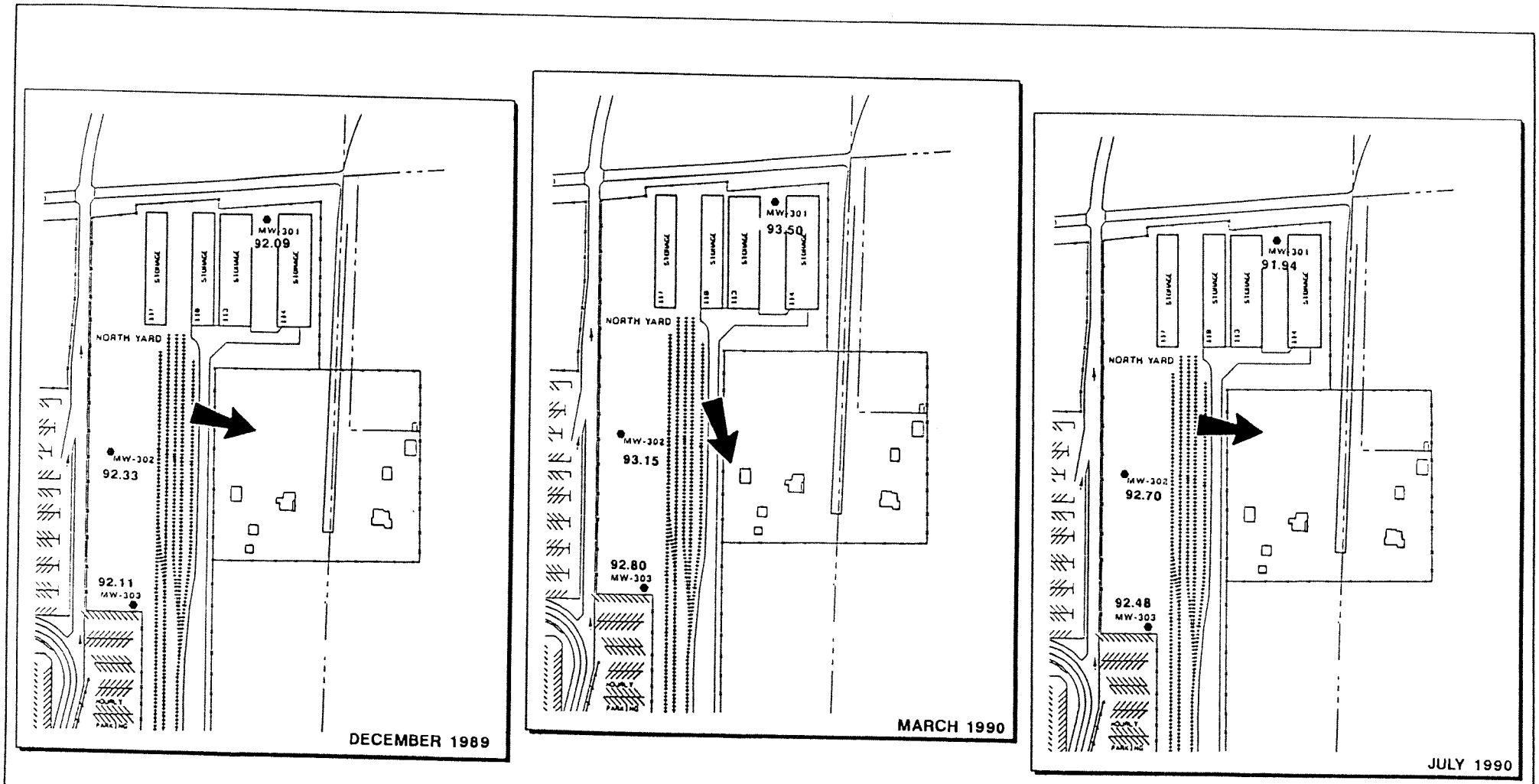


FIGURE 4

MONITORING WELL LOCATIONS
AND WATER LEVEL MEASUREMENTS

C-E ENVIRONMENTAL, INC.

TABLE 2

ORGANIC AND INORGANIC CHEMICALS IN GROUNDWATER AT THE NORTH YARD
GM HYDRA-MATIC, YPSILANTI, MICHIGAN

Date	Well No.	Cd	Cr	Cu	Fe	Pb	Ni	Zn	1,1,1-TCA	BDCM	CHLOROFORM	PCB-1248
July 1990	MW-301	U	U	U	0.31	U	U	U	U	U	U	U
	MW-302	U	U	U	5.3	U	U	0.11	U	U	U	U
	MW-303	U	U	U	11	U	U	U	U	U	U	U
	MW-351 (Dup of MW-303)	U	U	U	10	U	U	U	U	U	U	U
	MW-350 (Sampler Blank)	U	U	0.14	U	U	U	0.15	U	U	U	U
March 1990	MW-301	U	U	NA	U	U	U	U	U	U	U	U
	MW-302	U	U	NA	5.1	U	U	U	U	U	U	U
	MW-360 (Dup of MW-302)	U	U	NA	4.9	U	U	U	U	U	U	U
	MW-303	U	U	NA	7.5	U	U	U	U	U	U	0.00077
	MW-350 (Sampler Blank)	U	U	NA	U	U	U	0.03	U	U	U	U
December 1989	MW-301	U	U	U	U	U	U	U	U	U	U	U
	MW-302	U	U	U	8.9	U	U	U	U	U	U	U
	MW-303	U	U	U	7.2	U	U	U	U	U	U	0.0031
	MW-360 (Dup of MW-303)	U	U	U	7.3	U	U	U	U	U	U	0.0060
	MW-350 (Sampler Blank)	U	U	0.03	U	U	U	0.09	U	U	U	U
September 1989	MW-301	U	U	U	0.16	U	U	0.03	U	U	U	NA
	MW-302	U	U	0.02	5.9	U	U	0.03	U	U	U	NA
	MW-360 (Dup of MW-302)	U	U	0.02	5.9	U	U	0.02	U	U	U	NA
	MW-303	U	U	U	7.9	U	U	0.03	U	U	U	NA
	MW-350 (Sampler Blank)	U	U	0.51	0.06	0.03	U	0.32	U	U	0.003	NA
June 1989	MW-301	U	U	U	0.03	U	U	U	U	U	U	NA
	MW-351 (Dup of MW-301)	U	U	0.04	0.04	U	U	U	U	U	U	NA
	MW-302	U	U	U	2.0	U	U	U	U	U	U	NA
	MW-303	U	U	U	2.0	U	U	U	0.002	U	U	NA
	MW-350 (Sampler Blank)	U	U	0.02	U	U	U	U	U	0.001	0.005	NA
March 1989	MW-301	NA	U	U	U	U	U	U	U	U	U	NA
	MW-351 (Dup of MW-301)	NA	U	U	U	U	U	U	U	U	U	NA
	MW-302	NA	U	U	2.8	U	U	U	U	U	U	NA
	MW-303	NA	U	U	8.1	U	U	U	U	U	U	NA
	MW-350 (Sampler Blank)	NA	U	U	U	U	U	U	U	U	U	NA

NOTES:
1. All concentrations in mg/L.
2. U - Compound was analyzed but not detected.
3. NA - Not analyzed.
4. BDCM - Bromodichloromethane
5. 1,1,1-TCA - 1,1,1-Trichloroethane
6. Each sample was analyzed for DNR Scans 1 and 2 and HSL PCBs (EPA method 8080) unless otherwise noted; only the compounds detected are shown on this table.

December, this compound was detected in MW-303 and its duplicate (MW-360) at extremely low concentrations of 0.0031 mg/L and 0.0060 mg/L, respectively. In March, the concentration of Aroclor 1248 decreased to 0.00077 ug/L in MW-303. No PCBs were found in MW-303 during the July sampling event.

As mentioned previously, Hydra-matic conducted a subsurface soil study[2] in the North Yard in April 1988 to assess soil impacts due to oil leaks from machinery stored in the area. During the study, low concentrations of PCBs ($\leq$ 4 mg/kg) were found in shallow soils in two discrete areas of the site, but no PCBs above the limit of detection (0.2 mg/kg) were found in soil samples from the MW-303 area.

The presence of PCBs in groundwater at MW-303 was unexpected for several reasons. First, no PCBs were detected in soil samples from the MW-303 area, and at other areas of the site, PCBs were found only to a depth of 12 inches (MW-303 is 15 feet deep). Secondly, Aroclor 1248 is highly insoluble in water and tends to be found in the environment either adsorbed to soil particles or in oils. No oil was found in MW-303 or in any of the other wells in the North Yard.

The low concentration of Aroclor 1248 in MW-303 was most likely due to soil particles contaminated with very low levels of PCBs that were carried down to the screened interval during drilling. Although PCBs were undetected in soils around MW-303, it is possible that PCBs at concentrations below the limit of detection (0.2 mg/kg) were present in this area. If small amounts of these soils were carried downward during drilling, it is possible that very low PCB concentrations could be detected in groundwater if the samples were turbid. Indeed, the groundwater sampling record for MW-303 (see Appendices A and B) reported that water in this well was very silty.

In summary, it is likely that the PCBs observed in groundwater samples from MW-303 were actually not in groundwater, but instead were adsorbed to suspended soil particles. The PCBs at this depth were probably inadvertently introduced into the well during drilling. In any event, the fact that the concentration of Aroclor 1248 decreased during March (and was not evident in July) indicates that the small amount of PCBs smeared across the face of the borehole were removed during previous groundwater purging and sampling activities. Groundwater samples should be analyzed for PCBs during the next sampling event to confirm this conclusion.

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[2]"Investigation of Soil Contamination in a Machine Storage Area at the Hydra-matic Plant in Ypsilanti, Michigan," GM Research, March 30, 1989.

APPENDIX A

GROUNDWATER SAMPLE DATA RECORDS
DECEMBER 1989

EC JORDAN CO.

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT Lm HMD YPSI - North Yard JOB NO 5883-00

STATION NO/LOCATION MW-350 DATE 12/28/89

SKETCH ON BACK YES ☐ NO ☒ PHOTOGRAPHS YES ☐ NO ☒ ROLL NO/EXPOSURE NO _____

WELL DATA

WATER DEPTH — ☐ TOP WELL ☐ TOP CASING WELL DEPTH — WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED

PURGE	SAMPLE
KECK	KECK
QED	QED
SSBAIL	SSBAIL
OTHER	OTHER X teflon

PURGE TIME START _____ END _____

SAMPLE TIME START _____ END 1215

WEATHER C

____ FT. WATER X .163 (2"=.163gal/ft) (4"=.653gal/ft) (6"=1.47gal/ft) X 3 CASING VOLUME = _____ GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☒ IN BOTTLE

VOA LEVEL(PPM) AMBIENT _____ SAMPLE LOCATION _____ HEADSPACE _____

SAMPLE PURGE DATA

@ ____ GAL	@ ____ GAL	@ ____ GAL	@ ____ GAL
TEMP ____ °C	TEMP ____ °C	TEMP ____ °C	TEMP ____ °C
SP. COND ____ @25°C	SP. COND ____ @25°C	SP. COND ____ @25°C	SP. COND ____ @25°C
pH ____	pH ____	pH ____	pH ____
Eh ____	Eh ____	Eh ____	Eh ____

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
	80 ml	glass	No	No / No	VOA
	1l	plastic	Yes	HNO3 / 5 ml	Dissolved Metals
	2l	glass	No	— / —	PCB's

REMARKS/OBSERVATIONS Blank taken @ start of day through teflon bailer.

SAMPLER CK

EC JORDAN CO

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT Gm Amo YPSI - North Yard JOB NO 5803-00

STATION NO/LOCATION MW-301 DATE 12/28/89

SKETCH ON BACK YES ☐ NO ☑ PHOTOGRAPHS YES ☐ NO ☑ ROLL NO/EXPOSURE NO /

WELL DATA 4.74 4.76

WATER DEPTH 5.70 ☐ TOP WELL ☐ TOP CASING WELL DEPTH 12' WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED

PURGE	SAMPLE
KECK ___	KECK ___
QED ___	QED ___
SSBAIL ___	SSBAIL ___
OTHER X	OTHER X teflon

PURGE TIME START _____ END _____

SAMPLE TIME START 1230 END _____

WEATHER _____

7 FT. WATER X .163 (2"=.163gal/ft) (4"=.653gal/ft) (6"=1.47gal/ft) X 3 CASING VOLUME = 3.5 GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☑ IN BOTTLE

VOA LEVEL (PPM) AMBIENT _____ SAMPLE LOCATION _____ HEADSPACE _____

SAMPLE PURGE DATA

@ 1 GAL	@ 2 GAL	@ 3 GAL	@ _____ GAL
TEMP 6.3 °C	TEMP 6.6 °C	TEMP 5.6 °C	TEMP _____ °C
SP. COND 109 @25°C	SP. COND 127 @25°C	SP. COND 133 @25°C	SP. COND _____ @25°C
pH 7.11	pH 6.90	pH 6.98	pH _____
Eh _____	Eh _____	Eh _____	Eh _____

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
	80ml	glass	No	N/A	VOA
	1l	plastic	Yes	HNO3 2ml	Diss. Metals
	2l	glass	No	—	PCB's

REMARKS/OBSERVATIONS Water slightly silty

SAMPLER BL

EC JORDAN CO

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT [redacted] - YPSI - North Yard JOB NO 5883-00

STATION NO/LOCATION MW-302 DATE 12/28/89

SKETCH ON BACK ☐ YES ☒ NO PHOTOGRAPHS ☐ YES ☒ NO ROLL NO/EXPOSURE NO —

WELL DATA

WATER DEPTH ~~7.80~~ ☐ TOP WELL ☐ TOP CASING WELL DEPTH 15' WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED

PURGE	SAMPLE
KECK ____	KECK ____
QED ____	QED ____
SSBAIL ____	SSBAIL ____
OTHER X	OTHER X teflon

PURGE TIME START _____ END _____

SAMPLE TIME START _____ END 1245

WEATHER _____

7.2 FT. WATER X .163 (@ =.163gal/ft) (4"=.653gal/ft) (6"=1.47gal/ft) X 3 CASING VOLUME = 3.6 GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL(PPM) AMBIENT _____

SAMPLE LOCATION _____

HEADSPACE _____

SAMPLE PURGE DATA

@ 1 GAL	@ 2 GAL	@ 3 GAL	@ ____ GAL
TEMP 6.9 °C	TEMP 7.2 °C	TEMP 6.1 °C	TEMP ____ °C
SP. COND 501 @25°C	SP. COND 530 @25°C	SP. COND 480 @25°C	SP. COND ____ @25°C
pH 6.32	pH 6.31	pH 6.40	pH ____
Eh ____	Eh ____	Eh ____	Eh ____

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
	80ml	glass	No	No / No	VOA
	1l	plastic	yes	HNO_3 2ml	Diss. Metals
	2l	glass	No	—	PCB's

REMARKS/OBSERVATIONS water silty

SAMPLER CSK

EC JORDAN CO

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT Lm AMD YPSI – North Yard JOB NO 5883-00

STATION NO/LOCATION MW-303 DATE 12/28/89

SKETCH ON BACK YES ☐ NO ☒ PHOTOGRAPHS YES ☐ NO ☒ ROLL NO/EXPOSURE NO —

WELL DATA

WATER DEPTH 7.91 ☐ TOP WELL ☐ TOP CASING WELL DEPTH 15' WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED	PURGE	SAMPLE
KECK		
QED		
SSBAIL		
OTHER	X	X teflon

PURGE TIME START _____ END _____

SAMPLE TIME START _____ END 13:00

WEATHER _____

7.1 FT. WATER X 163 (2"=.163gal/ft) (4"=.653gal/ft) (6"=1.47gal/ft) X 3 CASING VOLUME = 3.5 GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☒ IN BOTTLE

VOA LEVEL(PPM) AMBIENT _____ SAMPLE LOCATION _____ HEADSPACE _____

SAMPLE PURGE DATA

@ 1 GAL	@ 2 GAL	@ 3 GAL	@ _____ GAL
TEMP 6.1 °C	TEMP 5.9 °C	TEMP 6.6 °C	TEMP _____ °C
SP. COND 360 @25°C	SP. COND 337 @25°C	SP. COND 350 @25°C	SP. COND _____ @25°C
pH 6.40	pH 6.37	pH 6.35	pH _____
Eh _____	Eh _____	Eh _____	Eh _____

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
	80ml	glass	No	—	VOA
	1l	plastic	yes	HNO3	Diss. Metals
	2l	glass	No	—	PCB's

REMARKS/OBSERVATIONS Water very silty

SAMPLER CSK

EC JORDAN CO

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT GM AMD YPSI - North Yard JOB NO 5883-00

STATION NO/LOCATION MW-360 DATE 12/28/89

SKETCH ON BACK YES ☐ NO ☑ PHOTOGRAPHS YES ☐ NO ☒ ROLL NO/EXPOSURE NO _____

WELL DATA

WATER DEPTH _____ ☐ TOP WELL ☐ TOP CASING WELL DEPTH _____ WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED

PURGE	SAMPLE
KECK ___	KECK ___
QED ___	QED ___
SSBAIL ___	SSBAIL ___
OTHER ✓	OTHER ✓

PURGE TIME: START _____ END _____

SAMPLE TIME: START _____ END _____

WEATHER _____

___ FT. WATER X .163 (2"=.163gal/ft, 4"=.653gal/ft, 6"=1.47gal/ft) X 3 CASING VOLUME = ___ GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL(PPM) AMBIENT _____ SAMPLE LOCATION _____ HEADSPACE _____

SAMPLE PURGE DATA

@ ___ GAL	@ ___ GAL	@ ___ GAL	@ ___ GAL
TEMP ___ °C	TEMP ___ °C	TEMP ___ °C	TEMP ___ °C
SP. COND ___ @25°C	SP. COND ___ @25°C	SP. COND ___ @25°C	SP. COND ___ @25°C
pH ___	pH ___	pH ___	pH ___
Eh ___	Eh ___	Eh ___	Eh ___

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
	80 ml	glass	No	—	VOA
	1l	plastic	yes	HNO3 2ml	Diss. Metals
	2l	glass	No	—	PCB's

REMARKS/OBSERVATIONS Duplicate Sample of MW-303

SAMPLER _____

APPENDIX B

GROUNDWATER SAMPLE DATA RECORDS
MARCH 1990

EC JORDAN CO

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT GM HMD - North Yard JOB NO 5883-00

STATION NO/LOCATION MW-350 DATE 3/27/90

SKETCH ON BACK YES ☐ NO ☑ PHOTOGRAPHS YES ☐ NO ☑ ROLL NO/EXPOSURE NO —

WELL DATA

WATER DEPTH _____ ☐ TOP WELL ☑ TOP CASING WELL DEPTH _____ WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED

	PURGE	SAMPLE
KECK		
QED		
SSBAIL	X	X
OTHER		

PURGE TIME START _____ END _____

SAMPLE TIME START _____ END 1220

WEATHER Sunny

____ FT. WATER X .163 (2"=.163gal/ft) (4"=.653gal/ft) (6"=1.47gal/ft) X 3 CASING VOLUME = ____ GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL(PPM) AMBIENT _____ SAMPLE LOCATION _____ HEADSPACE _____

SAMPLE PURGE DATA

@ ____ GAL	@ ____ GAL	@ ____ GAL	@ ____ GAL
TEMP ____ °C	TEMP ____ °C	TEMP ____ °C	TEMP ____ °C
SP. COND ____ @25°C	SP. COND ____ @25°C	SP. COND ____ @25°C	SP. COND ____ @25°C
pH ____	pH ____	pH ____	pH ____
Eh ____	Eh ____	Eh ____	Eh ____

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
	80ml	glass	No	—	VOA
	1l	Nalgene	Yes	HNO_3 2ml	Diss. Metals
	2l	Amberglass	No	—	PCBs

REMARKS/OBSERVATIONS Blank taken @ start of sampling day through SS bailer.

SAMPLER CSK/MD

EC JORDAN CO.

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT GM HMD - North Yard JOB NO 5883-00

STATION NO/LOCATION MW-301 DATE 3/27/90

SKETCH ON BACK YES ☐ NO ☑ PHOTOGRAPHS YES ☐ NO ☑ ROLL NO/EXPOSURE NO —

WELL DATA 3.31 .98 2.33

WATER DEPTH 4.29 ☐ TOP WELL ☑ TOP CASING WELL DEPTH 12' WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED

PURGE	SAMPLE
KECK	KECK
QED	QED
SSBAIL X	SSBAIL X
OTHER	OTHER

PURGE TIME START _____ END _____

SAMPLE TIME START _____ END 1245

WEATHER Sunny

8 FT. WATER X .163 (2"=.163gal/ft) (4"=.653gal/ft) (6"=1.47gal/ft) X 3 CASING VOLUME = 4 GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL (PPM) AMBIENT _____ SAMPLE LOCATION / HEADSPACE /

SAMPLE PURGE DATA

@ 1 GAL	@ 2 GAL	@ 3 GAL	@ 4 GAL
TEMP 7.8 °C	TEMP 6.0 °C	TEMP 5.9 °C	TEMP 5.9 °C
SP. COND 340 @25°C	SP. COND 310 @25°C	SP. COND 308 @25°C	SP. COND 308 @25°C
pH 6.9	pH 6.9	pH 6.9	pH 6.9
Eh _____	Eh _____	Eh _____	Eh _____

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
	80ml	glass	No	—	VOA
	1l	Nalgene	Yes	HNO_3 2ml	Diss. Metals
	2l	Amberglass	No	—	PCBs

REMARKS/OBSERVATIONS Water Silty

SAMPLER CSK/Ford

EC JORDAN CO.

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT GM HMD - North Yard JOB NO 5883-00

STATION NO/LOCATION MW-302 DATE 3/27/90

SKETCH ON BACK YES ☐ NO ☑ PHOTOGRAPHS YES ☐ NO ☑ ROLL NO/EXPOSURE NO —

WELL DATA 6.00 .98

WATER DEPTH ~~6.98~~ 6.98 ☐ TOP WELL ☑ TOP CASING WELL DEPTH 15' WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED

PURGE	SAMPLE
KECK ____	KECK ____
QED ____	QED ____
SSBAIL X	SSBAIL X
OTHER ____	OTHER ____

PURGE TIME START _____ END _____

SAMPLE TIME START _____ END 1315

WEATHER Sunny

8 FT. WATER X .163 (2"=.163gal/ft) (4"=.653gal/ft) (6"=1.47gal/ft) X 3 CASING VOLUME = 4 GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL(PPM) AMBIENT _____ SAMPLE LOCATION _____ HEADSPACE _____

SAMPLE PURGE DATA

@ 1 GAL	@ 2 GAL	@ 3 GAL	@ 4 GAL
TEMP 8.9 °C	TEMP 7.0 °C	TEMP 7.0 °C	TEMP 6.9 °C
SP. COND 1600 @25°C	SP. COND 1300 @25°C	SP. COND 1300 @25°C	SP. COND 1300 @25°C
pH 6.65	pH 6.5	pH 6.55	pH 6.55
Eh _____	Eh _____	Eh _____	Eh _____

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
	80ml	glass	No	— —	VOA
	1l	Nalgene	Yes	HNO_3 2ml	Diss. Metals
	2l	Amberglass	No	— —	PCBs

REMARKS/OBSERVATIONS Water mostly clear

SAMPLER CSK/MD

EC JORDAN CO.

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT GM HMD - North Yard JOB NO 5883-00

STATION NO/LOCATION MW-303 DATE 3/27/90

SKETCH ON BACK YES ☐ NO ☑ PHOTOGRAPHS YES ☐ NO ☑ ROLL NO/EXPOSURE NO —

WELL DATA 6.24 1990

WATER DEPTH 7.92 ☐ TOP WELL ☑ TOP CASING WELL DEPTH 15' WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED

PURGE	SAMPLE
KECK ____	KECK ____
QED ____	QED ____
SSBAIL X	SSBAIL X
OTHER ____	OTHER ____

PURGE TIME START _____ END _____

SAMPLE TIME START _____ END 1345

WEATHER Sunny

8 FT. WATER X .163 (2"=.163gal/ft) (4"=.653gal/ft) (6"=1.47gal/ft) X 3 CASING VOLUME = 4 GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL (PPM) AMBIENT _____ SAMPLE LOCATION / HEADSPACE /

SAMPLE PURGE DATA

@ 1 GAL	@ 2 GAL	@ 3 GAL	@ 4 GAL
TEMP 7.0 °C	TEMP 6.3 °C	TEMP 6.2 °C	TEMP 6.2 °C
SP. COND 890 @25°C	SP. COND 855 @25°C	SP. COND 850 @25°C	SP. COND 850 @25°C
pH 6.6	pH 6.65	pH 6.7	pH 6.7
Eh _____	Eh _____	Eh _____	Eh _____

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
	80ml	glass	No	—	VOA
	1l	Nalgene	Yes	HNO_3 2ml	Diss. Metals
	2l	Amberglass	No	—	PCBs

REMARKS/OBSERVATIONS Water Table

SAMPLER CSK/MD

EC JORDAN CO.

GROUNDWATER FIELD SAMPLE DATA RECORD

PROJECT GM HMD - North Yard JOB NO 5883-00

STATION NO/LOCATION MW-360 DATE 3/27/90

SKETCH ON BACK YES ☐ NO ☑ PHOTOGRAPHS YES ☐ NO ☑ ROLL NO/EXPOSURE NO —

WELL DATA

WATER DEPTH _____ ☐ TOP WELL ☑ TOP CASING WELL DEPTH _____ WELL DIAM. 2" WELL MATERIAL PVC

WELL STICK-UP _____ WELL/CASING _____

EQUIPMENT USED

PURGE	SAMPLE
KECK	KECK
QED	QED
SSBAIL X	SSBAIL X
OTHER	OTHER

PURGE TIME START / END /

SAMPLE TIME START / END /

WEATHER Sunny

/ FT. WATER X .163 (2"=.163gal/ft) (4"=.653gal/ft) (6"=1.47gal/ft) X 3 CASING VOLUME = / GAL PURGED

FIELD DATA

FIELD DATA COLLECTION ☐ IN SITU ☐ IN BOTTLE

VOA LEVEL(PPM) AMBIENT _____ SAMPLE LOCATION _____ HEADSPACE _____

SAMPLE PURGE DATA

@ GAL	@ GAL	@ GAL	@ GAL
TEMP °C	TEMP °C	TEMP °C	TEMP °C
SP. COND @25°C	SP. COND @25°C	SP. COND @25°C	SP. COND @25°C
pH	pH	pH	pH
Eh	Eh	Eh	Eh

BOTTLE ID	VOL	MATERIAL	FILTERED	PRES./VOL.	ANALYSIS REQUESTED
	80ml	glass	No	—	VOA
	1l	Nalgene	Yes	HNO_3 2ml	Diss. Metals
	2l	Amberglass	No	—	PCBs

REMARKS/OBSERVATIONS Duplicate sample of MW-302

SAMPLER CSK/MD

APPENDIX C

GROUNDWATER SAMPLE DATA RECORDS
JULY 1990

GROUNDWATER SAMPLE RECORD

SITE: Gm HMD YPSI - North Yard JOB NO. 5883-00 DATE: 7/20/90

SAMPLER BLANK

SAMPLE LOCATION MW-350 LAB NUMBER _____

WATER LEVEL/WELL DATA

MEASURED WELL DEPTH _____FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ] _____
WELL DIAM.
[X] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH _____FT
MONITORING:
AMBIENT AIR ___/___PPM
WELL MOUTH ___/___PPM

HISTORICAL WELL DEPTH _____FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND)
_____FT

PURGE DATA

HEIGHT OF WATER COLUMN _____FT
[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] ____ GAL/FT (____IN)
X 10 3 CASING VOLUMES = GALLONS TO BE PURGED
PURGE TIME START _____ END _____
SAMPLE TIME START _____ END 1130

	@ ___ GAL	@ ___ GAL	@ ___ GAL	@ ___ GAL	@ ___ GAL
PURGE VOLUME					
TEMP, DEG C					
pH, UNITS					
SPECIFIC CONDUCTIVITY, umhos/cm					

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID	DECON FLUIDS USED	WATER LEVEL EQUIP.USED
[X]	[ ] PERISTALTIC PUMP	_____	[ ] ETHYL ALCOHOL	[ ] ELECTRIC COND. PROBE
[ ]	[ ] SUBMERSIBLE PUMP	_____	[ ] DEIONIZED WATER	[X] FLOAT ACTIVATED
[ ]	[X] BAILER (PVC/SS/TEFLON)	_____	[ ] HNO3/D.I. WATER	[ ] KECK INTERFACE PROBE
[ ]	[ ] PVC/SILICON TUBING		[ ] POTABLE WATER	[ ] OTHER
[ ]	[X] TEFLON/SILICON TUBING		[X] TSP SOLUTION	
[ ]	[ ] AIR LIFT		[ ] NONE	NUMBER OF FILTER PAPERS USED ____
[ ]	[ ] WATERRA	_____	[ ] _____	
	[ ] IN-LINE FILTER			
	[ ] PRESS/VAC FILTER			
[ ]	[ ] _____	_____		

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	DNR SCAN 1 & 2	8020	80 ml	glass	No	No
_____	Dissolved metals	Cd Cr Fe Ni Pb Zn	1 l	plastic	Yes	Yes/2 ml
_____	PCBs	8080	1 l	amber glass	No	No
_____	_____	_____	_____	_____	_____	_____

NOTES

Sampler Blank taken @ start of Day

SIGNATURE Jerry D. Kelly

SIGNATURE/FUNCTION: _____

GROUNDWATER SAMPLE RECORD

SITE: GM HMD YPSI - North Yard JOB NO. 5883-00 DATE: 7/20/90

SAMPLE LOCATION MW-301 LAB NUMBER _____

WATER LEVEL/WELL DATA

MEASURED WELL DEPTH 12' FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ] _____
WELL DIAM.
[X] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH 7.81 + .90 = 5.85 FT
MONITORING:
AMBIENT AIR ___/___ PPM
WELL MOUTH ___/___ PPM

HISTORICAL WELL DEPTH _____ FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND) _____ FT

PURGE DATA

HEIGHT OF WATER COLUMN 6.5 FT
[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] ____ GAL/FT (____ IN)
1.8 x 3 CASING VOLUMES = 3.25 GALLONS TO BE PURGED
PURGE TIME START _____ END _____
SAMPLE TIME START _____ END 1145

PURGE VOLUME	@ 1 GAL	@ 2 GAL	@ 3 GAL	@ 4 GAL	@ ___ GAL
TEMP, DEG C	16.7	16.6	16.4	16.4	
pH, UNITS	7.1	7.3	7.3	7.3	
SPECIFIC CONDUCTIVITY, umhos/cm	880	680	675	675	

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID	DECON FLUIDS USED	WATER LEVEL EQUIP.USED
[X]	[ ] PERISTALTIC PUMP	_____	[ ] ETHYL ALCOHOL	[ ] ELECTRIC COND. PROBE
[ ]	[ ] SUBMERSIBLE PUMP	_____	[ ] DEIONIZED WATER	[X] FLOAT ACTIVATED
[ ]	[X] BAILER (PVC/SS/TEFLON)	_____	[ ] HNO3/D.I. WATER	[ ] KECK INTERFACE PROBE
[ ]	[ ] PVC/SILICON TUBING		[ ] POTABLE WATER	[ ] OTHER
[ ]	[X] ~~TEFLON/SILICON TUBING~~		[X] TSP SOLUTION	
[ ]	[ ] AIR LIFT		[ ] NONE	NUMBER OF FILTER PAPERS USED ____
[ ]	[ ] WATERRA	_____	[ ] _____	
	[ ] IN-LINE FILTER			
	[ ] PRESS/VAC FILTER			
[ ]	[ ] _____	_____		

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	DNR SCAN 1 & 2	8020	80 ml	glass	No	No
_____	Dissolved metals	Cd Cr Fe Ni Pb Zn	1 l	plastic	Yes	Yes/2ml
_____	PCBs	8080	1 l	amber glass	No	No
_____	_____	_____	_____	_____	_____	_____

NOTES Water Clear

SIGNATURE Jerry S. Kelly

SIGNATURE/FUNCTION: _____

GROUNDWATER SAMPLE RECORD

SITE: Gm HMD YPSI - North Yard JOB NO. 5883-00 DATE: 7/20/90

SAMPLE LOCATION MW-302 LAB NUMBER _____

WATER LEVEL/WELL DATA

MEASURED WELL DEPTH 15 FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ] _____
WELL DIAM.
[X] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH 6.93 / 7.43 FT
MONITORING:
AMBIENT AIR ___/___ PPM
WELL MOUTH ___/___ PPM

HISTORICAL WELL DEPTH _____ FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND)
_____ FT

PURGE DATA

HEIGHT OF WATER COLUMN 7.16 FT
[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] ____ GAL/FT (____ IN)
X (3) CASING VOLUMES = GALLONS TO BE PURGED 3.8 (10)
PURGE TIME START _____ END _____
SAMPLE TIME START _____ END 1205

	a 1 GAL	a 2 GAL	a 3 GAL	a 4 GAL	a ___ GAL
PURGE VOLUME					
TEMP, DEG C	17.0	17.2	17.2	17.1	
pH, UNITS	7.0	7.0	7.0	7.0	
SPECIFIC CONDUCTIVITY, umhos/cm	1860	1740	1800	1800	

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID	DECON FLUIDS USED	WATER LEVEL EQUIP.USED
[X]	[ ] PERISTALTIC PUMP	_____	[ ] ETHYL ALCOHOL	[ ] ELECTRIC COND. PROBE
[ ]	[ ] SUBMERSIBLE PUMP	_____	[ ] DEIONIZED WATER	[X] FLOAT ACTIVATED
[ ]	[X] BAILER (PVC/SS/TEFLON)	_____	[ ] HNO3/D.I. WATER	[ ] KECK INTERFACE PROBE
[ ]	[ ] PVC/SILICON TUBING		[ ] POTABLE WATER	[ ] OTHER
[ ]	[X] ~~TEFLON/SILICON TUBING~~		[X] TSP SOLUTION	
[ ]	[ ] AIR LIFT		[ ] NONE	NUMBER OF FILTER PAPERS USED ____
[ ]	[ ] WATERRA	_____	[ ] _____	
	[ ] IN-LINE FILTER			
	[ ] PRESS/VAC FILTER			
[ ]	[ ] _____	_____		

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	DNR SCAN 1 & 2	8020	80 ml	glass	No	No
_____	Dissolved metals	Cd Cr Fe Ni Pb Zn	1 l	plastic	Yes	Yes/2 ml
_____	PCBs	8080	1 l	amber glass	No	No
_____	_____	_____	_____	_____	_____	_____

NOTES Water Clear

SIGNATURE Amy S. Kelly

SIGNATURE/FUNCTION: _____

GROUNDWATER SAMPLE RECORD

SITE: Gm HMD YPSI - North Yard JOB NO. 5883-00 DATE: 7/20/90

SAMPLE LOCATION MW-303 LAB NUMBER _____

WATER LEVEL/WELL DATA

MEASURED WELL DEPTH 15 FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ] _____
WELL DIAM.
[X] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH 7.54 6.56 + .98 FT
MONITORING:
AMBIENT AIR ___/___ PPM
WELL MOUTH ___/___ PPM

HISTORICAL WELL DEPTH _____ FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND)
_____ FT

PURGE DATA

HEIGHT OF WATER COLUMN 7.5 FT
[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] ____ GAL/FT (____ IN)
10 X 3 CASING VOLUMES = GALLONS TO BE PURGED 3.8 x 3 (12)
PURGE TIME START _____ END _____
SAMPLE TIME START 1235 END _____

	a 3 GAL	a 6 GAL	a 9 GAL	a 12 GAL	a ___ GAL
TEMP, DEG C	17.5	17.6	17.2	17.3	
pH, UNITS	7.0	7.1	7.0	7.0	
SPECIFIC CONDUCTIVITY, umhos/cm	1175	1135	1100	1100	

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID	DECON FLUIDS USED	WATER LEVEL EQUIP.USED
[X]	[ ] PERISTALTIC PUMP	_____	[ ] ETHYL ALCOHOL	[ ] ELECTRIC COND. PROBE
[ ]	[ ] SUBMERSIBLE PUMP	_____	[ ] DEIONIZED WATER	[X] FLOAT ACTIVATED
[ ]	[X] BAILER (PVC/SS/TEFLON)	_____	[ ] HNO3/D.I. WATER	[ ] KECK INTERFACE PROBE
[ ]	[ ] PVC/SILICON TUBING		[ ] POTABLE WATER	[ ] OTHER
[ ]	[X] ~~TEFLON/SILICON~~ TUBING		[X] TSP SOLUTION	
[ ]	[ ] AIR LIFT		[ ] NONE	NUMBER OF FILTER PAPERS USED ____
[ ]	[ ] WATERRA	_____	[ ] _____	
	[ ] IN-LINE FILTER			
	[ ] PRESS/VAC FILTER			
[ ]	[ ] _____	_____		

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	DNR SCAN 1&2	8020	80 ml	glass	No	NO
_____	Dissolved metals	Cd Cr Fe Ni Pb Zn	1 l	plastic	Yes	Yes/2 ml
_____	PCBs	8080	1 l	amber glass	No	NO
_____	_____	_____	_____	_____	_____	_____

NOTES

⇒ Purge 10 well volumes
Water Clear

SIGNATURE _____
SIGNATURE/FUNCTION: _____

90303.WP
REVISED 3/90

ABB ENVIRONMENTAL SERVICES, INC.

GROUNDWATER SAMPLE RECORD

SITE: Gn Hmd YPSI - North Yard JOB NO. 5883-00 DATE: 7/20/90

SAMPLE LOCATION MW-351 Dup of 303 LAB NUMBER _____

WATER LEVEL/WELL DATA

MEASURED WELL DEPTH _____FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ] _____
WELL DIAM.
[X] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH _____FT
MONITORING:
AMBIENT AIR ___/___PPM
WELL MOUTH ___/___PPM

HISTORICAL WELL DEPTH _____FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND)
_____FT

PURGE DATA

HEIGHT OF WATER COLUMN _____FT
[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] ____ GAL/FT (____IN)
X 10 3 CASING VOLUMES = GALLONS TO BE PURGED
PURGE TIME START_____ END_____
SAMPLE TIME START_____ END_____

	a ___ GAL	a ___ GAL	a ___ GAL	a ___ GAL	a ___ GAL
PURGE VOLUME					
TEMP, DEG C					
pH, UNITS					
SPECIFIC CONDUCTIVITY, umhos/cm					

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID	DECON FLUIDS USED	WATER LEVEL EQUIP.USED
[X]	[ ] PERISTALTIC PUMP	_____	[ ] ETHYL ALCOHOL	[ ] ELECTRIC COND. PROBE
[ ]	[ ] SUBMERSIBLE PUMP	_____	[ ] DEIONIZED WATER	[X] FLOAT ACTIVATED
[ ]	[X] BAILER (PVC/SS/TEFLON)	_____	[ ] HNO3/D.I. WATER	[ ] KECK INTERFACE PROBE
[ ]	[ ] PVC/SILICON TUBING		[ ] POTABLE WATER	[ ] OTHER
[ ]	[X] TEFLON/SILICON TUBING		[X] TSP SOLUTION	
[ ]	[ ] AIR LIFT		[ ] NONE	NUMBER OF FILTER PAPERS USED ____
[ ]	[ ] WATERRA	_____	[ ] _____	
	[ ] IN-LINE FILTER			
	[ ] PRESS/VAC FILTER			
[ ]	[ ] _____	_____		

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	DNR SCAN 1 & 2	8020	80 ml	glass	No	No
_____	Dissolved metals	Cd Cr Fe Ni Pb Zn	1 l	plastic	Yes	Yes/2 ml
_____	PCBs	8080	1 l	amber glass	No	No
_____	_____	_____	_____	_____	_____	_____

NOTES

Duplicate sample of MW-303

SIGNATURE Amy S. Kelly

SIGNATURE/FUNCTION: _____

90303.WP
REVISED 3/90

ABB ENVIRONMENTAL SERVICES, INC.

APPENDIX D

ANALYTICAL METHODS

ANALYTICAL PROGRAM
QUARTERLY GROUNDWATER MONITORING PROGRAM

NORTH YARD
GM HYDRA-MATIC

PARAMETER	METHOD NUMBER
Dissolved Metals:	
Cadmium	1310/6010
Chromium	1310/6010
Iron	3010/7380
Nickel	1310/6010
Lead	3010/7420
Zinc	1310/6010
DNR Scan 1 Compounds:	8020
Bromodichloromethane	
Bromoform	
Carbon tetrachloride	
Chlorobenzene	
Chloroform	
Dibromochloromethane	
Dichlorodifluoromethane	
1,1-Dichloroethane	
1,2-Dichloroethane	
1,1-Dichloroethene	
cis-1,2-Dichloroethene	
trans-1,2-Dichloroethene	
1,3-Dichloropropene	
1,1,2,2-Tetrachloroethane	
Tetrachloroethene	
1,1,1-Trichloroethane	
1,1,2-Trichloroethane	
Trichloroethene	
DNR Scan 2 Compounds:	8020
Benzene	
Ethylbenzene	
Styrene	
Toluene	
Total Xylenes	
HSL Pesticides and PCBs:	8080
Aldrin	
Alpha-BHC	
Beta-BHC	
Delta-BHC	
Gamma-BHC (Lindane)	
Chlordane	
4-4'-DDD	
4-4'-DDE	
4-4'-DDT	
Dieldrin	
Alpha-Endosulfan	
Beta-Endosulfan	
Endosulfan Sulfate	
Endrin	
Endrin Ketone	
Heptachlor	
Heptachlor Epoxide	
Methoxychlor	
Toxaphene	
PCB-1016	
PCB-1221	
PCB-1232	
PCB-1242	
PCB-1248	
PCB-1254	
PCB-1260	

APPENDIX E

LABORATORY ANALYTICAL REPORTS
DECEMBER 1989

ENCOTEC
3985 RESEARCH PARK DR.
ANN ARBOR, MI 48108
(313) 761-1389

DATA SUMMARY SHEET

PROJECT: EC Jordan
PROJECT NO.: 40650
SAMPLE TYPE: Water
REPORT DATE: January, 1990

SAMPLE NAME		MW-350	MW-360	MW-301	MW-302	MW-303
SAMPLE DATE		12-28-89	12-28-89	12-28-89	12-28-89	12-28-89
PARAMETER	UNITS	ENCOTEC SAMPLE I.D. NUMBER				
		45346	45347	45348	45349	45350
Cadmium	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Copper	mg/L	0.03	<0.02	<0.02	<0.02	<0.02
Iron	mg/L	<0.02	7.3	<0.02	8.9	7.2
Lead	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	mg/L	0.09	<0.02	<0.02	<0.02	<0.02

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: February 8, 1990

Sample: MW 301
ENCOTEC Number: 45343
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: NA
Date Analyzed: 1-2-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: February 8, 1990

Sample: MW-301
ENCOTEC Number: 45343
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: NA
Date Analyzed: 1-2-89

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
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(313) 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: EPA 8080
Report Date: February 8, 1990

Sample: MW 301
ENCOTEC Number: 45343
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: 1-4-90
Date Analyzed: 1-22-90

U = Analyte not detected
B = Analyte present in method blank

HAZARDOUS SUBSTANCE LIST PESTICIDES	CAS #	UNITS	CONC.	DETECTION LIMIT
Aldrin	309-00-2	ug/L	U	0.05
Alpha-BHC	319-84-6	ug/L	U	0.05
Beta-BHC	319-85-7	ug/L	U	0.05
Delta-BHC	319-86-8	ug/L	U	0.05
Gamma-BHC (Lindane)	58-89-9	ug/L	U	0.05
Chlordane	57-74-9	ug/L	U	0.50
4,4'-DDD	72-54-8	ug/L	U	0.10
4,4'-DDE	72-55-9	ug/L	U	0.10
4,4'-DDT	50-29-3	ug/L	U	0.10
Dieldrin	60-57-1	ug/L	U	0.10
Alpha-Endosulfan	959-98-8	ug/L	U	0.05
Beta-Endosulfan	33213-65-9	ug/L	U	0.10
Endosulfan Sulfate	1031-07-08	ug/L	U	0.10
Endrin	72-20-8	ug/L	U	0.10
Endrin Ketone	53494-70-5	ug/L	U	0.10
Heptachlor	76-44-8	ug/L	U	0.05
Heptachlor Epoxide	1024-57-3	ug/L	U	0.05
Methoxychlor	72-43-5	ug/L	U	0.50
Toxaphene	80001-35-2	ug/L	U	1.0
PCB-1016	12674-11-2	ug/L	U	0.50
PCB-1221	11104-28-2	ug/L	U	0.50
PCB-1232	11141-16-5	ug/L	U	0.50
PCB-1242	53469-21-9	ug/L	U	0.50
PCB-1248	12572-29-6	ug/L	U	0.50
PCB-1254	11097-69-1	ug/L	U	1.0
PCB-1260	11096-82-5	ug/L	U	1.0

Quality Assurance Data

Surrogate Spike	Percent Recovery	QC Set
Dibutylchlorendate	73	4PW90

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: February 8, 1990

Sample: MW 302
ENCOTEC Number: 45344
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: NA
Date Analyzed: 1-2-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: February 8, 1990

Sample: MW-302
ENCOTEC Number: 45344
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: NA
Date Analyzed: 1-2-89

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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(313) 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: EPA 8080
Report Date: February 8, 1990

Sample: MW 302
ENCOTEC Number: 45344
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: 1-4-90
Date Analyzed: 1-22-90

U = Analyte not detected
B = Analyte present in method blank

HAZARDOUS SUBSTANCE LIST PESTICIDES	CAS #	UNITS	CONC.	DETECTION LIMIT
Aldrin	309-00-2	ug/L	U	0.05
Alpha-BHC	319-84-6	ug/L	U	0.05
Beta-BHC	319-85-7	ug/L	U	0.05
Delta-BHC	319-86-8	ug/L	U	0.05
Gamma-BHC (Lindane)	58-89-9	ug/L	U	0.05
Chlordane	57-74-9	ug/L	U	0.50
4,4'-DDD	72-54-8	ug/L	U	0.10
4,4'-DDE	72-55-9	ug/L	U	0.10
4,4'-DDT	50-29-3	ug/L	U	0.10
Dieldrin	60-57-1	ug/L	U	0.10
Alpha-Endosulfan	959-98-8	ug/L	U	0.05
Beta-Endosulfan	33213-65-9	ug/L	U	0.10
Endosulfan Sulfate	1031-07-08	ug/L	U	0.10
Endrin	72-20-8	ug/L	U	0.10
Endrin Ketone	53494-70-5	ug/L	U	0.10
Heptachlor	76-44-8	ug/L	U	0.05
Heptachlor Epoxide	1024-57-3	ug/L	U	0.05
Methoxychlor	72-43-5	ug/L	U	0.50
Toxaphene	80001-35-2	ug/L	U	1.0
PCB-1016	12674-11-2	ug/L	U	0.50
PCB-1221	11104-28-2	ug/L	U	0.50
PCB-1232	11141-16-5	ug/L	U	0.50
PCB-1242	53469-21-9	ug/L	U	0.50
PCB-1248	12572-29-6	ug/L	U	0.50
PCB-1254	11097-69-1	ug/L	U	1.0
PCB-1260	11096-82-5	ug/L	U	1.0

Quality Assurance Data

Surrogate Spike	Percent Recovery	QC Set
Dibutylchlorendate	84	4PW90

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: February 8, 1990

Sample: MW 303
ENCOTEC Number: 45345
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: NA
Date Analyzed: 1-2-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: February 8, 1990

Sample: MW-303
ENCOTEC Number: 45345
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: NA
Date Analyzed: 1-2-89

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: EPA 8080
Report Date: February 8, 1990

Sample: MW 303
ENCOTEC Number: 45345
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: 1-4-90
Date Analyzed: 1-22-90

U = Analyte not detected
B = Analyte present in method blank

HAZARDOUS SUBSTANCE LIST PESTICIDES	CAS #	UNITS	CONC.	DETECTION LIMIT
Aldrin	309-00-2	ug/L	U	0.05
Alpha-BHC	319-84-6	ug/L	U	0.05
Beta-BHC	319-85-7	ug/L	U	0.05
Delta-BHC	319-86-8	ug/L	U	0.05
Gamma-BHC (Lindane)	58-89-9	ug/L	U	0.05
Chlordane	57-74-9	ug/L	U	0.50
4,4'-DDD	72-54-8	ug/L	U	0.10
4,4'-DDE	72-55-9	ug/L	U	0.10
4,4'-DDT	50-29-3	ug/L	U	0.10
Dieldrin	60-57-1	ug/L	U	0.10
Alpha-Endosulfan	959-98-8	ug/L	U	0.05
Beta-Endosulfan	33213-65-9	ug/L	U	0.10
Endosulfan Sulfate	1031-07-08	ug/L	U	0.10
Endrin	72-20-8	ug/L	U	0.10
Endrin Ketone	53494-70-5	ug/L	U	0.10
Heptachlor	76-44-8	ug/L	U	0.05
Heptachlor Epoxide	1024-57-3	ug/L	U	0.05
Methoxychlor	72-43-5	ug/L	U	0.50
Toxaphene	80001-35-2	ug/L	U	1.0
PCB-1016	12674-11-2	ug/L	U	0.50
PCB-1221	11104-28-2	ug/L	U	0.50
PCB-1232	11141-16-5	ug/L	U	0.50
PCB-1242	53469-21-9	ug/L	U	0.50
PCB-1248	12572-29-6	ug/L	3.1	0.50
PCB-1254	11097-69-1	ug/L	U	1.0
PCB-1260	11096-82-5	ug/L	U	1.0

Quality Assurance Data

Surrogate Spike	Percent Recovery	QC Set
Dibutylchlorendate	75	4PW90

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: February 8, 1990

Sample: MW 360 Dup of MW-303
ENCOTEC Number: 45342
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: NA
Date Analyzed: 1-2-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: February 8, 1990

Sample: MW-360 Dup of MW-303
ENCOTEC Number: 45342
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: NA
Date Analyzed: 1-2-89

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: EPA 8080
Report Date: February 8, 1990

Sample: MW 360 Dup
ENCOTEC Number: 45342
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: 1-4-90
Date Analyzed: 1-22-90

U = Analyte not detected
B = Analyte present in method blank

HAZARDOUS SUBSTANCE LIST PESTICIDES	CAS #	UNITS	CONC.	DETECTION LIMIT
Aldrin	309-00-2	ug/L	U	0.05
Alpha-BHC	319-84-6	ug/L	U	0.05
Beta-BHC	319-85-7	ug/L	U	0.05
Delta-BHC	319-86-8	ug/L	U	0.05
Gamma-BHC (Lindane)	58-89-9	ug/L	U	0.05
Chlordane	57-74-9	ug/L	U	0.50
4,4'-DDD	72-54-8	ug/L	U	0.10
4,4'-DDE	72-55-9	ug/L	U	0.10
4,4'-DDT	50-29-3	ug/L	U	0.10
Dieldrin	60-57-1	ug/L	U	0.10
Alpha-Endosulfan	959-98-8	ug/L	U	0.05
Beta-Endosulfan	33213-65-9	ug/L	U	0.10
Endosulfan Sulfate	1031-07-08	ug/L	U	0.10
Endrin	72-20-8	ug/L	U	0.10
Endrin Ketone	53494-70-5	ug/L	U	0.10
Heptachlor	76-44-8	ug/L	U	0.05
Heptachlor Epoxide	1024-57-3	ug/L	U	0.05
Methoxychlor	72-43-5	ug/L	U	0.50
Toxaphene	80001-35-2	ug/L	U	1.0
PCB-1016	12674-11-2	ug/L	U	0.50
PCB-1221	11104-28-2	ug/L	U	0.50
PCB-1232	11141-16-5	ug/L	U	0.50
PCB-1242	53469-21-9	ug/L	U	0.50
PCB-1248	12572-29-6	ug/L	6.0	0.50
PCB-1254	11097-69-1	ug/L	U	1.0
PCB-1260	11096-82-5	ug/L	U	1.0

Quality Assurance Data

Surrogate Spike	Percent Recovery	QC Set
Dibutylchlorendate	70	4PW90

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: February 8, 1990

Sample: MW 350 – Blank
ENCOTEC Number: 45341
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: NA
Date Analyzed: 1-2-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: February 8, 1990

Sample: MW-350 Blank
ENCOTEC Number: 45341
Sample Date: 12/28/89
Date Received: 12/28/89
Date Extracted: NA
Date Analyzed: 1/2/90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: EPA 8080
Report Date: February 8, 1990

Sample: MW 350 Blank
ENCOTEC Number: 45341
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: 1-4-90
Date Analyzed: 1-22-90

U = Analyte not detected
B = Analyte present in method blank

HAZARDOUS SUBSTANCE LIST PESTICIDES	CAS #	UNITS	CONC.	DETECTION LIMIT
Aldrin	309-00-2	ug/L	U	0.05
Alpha-BHC	319-84-6	ug/L	U	0.05
Beta-BHC	319-85-7	ug/L	U	0.05
Delta-BHC	319-86-8	ug/L	U	0.05
Gamma-BHC (Lindane)	58-89-9	ug/L	U	0.05
Chlordane	57-74-9	ug/L	U	0.50
4,4'-DDD	72-54-8	ug/L	U	0.10
4,4'-DDE	72-55-9	ug/L	U	0.10
4,4'-DDT	50-29-3	ug/L	U	0.10
Dieldrin	60-57-1	ug/L	U	0.10
Alpha-Endosulfan	959-98-8	ug/L	U	0.05
Beta-Endosulfan	33213-65-9	ug/L	U	0.10
Endosulfan Sulfate	1031-07-08	ug/L	U	0.10
Endrin	72-20-8	ug/L	U	0.10
Endrin Ketone	53494-70-5	ug/L	U	0.10
Heptachlor	76-44-8	ug/L	U	0.05
Heptachlor Epoxide	1024-57-3	ug/L	U	0.05
Methoxychlor	72-43-5	ug/L	U	0.50
Toxaphene	80001-35-2	ug/L	U	1.0
PCB-1016	12674-11-2	ug/L	U	0.50
PCB-1221	11104-28-2	ug/L	U	0.50
PCB-1232	11141-16-5	ug/L	U	0.50
PCB-1242	53469-21-9	ug/L	U	0.50
PCB-1248	12572-29-6	ug/L	U	0.50
PCB-1254	11097-69-1	ug/L	U	1.0
PCB-1260	11096-82-5	ug/L	U	1.0

Quality Assurance Data

Surrogate Spike	Percent Recovery	QC Set
Dibutylchlorendate	81	4PW90

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: February 8, 1990

Sample: Trip Blank
ENCOTEC Number: 45351
Sample Date: 12-28-89
Date Received: 12-28-89
Date Extracted: NA
Date Analyzed: 1-2-89

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: February 8, 1990

Sample: Method Blank
ENCOTEC Number: NA
Sample Date: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 1-2-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: February 8, 1990

Sample: Method Blank
ENCOTEC Number: NA
Sample Date: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 1-2-89

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: E.C. Jordan
Project Number: 40650
Method: EPA 8080
Report Date: February 8, 1990

Sample: Method Blank
ENCOTEC Number: NA
Sample Date: NA
Date Received: NA
Date Extracted: 1-4-90
Date Analyzed: 1-22-90

U = Analyte not detected
B = Analyte present in method blank

HAZARDOUS SUBSTANCE LIST PESTICIDES	CAS #	UNITS	CONC.	DETECTION LIMIT
Aldrin	309-00-2	ug/L	U	0.05
Alpha-BHC	319-84-6	ug/L	U	0.05
Beta-BHC	319-85-7	ug/L	U	0.05
Delta-BHC	319-86-8	ug/L	U	0.05
Gamma-BHC (Lindane)	58-89-9	ug/L	U	0.05
Chlordane	57-74-9	ug/L	U	0.50
4,4'-DDD	72-54-8	ug/L	U	0.10
4,4'-DDE	72-55-9	ug/L	U	0.10
4,4'-DDT	50-29-3	ug/L	U	0.10
Dieldrin	60-57-1	ug/L	U	0.10
Alpha-Endosulfan	959-98-8	ug/L	U	0.05
Beta-Endosulfan	33213-65-9	ug/L	U	0.10
Endosulfan Sulfate	1031-07-08	ug/L	U	0.10
Endrin	72-20-8	ug/L	U	0.10
Endrin Ketone	53494-70-5	ug/L	U	0.10
Heptachlor	76-44-8	ug/L	U	0.05
Heptachlor Epoxide	1024-57-3	ug/L	U	0.05
Methoxychlor	72-43-5	ug/L	U	0.50
Toxaphene	80001-35-2	ug/L	U	1.0
PCB-1016	12674-11-2	ug/L	U	0.50
PCB-1221	11104-28-2	ug/L	U	0.50
PCB-1232	11141-16-5	ug/L	U	0.50
PCB-1242	53469-21-9	ug/L	U	0.50
PCB-1248	12572-29-6	ug/L	U	0.50
PCB-1254	11097-69-1	ug/L	U	1.0
PCB-1260	11096-82-5	ug/L	U	1.0

Quality Assurance Data

Surrogate Spike	Percent Recovery	QC Set
Dibutylchlorendate	86	3PW90

APPENDIX F

LABORATORY ANALYTICAL REPORTS
MARCH 1990

ENCOTEC
3985 RESEARCH PARK DR.
ANN ARBOR, MI 48108
(313) 761-1389

DATA SUMMARY SHEET

PROJECT: C. E. Environmental PROJECT NO.: 40650

SAMPLE TYPE: Filtrate REPORT DATE: May, 1990

SAMPLE NAME		MW 350	MW 360	MW 301	MW 302	MW 303
SAMPLE DATE		3-27-90	3-27-90	3-27-90	3-27-90	3-27-90
PARAMETER	UNITS	ENCOTEC SAMPLE I.D. NUMBER				
		49771	49772	49773	49774	49775
Cadmium	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Iron	mg/L	<0.02	4.9	<0.02	5.1	7.5
Lead	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	mg/L	0.03	<0.02	<0.02	<0.02	<0.02

ENCOTEC
3985 RESEARCH PARK DR.
ANN ARBOR, MI 48108
(313) 761-1389

DATA SUMMARY SHEET

PROJECT: C. E. Environmental
PROJECT NO.: 40650
SAMPLE TYPE: Water
REPORT DATE: May, 1990

SAMPLE NAME		MW 350	MW 360	MW 301	MW 302	MW 303
SAMPLE DATE		3-27-90	3-27-90	3-27-90	3-27-90	3-27-90
PARAMETER	UNITS	ENCOTEC SAMPLE I.D. NUMBER				
		49766	49767	49768	49768 69	49770
Aroclor 1016	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	ug/L	<0.1	<0.1	<0.1	<0.1	0.77
Aroclor 1254	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: May 11, 1990

Sample: MW301
ENCOTEC Number: 49763
Sample Date: 3-27-90
Date Received: 3-27-90
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyte not detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: May 11, 1990

Sample: MW301
ENCOTEC Number: 49768
Sample Date: 3-27-90
Date Received: 3-27-90
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyzed, Not Detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: May 11, 1990

Sample: MW302
ENCOTEC Number: 49769
Sample Date: 3-27-90
Date Received: 3-27-90
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyte not detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: May 11, 1990

Sample: MW302
ENCOTEC Number: 49769
Sample Date: 3-27-90
Date Received: 3-27-90
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyzed, Not Detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: May 11, 1990

Sample: MW360 Dup of MW-302
ENCOTEC Number: 49767
Sample Date: 3-27-90
Date Received: 3-27-90
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyte not detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: May 11, 1990

Sample: MW360 Comp B /10302
ENCOTEC Number: 49767
Sample Date: 3-27-90
Date Received: 3-27-90
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyzed, Not Detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: May 11, 1990

Sample: MW303
ENCOTEC Number: 49770
Sample Date: 3-27-90
Date Received: 3-27-90
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyte not detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: May 11, 1990

Sample: MW303
ENCOTEC Number: 49770
Sample Date: 3-27-90
Date Received: 3-27-90
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyzed, Not Detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: May 11, 1990

Sample: MW350 - Blank
ENCOTEC Number: 49766
Sample Date: 3-27-90
Date Received: 3-27-90
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyte not detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: May 11, 1990

Sample: MW350 - [illegible]
ENCOTEC Number: 49766
Sample Date: 3-27-90
Date Received: 3-27-90
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyzed, Not Detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: May 11, 1990

Sample: Trip Blank
ENCOTEC Number: 49776
Sample Date: 3-27-90
Date Received: 3-27-90
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyte not detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: May 11, 1990

Sample: Trip Blank
ENCOTEC Number: 49776
Sample Date: 3-27-90
Date Received: 3-27-90
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyzed, Not Detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: May 11, 1990

Sample: Method Blank (B036V15)
ENCOTEC Number: NA
Sample Date: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyte not detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	0.001	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	0.002	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: May 11, 1990

Sample: Method Blank (A036V15)
ENCOTEC Number: NA
Sample Date: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 4-3-90

U = Analyzed, Not Detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	0.002	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: May 11, 1990

Sample: Method Blank
ENCOTEC Number: NA
Sample Date: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 4-4-90

U = Analyte not detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	0.001	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	0.001	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: C.E. Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: May 11, 1990

Sample: Method Blank
ENCOTEC Number: NA
Sample Date: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 4-4-90

U = Analyzed, Not Detected
B = Analyte present in method blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	0.002	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

APPENDIX G

LABORATORY ANALYTICAL REPORTS
JULY 1990

ENCOTEC
3985 RESEARCH PARK DR.
ANN ARBOR, MI 48108
(313) 761-1389

DATA SUMMARY SHEET

PROJECT: ABB Environmental
PROJECT NO.: 40650
SAMPLE TYPE: Water
REPORT DATE: August, 1990

SAMPLE NAME		MW 301	MW 302	MW 303	MW 350	MW 351
SAMPLE DATE		7-20-90	7-20-90	7-20-90	7-20-90	7-20-90
PARAMETER	UNITS	ENCOTEC SAMPLE I.D. NUMBER				
		55832	55833	55834	55835	55836
Cadmium	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Copper	mg/L	<0.02	<0.02	<0.02	0.14	<0.02
Iron	mg/L	0.31	5.3	11	<0.02	10
Lead	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	mg/L	<0.02	0.11	<0.02	0.15	<0.02

ENCOTEC
3985 RESEARCH PARK DR.
ANN ARBOR, MI 48108
(313) 761-1389

DATA SUMMARY SHEET

PROJECT: ABB Environmental
PROJECT NO.: 40650
SAMPLE TYPE: Water
REPORT DATE: August, 1990

SAMPLE NAME		MW 301	MW 302	MW 303	MW 350	MW 351
SAMPLE DATE		7-20-90	7-20-90	7-20-90	7-20-90	7-20-90
PARAMETER	UNITS	ENCOTEC SAMPLE I.D. NUMBER				
		55832	55833	55834	55835	55836
Aroclor 1016	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	ug/L	<0.2	<0.2	<0.2	<0.2	<0.2
Aroclor 1260	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: August 10, 1990

Sample: MW 301
ENCOTEC Number: 55832
Sample Date: 7-20-90
Date Received: 7-20-90
Date Extracted: NA
Date Analyzed: 7-30-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.002
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: AAB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: August 10, 1990

Sample: MW 301
ENCOTEC Number: 55832
Sample Date: 7-20-90
Date Received: 7-20-90
Date Extracted: NA
Date Analyzed: 7-30-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.002
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: August 10, 1990

Sample: MW 302
ENCOTEC Number: 55833
Sample Date: 7-20-90
Date Received: 7-20-90
Date Extracted: NA
Date Analyzed: 7-30-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.002
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: AAB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: August 10, 1990

Sample: MW 302
ENCOTEC Number: 55833
Sample Date: 7-20-90
Date Received: 7-20-90
Date Extracted: NA
Date Analyzed: 7-30-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.002
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: August 10, 1990

Sample: MW 303
ENCOTEC Number: 55834
Sample Date: 7-20-90
Date Received: 7-20-90
Date Extracted: NA
Date Analyzed: 7-30-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.002
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: AAB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: August 10, 1990

Sample: MW 303
ENCOTEC Number: 55834
Sample Date: 7-20-90
Date Received: 7-20-90
Date Extracted: NA
Date Analyzed: 7-30-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.002
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: August 10, 1990

Sample: MW 351
ENCOTEC Number: 55836
Sample Date: 7-20-90
Date Received: 7-20-90
Date Extracted: NA
Date Analyzed: 7-30-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.002
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: AAB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: August 10, 1990

Sample: MW 351-
ENCOTEC Number: 55836
Sample Date: 7-20-90
Date Received: 7-20-90
Date Extracted: NA
Date Analyzed: 7-30-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: August 10, 1990

Sample: MW 350
ENCOTEC Number: 55835
Sample Date: 7-20-90
Date Received: 7-20-90
Date Extracted: NA
Date Analyzed: 7-30-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.003
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: AAB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: August 10, 1990

Sample: MW 350
ENCOTEC Number: 55835
Sample Date: 7-20-90
Date Received: 7-20-90
Date Extracted: NA
Date Analyzed: 7-30-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.002
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: August 10, 1990

Sample: Method Blank
ENCOTEC Number: NA
Sample Date: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 7-30-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	0.001	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: AAB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: August 10, 1990

Sample: Method Blank
ENCOTEC Number: NA
Sample Date: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 7-30-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

C-E ENVIRONMENTAL, INC.

GROUNDWATER MONITORING REPORT SEPTEMBER 1990

NORTH YARD

Prepared For:

GENERAL MOTORS CORPORATION
HYDRA-MATIC DIVISION
GM Hydra-Matic, Ypsilanti, Michigan

December 1990

Job No. 5883-00

COMBUSTION ENGINEERING

GROUNDWATER MONITORING REPORT
SEPTEMBER 1990

NORTH YARD

Prepared For:

GENERAL MOTORS CORPORATION
HYDRA-MATIC DIVISION
Ypsilanti, Michigan

Prepared By:

C-E ENVIRONMENTAL INC.
Farmington Hills, Michigan

December 1990

5883-00

TABLE OF CONTENTS

SECTION NO.	TITLE	PAGE NO.
1.0	INTRODUCTION	1
2.0	SCHEDULE	1
3.0	PERSONNEL	1
4.0	SAMPLING LOCATIONS	1
5.0	FIELD PROCEDURES	1
6.0	SAMPLE HANDLING	5
7.0	QUALITY CONTROL SAMPLES	5
8.0	RESULTS	5
	8.1 GROUNDWATER FLOW	5
	8.2 QUALITY CONTROL SAMPLES	5
	8.3 GROUNDWATER QUALITY	5

APPENDIX A - GROUNDWATER SAMPLE DATA RECORDS
APPENDIX B - ANALYTICAL METHODS
APPENDIX C - LABORATORY ANALYTICAL REPORTS

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
1	LOCATION OF THE GM HYDRA-MATIC WILLOW RUN PLANT	2
2	INVESTIGATION LOCATION MAP	3
3	MONITORING WELL LOCATIONS	4
4	MONITORING WELL LOCATIONS AND WATER LEVEL MEASUREMENTS	6

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
1	SUMMARY OF WATER LEVELS AND GROUNDWATER FLOW DIRECTIONS	7
2	ORGANIC AND INORGANIC CHEMICALS IN GROUNDWATER AT THE NORTH YARD - SEPTEMBER 1990	8

1.0 INTRODUCTION

The General Motors (GM) Hydra-matic Willow Run Plant is located in Ypsilanti, Michigan, within Washtenaw County (see Figure 1). The North Yard, previously used to store production machinery and equipment, is located in the northeast corner of Hydra-matic's property (see Figure 2). The equipment was stored directly on the ground; as a result, residual metal-working fluids and various oils leaked from the equipment into the soil.

GM conducted a subsurface soil study in April 1988 to determine the extent of contamination in the North Yard. The results indicated that the fluids and oils which had leaked from the machinery were confined to the upper 24 inches of soil. This material was removed from the site in August 1988.

As part of the North Yard remediation program, Hydra-matic chose to implement a quarterly groundwater monitoring program for a two year period beginning in 1989[1]. In February 1989, C-E Environmental, Inc. intalled three groundwater monitoring wells in the North Yard. Groundwater samples were collected in March 1989, June 1989, September 1989, December 1989, March 1990, July 1990, and September 1990. All samples were analyzed for selected dissolved metals, purgeable halocarbons (DNR Scan 1), and purgeable aromatic hydrocarbons (DNR Scan 2). In addition, samples collected in December 1989, March 1990, July 1990, and September 1990 were analyzed for polychlorinated biphenyls (PCBs). The results of the first six sampling events were reported previously. This report documents the sampling event which occurred in September 1990.

2.0 SCHEDULE

The seventh groundwater sampling event was conducted on September 19, 1990.

3.0 PERSONNEL

Groundwater samples were collected by C. Kielty of C-E Environmental.

4.0 SAMPLING LOCATIONS

Figure 3 shows the locations of the three monitoring wells in the North Yard.

5.0 FIELD PROCEDURES

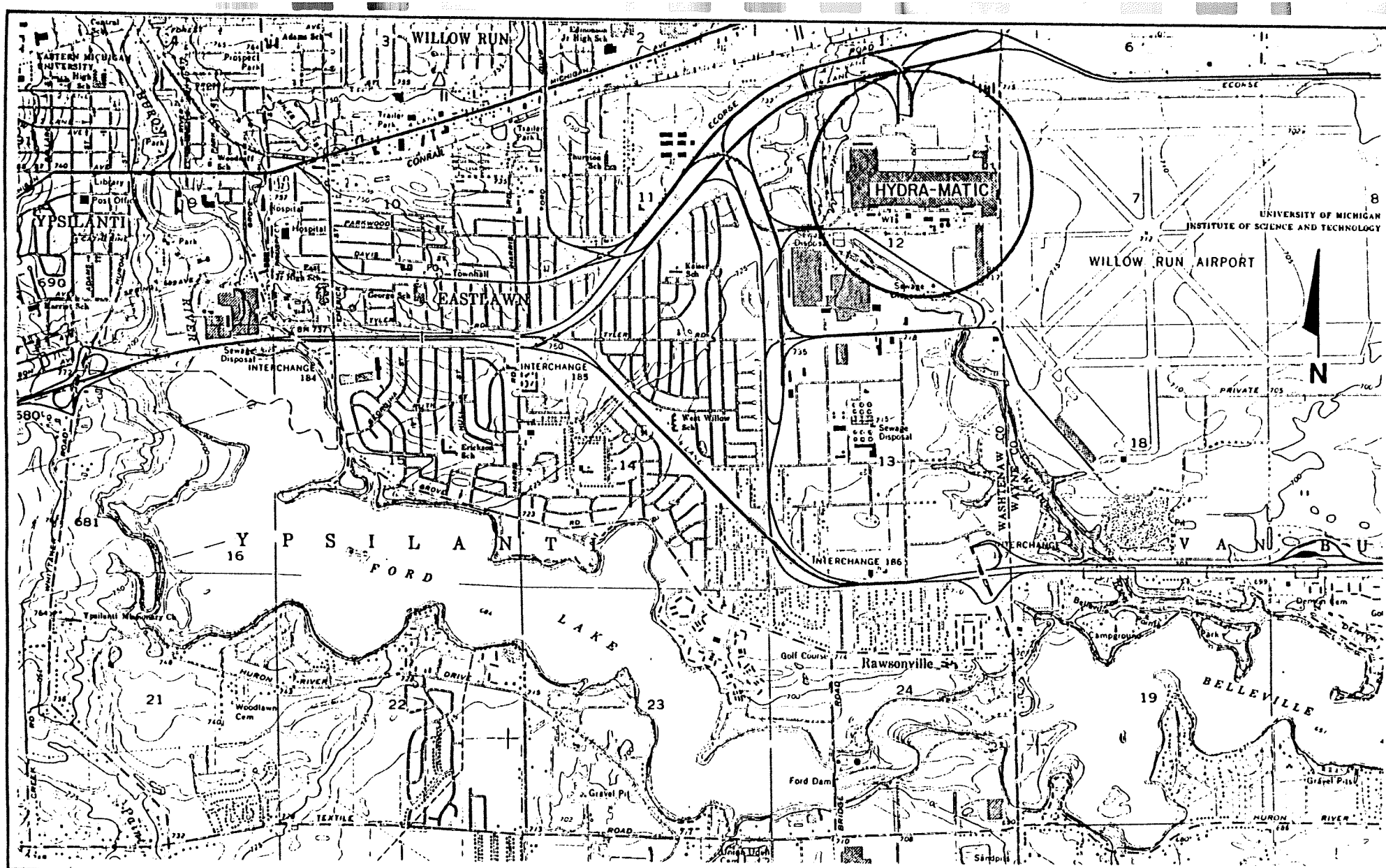
Prior to sampling, the water level and depth of each well was measured from the top of the well casing. The volume of water standing inside the well casing was calculated, and three well volumes were evacuated from the well using a peristaltic pump and disposable tygon tubing. New tygon tubing was used for each well.

Groundwater temperature, pH, and specific conductance were recorded three times during evacuation. Stabilization of these parameters indicated that stagnant water had been removed from the well casing so that a representative groundwater sample could be taken. These parameters were recorded on the Groundwater Sampling Records contained in Appendix A.

After evacuating each well, groundwater samples being analyzed for organic parameters were collected with a Teflon bailer. Samples to be analyzed for dissolved metals were filtered directly through a 45-micron pore size, in-line, disposable filter into laboratory prepared bottles that were pre-preserved with nitric acid. The

---

[1]For additional information, see: "Hydrogeologic Investigation at the North Yard," July 1989. Prepared for General Motors Corporation, Hydra-matic Division, by C-E Environmental, Inc.





QUADRANGLE LOCATION

0 1500 3000 6000 FEET

TAKEN FROM U.S.G.S. YPSILANTI EAST, MICH. 7.5' QUADRANGLE MAP.

FIGURE 1
LOCATION OF THE GM HYDRA-MATIC PLANT YPSILANTI, MICHIGAN

C-E ENVIRONMENTAL, INC.

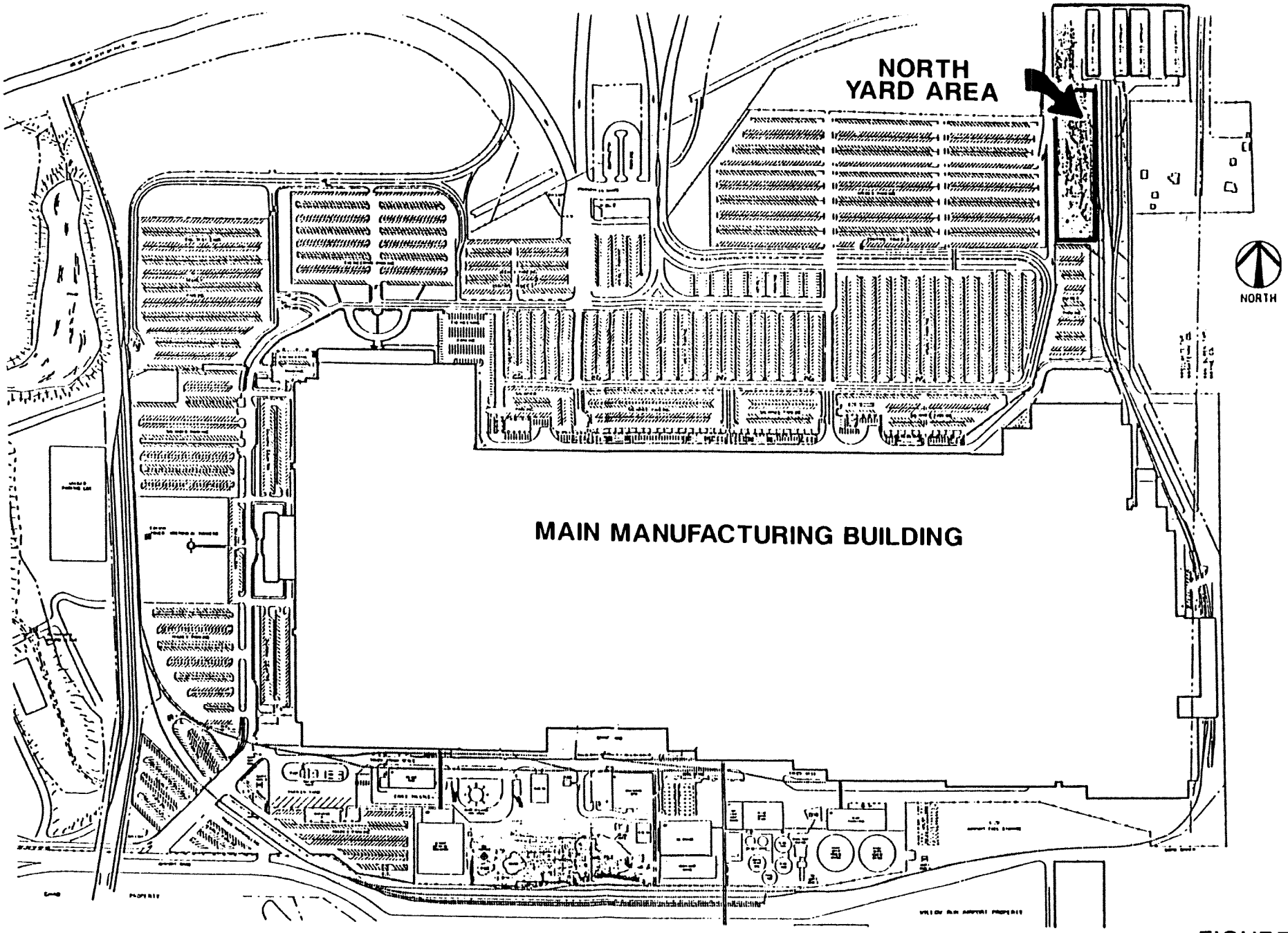
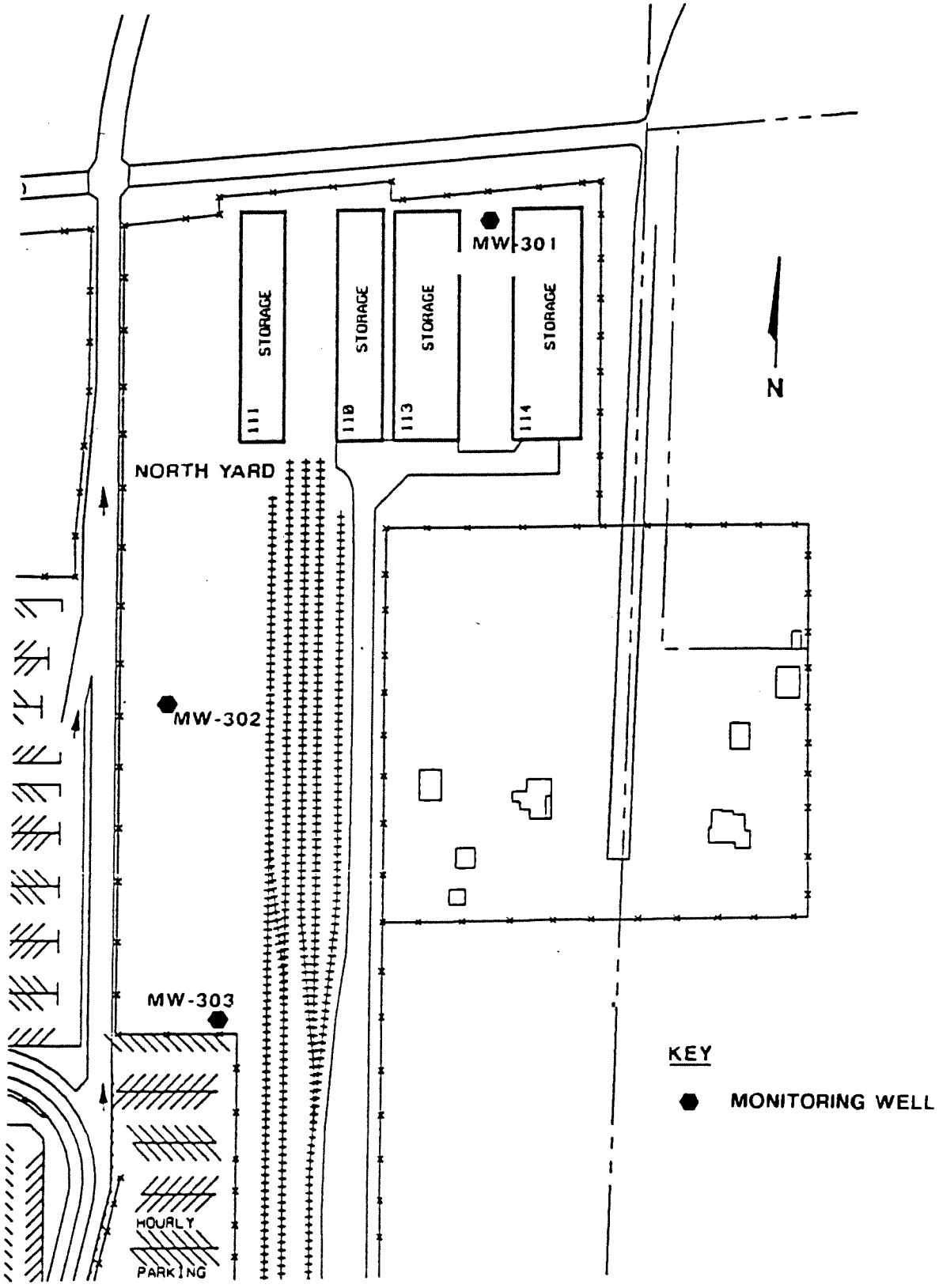


FIGURE 2
INVESTIGATION LOCATION MAP
GM HYDRA-MATIC PLANT
YPSILANTI, MICHIGAN

C-E ENVIRONMENTAL, INC.



SCALE

0 100 200 400 FEET

FIGURE 3
MONITORING WELL LOCATIONS
NORTH YARD
GM HYDRA-MATIC PLANT
YPSILANTI, MICHIGAN

GM DRAWING # HWR-NY-1

C-E Environmental, Inc.

filter was replaced after each sample. After processing and labeling, all samples were kept on ice in coolers until delivery to the laboratory.

The bailer was decontaminated with a solution of trisodium phosphate and distilled water, followed by a final distilled water rinse.

6.0 SAMPLE HANDLING

After processing and labeling, a chain-of-custody record and an analytical request form was completed. The samples were then transported to Environmental Control Technology Corporation (ENCOTEC), of Ann Arbor, Michigan, for analysis of selected dissolved metals (cadmium, chromium, copper, iron, lead, nickel, and zinc), purgeable halocarbons (DNR Scan 1), purgeable aromatic hydrocarbons (DNR Scan 2), and PCBs. The analytical methods used and lists of organic analytes are presented in Appendix B.

7.0 QUALITY CONTROL SAMPLES

For quality control purposes, one blind duplicate sample (MW-351, a duplicate of MW-303) and one sampler blank (MW-350, taken prior to sampling) were collected during this sampling effort. Similar to the groundwater samples, each quality control sample was analyzed for dissolved metals and organic chemicals.

A blind duplicate sample is a duplicate sample labeled in a manner such that the laboratory is unaware that it is a duplicate. The purpose of a duplicate sample is to check the homogeneity of the sample in addition to the precision of the laboratory. A sampler blank is a sample of distilled water that is handled in the same manner as a groundwater sample -it is poured into the sampling equipment, filtered, preserved, placed into laboratory-prepared bottles, etc. The purpose of a sampler blank is to check the effectiveness of the decontamination procedures.

8.0 RESULTS

8.1 GROUNDWATER FLOW

As shown on Figure 4, groundwater in the North Yard appeared to be moving toward the southwest in September 1990. Table 1 summarizes water level measurements and groundwater flow directions observed in the North Yard during the seven sampling events conducted thus far.

8.2 QUALITY CONTROL SAMPLES

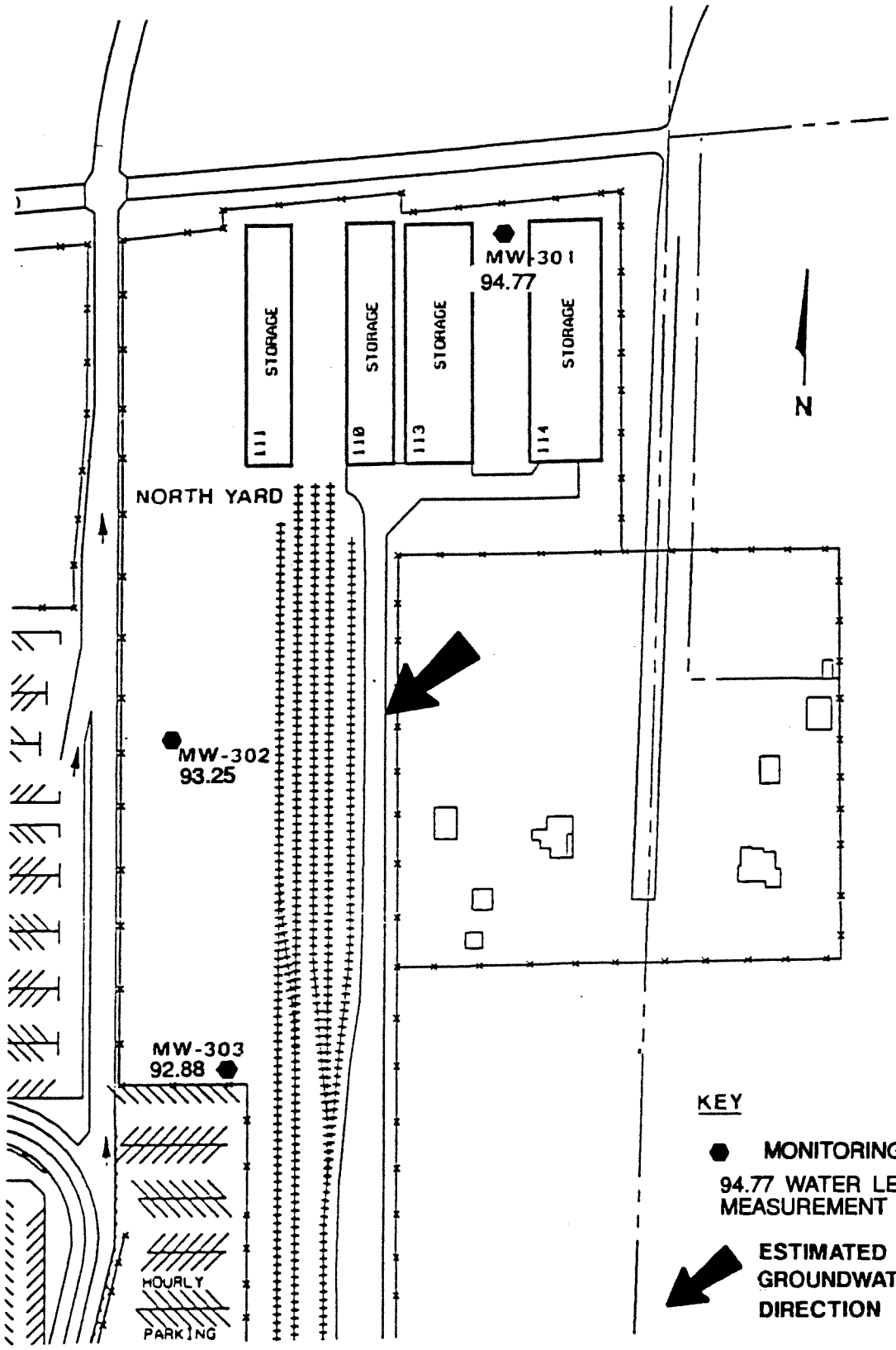
Table 2 presents the analytical data for September 1990, as well as the data collected during all previous sampling events. Laboratory analytical reports for September 1990 are contained in Appendix C.

The sampler blank (MW-350) contained 0.30 milligrams per liter (mg/L) of iron, 0.02 mg/L of lead, and 0.002 mg/L of chloroform. Sample MW-303 showed excellent correlation with its duplicate sample MW-303, indicating good quality control.

8.3 GROUNDWATER QUALITY

As shown on Table 2, iron was detected in all three wells at concentrations ranging from 4.7 to 10 mg/L. These concentrations are similar to those detected during previous sampling events. In addition to iron, lead was detected in MW-301 at 0.02 mg/L, but lead was also detected in the sampler blank at the same concentration. Because of this fact, and because lead has never been detected at the site during previous sampling events, it is unlikely that lead is site-related.

No site-related organic chemicals were found in September 1990.



SCALE

0 100 200 400 FEET

FIGURE 4
MONITORING WELL LOCATIONS
AND STATIC WATER LEVELS
SEPTEMBER 1990
NORTH YARD
GM HYDRA-MATIC PLANT
YPSILANTI, MICHIGAN

GM DRAWING # HWR-NY-1

C-E Environmental, Inc.

TABLE 1
Summary of Water Levels and Groundwater Flow Directions
Observed in the North Yard During 1989 and 1990

	3/89	6/89	9/89	12/89	3/90	7/90	9/90
MW-301	93.97	93.03	92.45	92.09	93.50	91.94	94.77
MW-302	92.90	93.20	92.89	92.33	93.15	92.70	93.25
MW-303	92.41	92.75	92.63	92.11	92.80	92.48	92.88
FLOW DIRECTION	S	SE	ESE	ESE	SSE	SE	SW

TABLE 2 ORGANIC AND INORGANIC CHEMICALS IN GROUNDWATER AT THE NORTH YARD
GM HYDRA-MATIC, YPSILANTI, MICHIGAN

Date	Well No.	Cd	Cr	Cu	Fe	Pb	Ni	Zn	1,1,1-TCA	BDCM	CHLOROFO	PCB-1248
September 1990	MW-301	U	U	U	5.1	0.02	U	U	U	U	U	U
	MW-302	U	U	U	4.7	U	U	U	U	U	U	U
	MW-303	U	U	U	4.7	U	U	U	U	U	U	U
	MW-351 (Dup of MW-303)	U	U	U	10	U	U	U	U	U	U	U
	MW-350 (Sampler Blank)	U	U	U	0.30	0.02	U	U	U	U	0.002	U
July 1990	MW-301	U	U	U	0.31	U	U	U	U	U	U	U
	MW-302	U	U	U	5.3	U	U	0.11	U	U	U	U
	MW-303	U	U	U	11	U	U	U	U	U	U	U
	MW-351 (Dup of MW-303)	U	U	U	10	U	U	U	U	U	U	U
	MW-350 (Sampler Blank)	U	U	0.14	U	U	U	0.15	U	U	U	U
March 1990	MW-301	U	U	NA	U	U	U	U	U	U	U	U
	MW-302	U	U	NA	5.1	U	U	U	U	U	U	U
	MW-360 (Dup of MW-302)	U	U	NA	4.9	U	U	U	U	U	U	U
	MW-303	U	U	NA	7.5	U	U	U	U	U	U	0.00077
	MW-350 (Sampler Blank)	U	U	NA	U	U	U	0.03	U	U	U	U
December 1989	MW-301	U	U	U	U	U	U	U	U	U	U	U
	MW-302	U	U	U	8.9	U	U	U	U	U	U	U
	MW-303	U	U	U	7.2	U	U	U	U	U	U	0.0031
	MW-360 (Dup of MW-303)	U	U	U	7.3	U	U	U	U	U	U	0.0060
	MW-350 (Sampler Blank)	U	U	0.03	U	U	U	0.09	U	U	U	U
September 1989	MW-301	U	U	U	0.16	U	U	0.03	U	U	U	NA
	MW-302	U	U	0.02	5.9	U	U	0.03	U	U	U	NA
	MW-360 (Dup of MW-302)	U	U	0.02	5.9	U	U	0.02	U	U	U	NA
	MW-303	U	U	U	7.9	U	U	0.03	U	U	U	NA
	MW-350 (Sampler Blank)	U	U	0.51	0.06	0.03	U	0.32	U	U	0.003	NA
June 1989	MW-301	U	U	U	0.03	U	U	U	U	U	U	NA
	MW-351 (Dup of MW-301)	U	U	0.04	0.04	U	U	U	U	U	U	NA
	MW-302	U	U	U	2.0	U	U	U	U	U	U	NA
	MW-303	U	U	U	2.0	U	U	U	0.002	U	U	NA
	MW-350 (Sampler Blank)	U	U	0.02	U	U	U	U	U	0.001	0.005	NA
March 1989	MW-301	NA	U	U	U	U	U	U	U	U	U	NA
	MW-351 (Dup of MW-301)	NA	U	U	U	U	U	U	U	U	U	NA
	MW-302	NA	U	U	2.8	U	U	U	U	U	U	NA
	MW-303	NA	U	U	8.1	U	U	U	U	U	U	NA
	MW-350 (Sampler Blank)	NA	U	U	U	U	U	U	U	U	U	NA

NOTES:

1. All concentrations in mg/L.
2. U - Compound was analyzed but not detected.
3. NA - Not analyzed.
4. BDCM - Bromodichloromethane
5. 1,1,1-TCA - 1,1,1-Trichloroethane
6. Each sample was analyzed for DNR Scans 1 and 2 and HSL PCBs (EPA method 8080) unless otherwise noted; only the compounds detected are shown on this table.

APPENDIX A

GROUNDWATER SAMPLE DATA RECORDS

GROUNDWATER SAMPLE RECORD

SITE: Gm Hmd 4PSI - North Yard JOB NO. 5883-00 DATE: 9/19/90

Sampler Blank

SAMPLE LOCATION MW-350 LAB NUMBER _____

WATER LEVEL/WELL DATA

MEASURED WELL DEPTH _____FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ] _____
WELL DIAM.
[X] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH _____FT
MONITORING:
AMBIENT AIR _____PPM
WELL MOUTH _____PPM

HISTORICAL WELL DEPTH _____FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND)
_____FT

PURGE DATA

[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] _____ GAL/FT (____IN)

HEIGHT OF WATER COLUMN _____FT X ____ CASING VOLUMES = GALLONS TO BE PURGED

PURGE TIME START _____ END _____

SAMPLE TIME START _____ END 1020

	@ ____ GAL	@ ____ GAL	@ ____ GAL	@ ____ GAL	@ ____ GAL
PURGE VOLUME					
TEMP, DEG C					
pH, UNITS					
SPECIFIC CONDUCTIVITY, umhos/cm					

EQUIPMENT DOCUMENTATION

PURGING
[X]
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]
[ ]

SAMPLING
[X] PERISTALTIC PUMP Metals
[ ] SUBMERSIBLE PUMP
[X] BAILER (PVC/SS/TEFLON) VOA
[ ] PVC/SILICON TUBING + PCBs
[ ] TEFLON/SILICON TUBING
[ ] AIR LIFT
[ ] WATERRA
[ ] IN-LINE FILTER
[ ] PRESS/VAC FILTER
[ ] _____

EQUIPMENT ID
_____
_____
_____
_____

DECON FLUIDS USED
[ ] ETHYL ALCOHOL
[ ] DEIONIZED WATER
[ ] HNO3/D.I. WATER
[ ] POTABLE WATER
[X] TSP SOLUTION
[ ] NONE
[X] DISTILLED

WATER LEVEL EQUIP.USED
[ ] ELECTRIC COND. PROBE
[X] FLOAT ACTIVATED
[ ] KECK INTERFACE PROBE
[ ] OTHER

NUMBER OF FILTER PAPERS USED ____
QED FILTERS

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	DNR SCAN 1 & 2	8010 8020	40 ml	glass	No	No
_____	Dissolved metals	Cd Cr Cu Fe Pb Ni Zn	1 l	PE	Yes	Yes/2ml
_____	PCBs only	8080	1 l	A-glass	No	No
_____	_____	_____	_____	_____	_____	_____

NOTES Sampler Blank Taken at start of day.

SIGNATURE Craig S Kelly

SIGNATURE/FUNCTION: _____

90303.WP
REVISED 3/90

ABB ENVIRONMENTAL SERVICES, INC.

GROUNDWATER SAMPLE RECORD

SITE: Gm Hmd 4PSI - North Yard JOB NO. 5883-00 DATE: 9/19/90

SAMPLE LOCATION MW-301 LAB NUMBER _____

WATER LEVEL/WELL DATA

MEASURED WELL DEPTH 12 FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ] _____
WELL DIAM.
[X] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH 2.04x.98 3.02 FT
MONITORING:
AMBIENT AIR / PPM
WELL MOUTH / PPM

HISTORICAL WELL DEPTH _____ FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND) _____ FT

PURGE DATA

HEIGHT OF WATER COLUMN 0 FT
[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] _____ GAL/FT (____ IN)
X 3 CASING VOLUMES = 4.5 GALLONS TO BE PURGED
PURGE TIME START _____ END _____
SAMPLE TIME START _____ END 1035

PURGE VOLUME	@ 1 GAL	@ 2.5 GAL	@ 3.5 GAL	@ 5 GAL	@ ___ GAL
TEMP, DEG C	16.0	16.1	15.7	15.8	
pH, UNITS	7.0	7.6	7.5	7.5	
SPECIFIC CONDUCTIVITY, umhos/cm	530	500	435	433	

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID
[X]	[X] PERISTALTIC PUMP Metals	
[ ]	[ ] SUBMERSIBLE PUMP	
[ ]	[X] BAILER (PVC/SS/TEFLON) VOA & PCBs	
[ ]	[ ] PVC/SILICON TUBING	
[ ]	[ ] TEFLON/SILICON TUBING	
[ ]	[ ] AIR LIFT	
[ ]	[ ] WATERRA	
	[ ] IN-LINE FILTER	
	[ ] PRESS/VAC FILTER	
[ ]	[ ] _____	

DECON FLUIDS USED
[ ] ETHYL ALCOHOL
[ ] DEIONIZED WATER
[ ] HNO3/D.I. WATER
[ ] POTABLE WATER
[X] TSP SOLUTION
[ ] NONE
[X] DISTILLED

WATER LEVEL EQUIP.USED
[ ] ELECTRIC COND. PROBE
[X] FLOAT ACTIVATED
[ ] KECK INTERFACE PROBE
[ ] OTHER

NUMBER OF FILTER PAPERS USED 1
QED FILTERS

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
	DNR SCAN 1&2	8010 8020	80 ml	glass	No	No
	Dissolved metals	Cd Cr Cu Fe Pb Ni Zn	1l	PE	Yes	Yes/2ml
	PCBs only	8080	2l	A-glass	No	No

NOTES

Water Slightly Cloudy to clear @ 1.5 gallons

SIGNATURE Craig & Kathy

SIGNATURE/FUNCTION: _____

90303.WP
REVISED 3/90

ABB ENVIRONMENTAL SERVICES, INC.

GROUNDWATER SAMPLE RECORD

SITE: Gm HMD 4PSI - North Yard JOB NO. 5883-00 DATE: 9/19/90

SAMPLE LOCATION MW-302 LAB NUMBER _____

WATER LEVEL/WELL DATA

5.90+.98

MEASURED WELL DEPTH 15 FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ] _____
WELL DIAM.
[X] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH 6.88 FT
MONITORING:
AMBIENT AIR ___/___ PPM
WELL MOUTH ___/___ PPM

HISTORICAL WELL DEPTH _____ FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND)
_____ FT

PURGE DATA

HEIGHT OF WATER COLUMN 9 FT
[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] _____ GAL/FT (____ IN)
X 3 CASING VOLUMES = GALLONS TO BE PURGED
PURGE TIME START _____ END _____
SAMPLE TIME START _____ END 1120

	@ 1.5 GAL	@ 2.5 GAL	@ 3.5 GAL	@ 5 GAL	@ ___ GAL
TEMP, DEG C	17.0	16.9	16.7	16.7	
pH, UNITS	7.4	7.4	7.4	7.4	
SPECIFIC CONDUCTIVITY, umhos/cm	1030	890	940	942	

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID
[X]	[X] PERISTALTIC PUMP Metals	_____
[ ]	[ ] SUBMERSIBLE PUMP	_____
[ ]	[X] BAILER (PVC/SS/TEFLON) VOA & PCBs	_____
[ ]	[ ] PVC/SILICON TUBING	
[ ]	[ ] TEFLON/SILICON TUBING	
[ ]	[ ] AIR LIFT	
[ ]	[ ] WATERRA	_____
	[ ] IN-LINE FILTER	
	[ ] PRESS/VAC FILTER	
[ ]	[ ] _____	_____

DECON FLUIDS USED
[ ] ETHYL ALCOHOL
[ ] DEIONIZED WATER
[ ] HNO3/D.I. WATER
[ ] POTABLE WATER
[X] TSP SOLUTION
[ ] NONE
[X] DISTILLED

WATER LEVEL EQUIP.USED
[ ] ELECTRIC COND. PROBE
[X] FLOAT ACTIVATED
[ ] KECK INTERFACE PROBE
[ ] OTHER

NUMBER OF FILTER PAPERS USED ____
QED FILTERS

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	DNR SCAN 1&2	8010 8020	80 ml	glass	No	No
_____	Dissolved metals	Cd Cr Cu Fe Pb Ni Zn	1l	PE	Yes	Yes/2ml
_____	PCBs only	8080	2l	A-glass	No	No
_____						

NOTES

Water Clear ; Slight Sulfur odor

SIGNATURE Craig S Kelly

SIGNATURE/FUNCTION: _____

GROUNDWATER SAMPLE RECORD

SITE: Gm Hmd 4PSI - North Yard JOB NO. 5883-00 DATE: 9/19/90

SAMPLE LOCATION MW-303 LAB NUMBER _____

WATER LEVEL/WELL DATA

6.16+.98

MEASURED WELL DEPTH 15 FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ] _____
WELL DIAM.
[X] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH 7.14 FT
MONITORING:
AMBIENT AIR 1 PPM
WELL MOUTH _____ PPM

HISTORICAL WELL DEPTH _____ FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND) _____ FT

PURGE DATA

HEIGHT OF WATER COLUMN 8 FT
[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] ____ GAL/FT (____ IN)
X 10+ CASING VOLUMES = 15 GALLONS TO BE PURGED
PURGE TIME START _____ END _____
SAMPLE TIME START _____ END 1215

	@ 3 GAL	@ 6 GAL	@ 9 GAL	@ 12.5 GAL	@ 15 GAL
TEMP, DEG C	17.5	17.4	17.1	17.0	17.0
pH, UNITS	7.3	7.3	7.2	7.2	7.2
SPECIFIC CONDUCTIVITY, umhos/cm	685	650	654	649	650

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID
[X]	[X] PERISTALTIC PUMP (Metals)	_____
[ ]	[ ] SUBMERSIBLE PUMP	_____
[ ]	[X] BAILER (PVC/SS/TEFLON) VOA	_____
[ ]	[ ] PVC/SILICON TUBING + PCBs	
[ ]	[ ] TEFLON/SILICON TUBING	
[ ]	[ ] AIR LIFT	
[ ]	[ ] WATERRA	_____
	[ ] IN-LINE FILTER	
	[ ] PRESS/VAC FILTER	
[ ]	[ ] _____	_____

DECON FLUIDS USED
[ ] ETHYL ALCOHOL
[ ] DEIONIZED WATER
[ ] HNO3/D.I. WATER
[ ] POTABLE WATER
[X] TSP SOLUTION
[ ] NONE
[X] DISTILLED

WATER LEVEL EQUIP.USED
[ ] ELECTRIC COND. PROBE
[X] FLOAT ACTIVATED
[ ] KECK INTERFACE PROBE
[ ] OTHER

NUMBER OF FILTER PAPERS USED ____
QED FILTERS

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	DNR SCAN 1&2	8010 8020	80 ml	glass	No	No
_____	Dissolved metals	Cd Cr Cu Fe Pb Ni Zn	1l	PE	Yes	Yes/2ml
_____	PCBs only	8080	2l	A-glass	No	No
_____	_____	_____	_____	_____	_____	_____

NOTES

⇒ Purged 10 well volumes = 15 gallons
Water Clear ; Slight Sulfur odor

SIGNATURE Craig & Kathy

SIGNATURE/FUNCTION: _____

90303.WP
REVISED 3/90

ABB ENVIRONMENTAL SERVICES, INC.

GROUNDWATER SAMPLE RECORD

SITE: Gm Hmd 4PSI - North Yard JOB NO. 5883-00 DATE: 9/19/90

Dup of MW-303

SAMPLE LOCATION MW-351 LAB NUMBER _____

WATER LEVEL/WELL DATA

MEASURED WELL DEPTH _____FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ] _____
WELL DIAM.
[ ] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH _____FT
MONITORING:
AMBIENT AIR _____PPM
WELL MOUTH _____PPM

HISTORICAL WELL DEPTH _____FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[ ] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND)
_____FT

PURGE DATA

HEIGHT OF WATER COLUMN _____FT
[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] _____ GAL/FT (_____IN)
X _____ CASING VOLUMES = GALLONS TO BE PURGED
PURGE TIME START_____ END_____
SAMPLE TIME START_____ END_____

	@ ____ GAL	@ ____ GAL	@ ____ GAL	@ ____ GAL	@ ____ GAL
PURGE VOLUME					
TEMP, DEG C					
pH, UNITS					
SPECIFIC CONDUCTIVITY, umhos/cm					

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID	DECON FLUIDS USED	WATER LEVEL EQUIP.USED
[X]	[X] PERISTALTIC PUMP Metals	_____	[ ] ETHYL ALCOHOL	[ ] ELECTRIC COND. PROBE
[ ]	[ ] SUBMERSIBLE PUMP	_____	[ ] DEIONIZED WATER	[X] FLOAT ACTIVATED
[ ]	[X] BAILER (PVC/SS/TEFLON) VOA	_____	[ ] HNO3/D.I. WATER	[ ] KECK INTERFACE PROBE
[ ]	[ ] PVC/SILICON TUBING + PCBs		[ ] POTABLE WATER	[ ] OTHER
[ ]	[ ] TEFLON/SILICON TUBING		[X] TSP SOLUTION	
[ ]	[ ] AIR LIFT		[ ] NONE	NUMBER OF FILTER PAPERS USED ____
[ ]	[ ] WATERRA	_____	[X] DISTILLED	QED FILTERS
	[ ] IN-LINE FILTER			
	[ ] PRESS/VAC FILTER			
[ ]	[ ] _____	_____		

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	DNR SCAN 1&2	8010 8020	80 ml	glass	No	No
_____	Dissolved Metals	Cd Cr Cu Fe Pb Ni Zn	1l	PE	Yes	Yes/2ml
_____	PCBs only	8080	1l	A-glass	No	No
_____	_____	_____	_____	_____	_____	_____

NOTES

Duplicate Sample of MW-303

SIGNATURE Craig S Kelly

SIGNATURE/FUNCTION: _____

APPENDIX B

ANALYTICAL METHODS

ANALYTICAL PROGRAM
QUARTERLY GROUNDWATER MONITORING PROGRAM

NORTH YARD
GM HYDRA-MATIC

PARAMETER	METHOD NUMBER
Dissolved Metals:	
Cadmium	1310/6010
Chromium	1310/6010
Iron	3010/7380
Nickel	1310/6010
Lead	3010/7420
Zinc	1310/6010
DNR Scan 1 Compounds:	8020
Bromodichloromethane	
Bromoform	
Carbon tetrachloride	
Chlorobenzene	
Chloroform	
Dibromochloromethane	
Dichlorodifluoromethane	
1,1-Dichloroethane	
1,2-Dichloroethane	
1,1-Dichloroethene	
cis-1,2-Dichloroethene	
trans-1,2-Dichloroethene	
1,3-Dichloropropene	
1,1,2,2-Tetrachloroethane	
Tetrachloroethene	
1,1,1-Trichloroethane	
1,1,2-Trichloroethane	
Trichloroethene	
DNR Scan 2 Compounds:	8020
Benzene	
Ethylbenzene	
Styrene	
Toluene	
Total Xylenes	
HSL Pesticides and PCBs:	8080
Aldrin	
Alpha-BHC	
Beta-BHC	
Delta-BHC	
Gamma-BHC (Lindane)	
Chlordane	
4-4'-DDD	
4-4'-DDE	
4-4'-DDT	
Dieldrin	
Alpha-Endosulfan	
Beta-Endosulfan	
Endosulfan Sulfate	
Endrin	
Endrin Ketone	
Heptachlor	
Heptachlor Epoxide	
Methoxychlor	
Toxaphene	
PCB-1016	
PCB-1221	
PCB-1232	
PCB-1242	
PCB-1248	
PCB-1254	
PCB-1260	

APPENDIX C

LABORATORY ANALYTICAL REPORTS

ENCOTEC
3985 RESEARCH PARK DR.
ANN ARBOR, MI 48108
(313) 761-1389

DATA SUMMARY SHEET

PROJECT: ABB Environmental
SAMPLE TYPE: Filtrate
PROJECT NO.: 40650
REPORT DATE: October , 1990

SAMPLE NAME		MW 350	MW 301	MW 302	MW 303	MW 351
SAMPLE DATE		9-19-90	9-19-90	9-19-90	9-19-90	9-19-90
PARAMETER	UNITS	ENCOTEC SAMPLE I.D. NUMBER				
		59837	59838	59839	59840	59841
Cadmium	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Copper	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Iron	mg/L	0.30	5.1	4.7	11	10
Lead	mg/L	0.02	0.02	<0.02	< 0.02	<0.02
Nickel	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02

ENCOTEC
3985 RESEARCH PARK DR.
ANN ARBOR, MI 48108
(313) 761-1389

DATA SUMMARY SHEET

PROJECT: ABB Environmental
PROJECT NO.: 40650
SAMPLE TYPE: Water
REPORT DATE: November, 1990

SAMPLE NAME		MW-350	MW-301	MW-302	MW-303	MW-351
SAMPLE DATE		9-19-90	9-19-90	9-19-90	9-19-90	9-19-90
PARAMETER	UNITS	ENCOTEC SAMPLE I.D. NUMBER				
		59832	59833	59834	59835	59836
Aroclor 1016	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
					001	

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: October 24, 1990

Sample: MW 350
ENCOTEC Number: 59832
Sample Date: 9-19-90
Date Received: 9-19-90
Date Extracted: N/A
Date Analyzed: 10-01-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	0.002	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: October 24, 1990

Sample: MW 301
ENCOTEC Number: 59833
Sample Date: 9-19-90
Date Received: 9-19-90
Date Extracted: N/A
Date Analyzed: 10-01-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: October 24, 1990

Sample: MW 302
ENCOTEC Number: 59834
Sample Date: 9-19-90
Date Received: 9-19-90
Date Extracted: N/A
Date Analyzed: 10-01-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: October 24, 1990

Sample: MW 303
ENCOTEC Number: 59835
Sample Date: 9-19-90
Date Received: 9-19-90
Date Extracted: N/A
Date Analyzed: 10-01-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.005
Bromoform	75-25-2	mg/L	U	0.005
Bromomethane	74-83-9	mg/L	U	0.005
Carbon Tetrachloride	56-23-5	mg/L	U	0.005
Chlorobenzene	108-90-7	mg/L	U	0.005
Chloroethane	75-00-3	mg/L	U	0.005
Chloroform	67-66-3	mg/L	U	0.005
Dibromochloromethane	124-48-1	mg/L	U	0.005
1,1-Dichloroethane	75-34-3	mg/L	U	0.005
1,2-Dichloroethane	107-06-2	mg/L	U	0.005
1,1-Dichloroethene	75-35-4	mg/L	U	0.005
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.005
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.005
1,2-Dichloropropane	78-87-5	mg/L	U	0.005
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.005
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.005
Methylene Chloride	75-09-2	mg/L	U	0.005
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.005
Tetrachloroethene	127-18-4	mg/L	U	0.005
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.005
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.005
Trichloroethene	79-01-6	mg/L	U	0.005
Trichlorofluoromethane	75-69-4	mg/L	U	0.005
Vinyl Chloride	75-01-4	mg/L	U	0.005

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

Detection Limits Raised Due to Sample Foaming.

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: October 24, 1990

Sample: MW 351
ENCOTEC Number: 59836
Sample Date: 9-19-90
Date Received: 9-19-90
Date Extracted: N/A
Date Analyzed: 10-01-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.005
Bromoform	75-25-2	mg/L	U	0.005
Bromomethane	74-83-9	mg/L	U	0.005
Carbon Tetrachloride	56-23-5	mg/L	U	0.005
Chlorobenzene	108-90-7	mg/L	U	0.005
Chloroethane	75-00-3	mg/L	U	0.005
Chloroform	67-66-3	mg/L	U	0.005
Dibromochloromethane	124-48-1	mg/L	U	0.005
1,1-Dichloroethane	75-34-3	mg/L	U	0.005
1,2-Dichloroethane	107-06-2	mg/L	U	0.005
1,1-Dichloroethene	75-35-4	mg/L	U	0.005
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.005
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.005
1,2-Dichloropropane	78-87-5	mg/L	U	0.005
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.005
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.005
Methylene Chloride	75-09-2	mg/L	U	0.005
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.005
Tetrachloroethene	127-18-4	mg/L	U	0.005
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.005
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.005
Trichloroethene	79-01-6	mg/L	U	0.005
Trichlorofluoromethane	75-69-4	mg/L	U	0.005
Vinyl Chloride	75-01-4	mg/L	U	0.005

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

Detection Limits Raised Due to Sample Foaming.

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: October 24, 1990

Sample: Method Blank
ENCOTEC Number: N/A
Sample Date: N/A
Date Received: N/A
Date Extracted: N/A
Date Analyzed: 10-01-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: October 24, 1990

Sample: MW 350
ENCOTEC Number: 58932
Sample Date: 9-19-90
Date Received: 9-19-90
Date Extracted: N/A
Date Analyzed: 10-1-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: October 24, 1990

Sample: MW 301
ENCOTEC Number: 58933
Sample Date: 9-19-90
Date Received: 9-19-90
Date Extracted: N/A
Date Analyzed: 10-1-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: October 24, 1990

Sample: MW 302
ENCOTEC Number: 58934
Sample Date: 9-19-90
Date Received: 9-19-90
Date Extracted: N/A
Date Analyzed: 10-1-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: October 24, 1990

Sample: Method Blank
ENCOTEC Number: N/A
Sample Date: N/A
Date Received: N/A
Date Extracted: N/A
Date Analyzed: 10-1-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: October 24, 1990

Sample: MW 303
ENCOTEC Number: 59835
Sample Date: 9-19-90
Date Received: 9-19-90
Date Extracted: N/A
Date Analyzed: 10-1-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.005
Ethylbenzene	100-41-4	mg/L	U	0.005
Toluene	108-88-3	mg/L	U	0.005
1,2-Xylene	95-47-6	mg/L	U	0.005
1,3-Xylene*	108-38-3	mg/L	U	0.01
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

Detection Limits Raised Due to Sample Foaming.

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: October 24, 1990

Sample: MW 351
ENCOTEC Number: 59836
Sample Date: 9-19-90
Date Received: 9-19-90
Date Extracted: N/A
Date Analyzed: 10-1-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.005
Ethylbenzene	100-41-4	mg/L	U	0.005
Toluene	108-88-3	mg/L	U	0.005
1,2-Xylene	95-47-6	mg/L	U	0.005
1,3-Xylene*	108-38-3	mg/L	U	0.01
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

Detection Limits Raised Due to Sample Foaming.

C-E ENVIRONMENTAL, INC.

GROUNDWATER MONITORING REPORT
DECEMBER 1990

NORTH YARD

Prepared For:

GENERAL MOTORS CORPORATION
HYDRA-MATIC DIVISION
GM Hydra-Matic, Ypsilanti, Michigan

JANUARY 1991

JOB NO. 5883-00

COMBUSTION ENGINEERING

GROUNDWATER MONITORING REPORT
DECEMBER 1990

NORTH YARD

Prepared For:

GENERAL MOTORS CORPORATION
HYDRA-MATIC DIVISION
Ypsilanti, Michigan

Prepared By:

C-E ENVIRONMENTAL INC.
Farmington Hills, Michigan

JANUARY 1991

PROJECT NO. 5883-00

TABLE OF CONTENTS

SECTION NO.	TITLE	PAGE NO.
1.0	INTRODUCTION	1
2.0	SCHEDULE	1
3.0	PERSONNEL	1
4.0	SAMPLING LOCATIONS	1
5.0	FIELD PROCEDURES	1
6.0	SAMPLE HANDLING	5
7.0	QUALITY CONTROL SAMPLES	5
8.0	RESULTS	5
	8.1 Groundwater Flow	5
	8.2 Quality Control Samples	5
	8.3 Groundwater Quality	5

APPENDIX A - GROUNDWATER SAMPLE DATA RECORDS
APPENDIX B - ANALYTICAL METHODS
APPENDIX C - LABORATORY ANALYTICAL REPORTS

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE NO.
1	LOCATION OF THE GM HYDRA-MATIC WILLOW RUN PLANT	2
2	INVESTIGATION LOCATION MAP	3
3	MONITORING WELL LOCATIONS	4
4	GROUNDWATER LEVEL MEASUREMENTS	6

LIST OF TABLES

TABLE NO.	TITLE	PAGE NO.
1	SUMMARY OF WATER LEVELS AND GROUNDWATER FLOW DIRECTIONS	7
2	ORGANIC AND INORGANIC CHEMICALS IN GROUNDWATER AT THE NORTH YARD	8

1.0 INTRODUCTION

The General Motors (GM) Hydra-matic Willow Run Plant is located in Ypsilanti, Michigan, within Washtenaw County (see Figure 1). The North Yard, previously used to store production machinery and equipment, is located in the northeast corner of Hydra-matic's property (see Figure 2). The equipment was stored directly on the ground; as a result, residual metal-working fluids and various oils leaked from the equipment into the soil.

GM conducted a subsurface soil study in April 1988 to determine the extent of contamination in the North Yard. The results indicated that the fluids and oils which had leaked from the machinery were confined to the upper 24 inches of soil. This material was removed from the site in August 1988.

As part of the North Yard remediation program, Hydra-matic chose to implement a quarterly groundwater monitoring program for a two year period beginning in 1989[1]. In February 1989, C-E Environmental, Inc. installed three groundwater monitoring wells in the North Yard. Groundwater samples were collected from these wells in March 1989, June 1989, September 1989, December 1989, March 1990, July 1990, September 1990, and December 1990. All samples were analyzed for selected dissolved metals, purgeable halocarbons (DNR Scan 1), and purgeable aromatic hydrocarbons (DNR Scan 2). In addition, samples collected in December 1989, March 1990, July 1990, September 1990, and December 1990 were analyzed for polychlorinated biphenyls (PCBs). The results of the first seven sampling events were reported previously. This report documents the sampling event which occurred in December 1990.

2.0 SCHEDULE

The eighth quarterly groundwater sampling event was conducted on December 21, 1990.

3.0 PERSONNEL

Groundwater samples were collected by C. Kielty and M. DeLong of C-E Environmental.

4.0 SAMPLING LOCATIONS

Figure 3 shows the locations of the three monitoring wells in the North Yard.

5.0 FIELD PROCEDURES

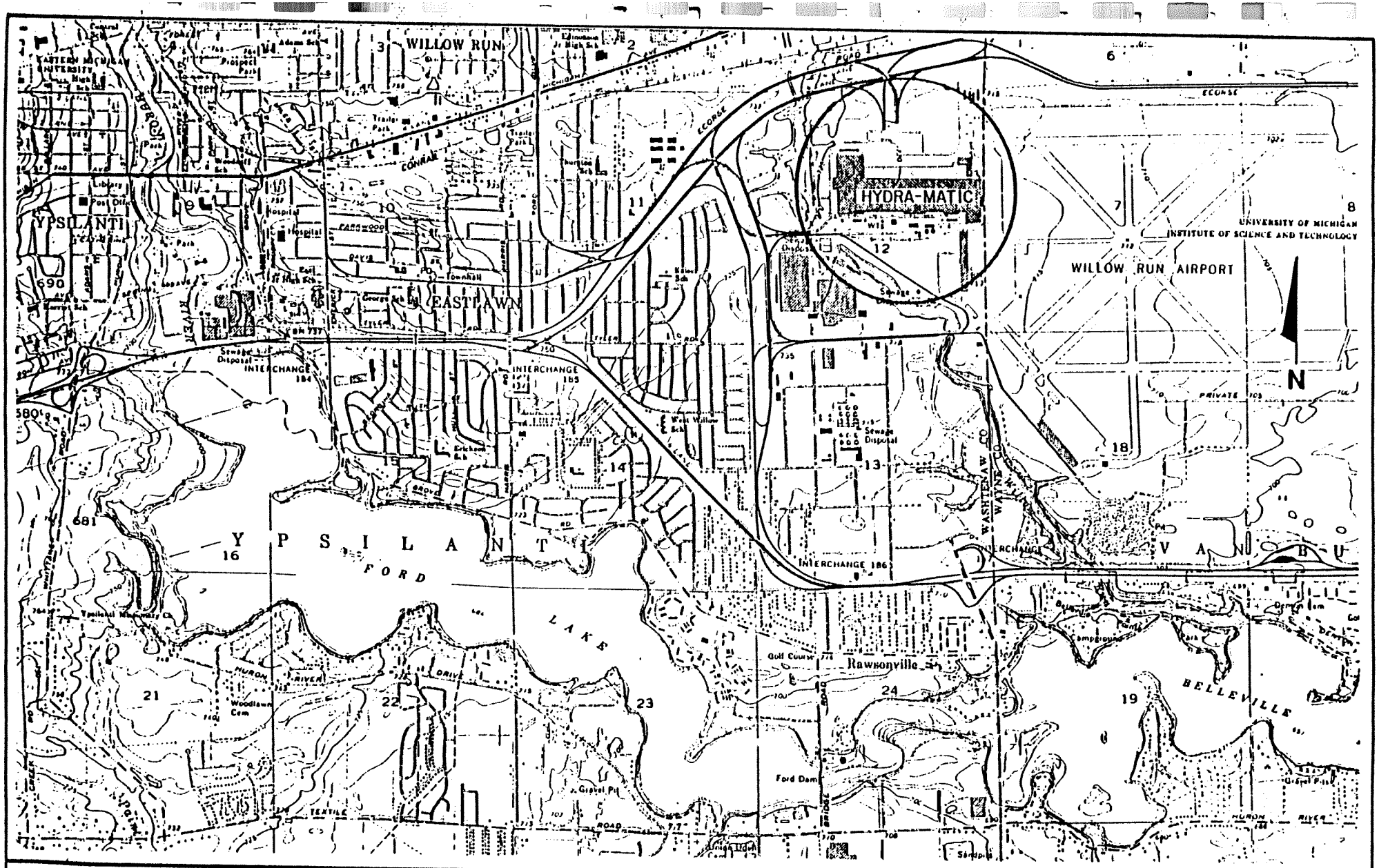
Prior to sampling, the water level and depth of each well was measured from the top of the well casing. The volume of water standing inside the well casing was calculated, and three well volumes were evacuated from the well using a peristaltic pump and disposable tygon tubing. New tygon tubing was used for each well.

Groundwater temperature, pH, and specific conductance were recorded three times during evacuation. Stabilization of these parameters indicated that stagnant water had been removed from the well casing so that a representative groundwater sample could be taken. These parameters were recorded on the Groundwater Sample Records contained in Appendix A.

After evacuating each well, groundwater samples to be analyzed for organic parameters were collected with a Teflon bailer. Samples to be analyzed for dissolved metals were filtered directly through a 0.45-micron pore size, in-line, disposable filter into laboratory prepared bottles that were pre-preserved with nitric acid. The

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[1]For additional information, see: "Hydrogeologic Investigation at the North Yard," July 1989. Prepared for General Motors Corporation, Hydra-matic Division, by C-E Environmental, Inc.



TAKEN FROM U.S.G.S. YPSILANTI EAST, MICH. 7.5' QUADRANGLE MAP.

FIGURE 1
LOCATION OF THE GM HYDRA-MATIC PLANT YPSILANTI, MICHIGAN

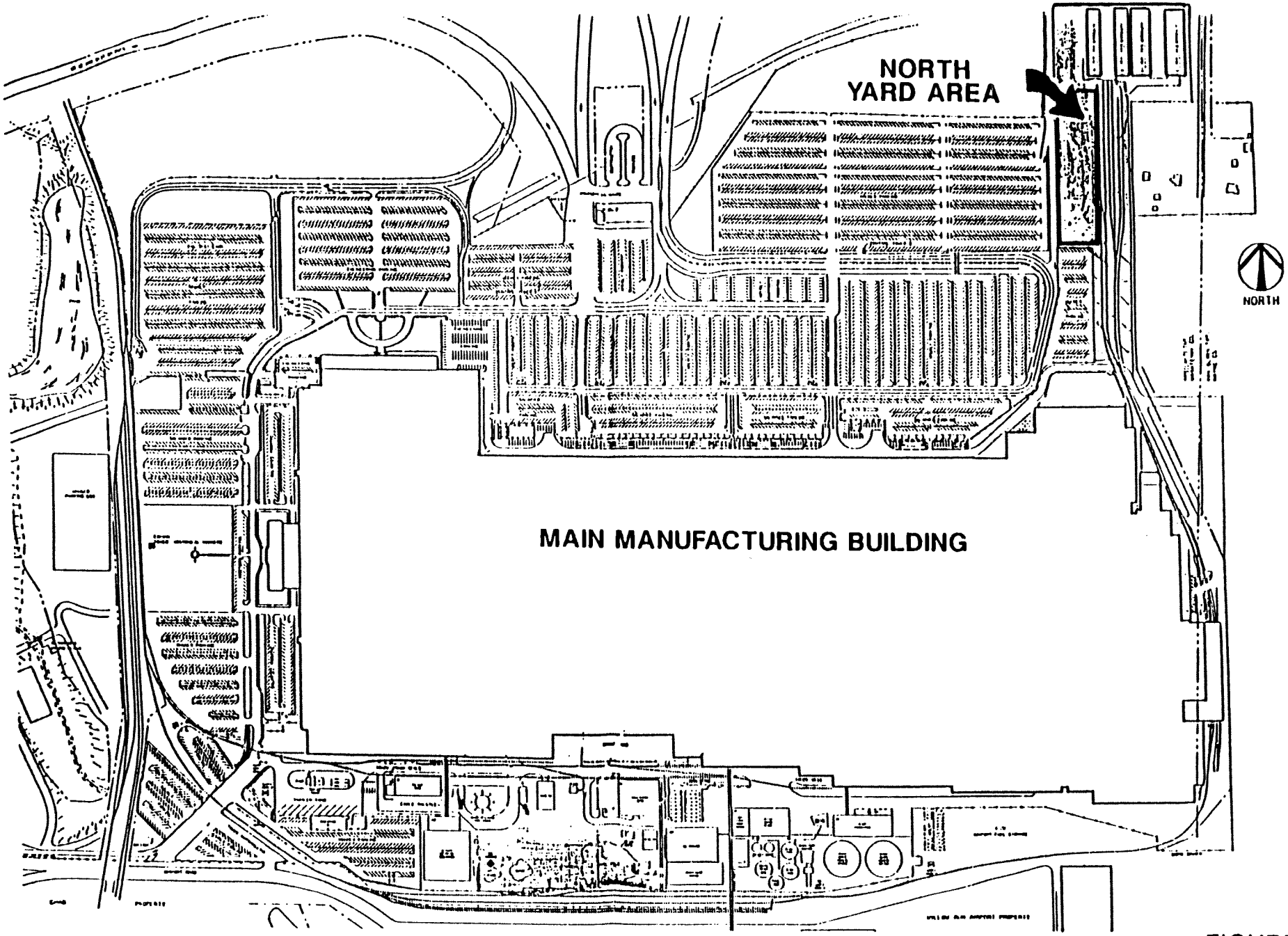
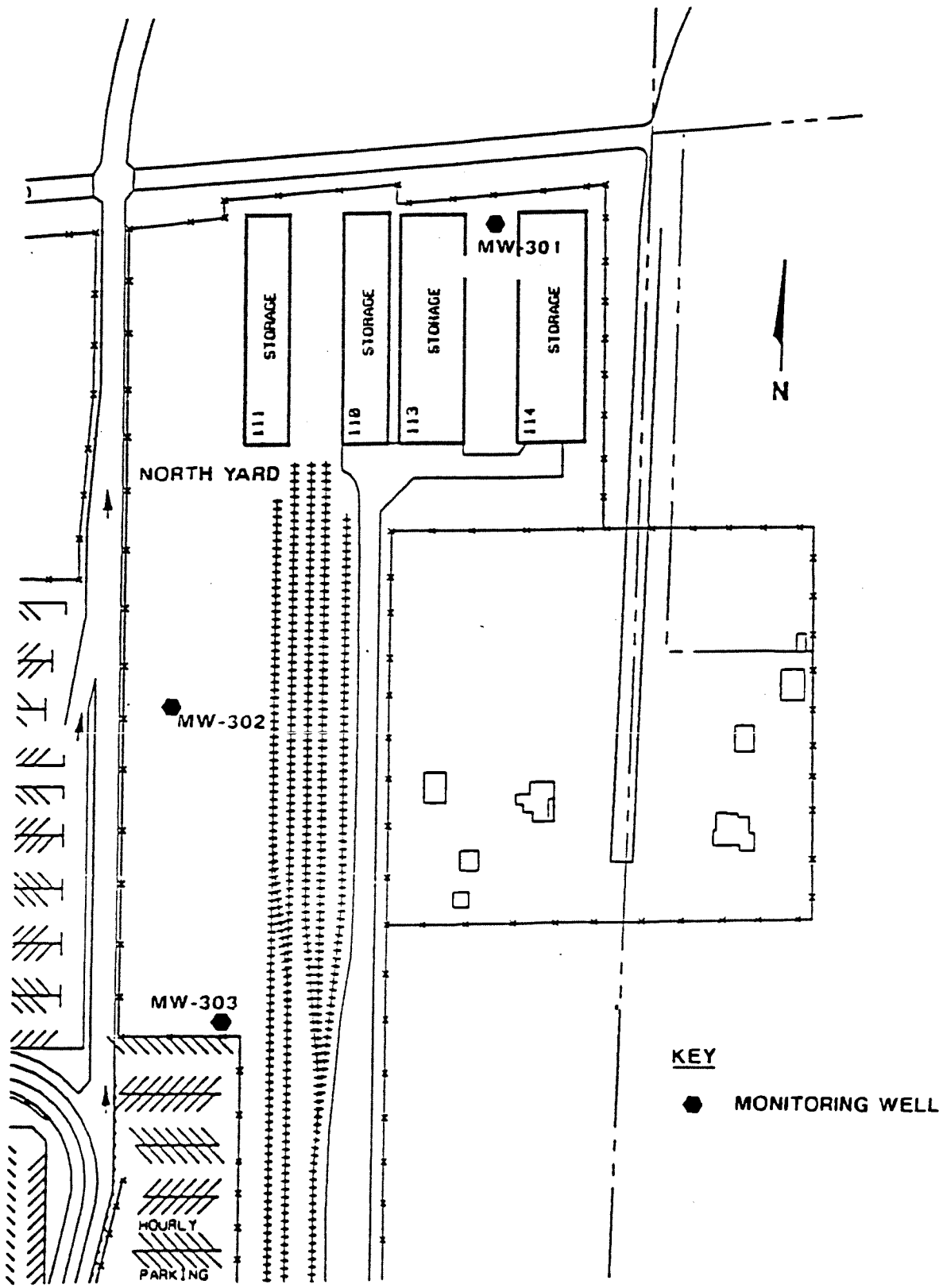


FIGURE 2
INVESTIGATION LOCATION MAP
GM HYDRA-MATIC PLANT
YPSILANTI, MICHIGAN

C-E ENVIRONMENTAL, INC.



SCALE

0 100 200 400 FEET

FIGURE 3
MONITORING WELL LOCATIONS
NORTH YARD
GM HYDRA-MATIC PLANT
YPSILANTI, MICHIGAN

GM DRAWING # HWR-NY-1

C-E Environmental, Inc.

filter was replaced after each sample. After processing and labeling, all samples were kept on ice in coolers until delivered to the laboratory.

The bailer was decontaminated with a solution of trisodium phosphate and distilled water, followed by a final distilled water rinse.

6.0 SAMPLE HANDLING

After processing and labeling, a chain-of-custody record and an analytical request form were completed. The samples were then transported to Environmental Control Technology Corporation (ENCOTEC), of Ann Arbor, Michigan, for analysis of selected dissolved metals (cadmium, chromium, copper, iron, lead, nickel, and zinc), purgeable halocarbons (DNR Scan 1), purgeable aromatic hydrocarbons (DNR Scan 2), and PCBs. The analytical methods used and lists of organic analytes are presented in Appendix B.

7.0 QUALITY CONTROL SAMPLES

For quality control purposes, one blind duplicate sample (MW-351, a duplicate of MW-302) and one sampler blank (MW-350, taken prior to sampling) were collected during this sampling effort. A blind duplicate sample is a duplicate sample labeled in a manner such that the laboratory is unaware that it is a duplicate. The purpose of a duplicate sample is to check the homogeneity of the sample in addition to the precision of the laboratory. A sampler blank is a sample of distilled water that is handled in the same manner as a groundwater sample -it is poured into the sampling equipment, filtered, preserved, placed into laboratory-prepared bottles, etc. The purpose of a sampler blank is to check the effectiveness of the decontamination procedures.

Each quality control sample was analyzed for the same dissolved metals and organic chemicals as the groundwater samples.

8.0 RESULTS

8.1 Groundwater Flow

As shown on Figure 4, groundwater in the North Yard appeared to be moving toward the south-southeast in December 1990. Table 1 summarizes water level measurements and groundwater flow directions observed in the North Yard during the eight sampling events conducted to date.

8.2 Quality Control Samples

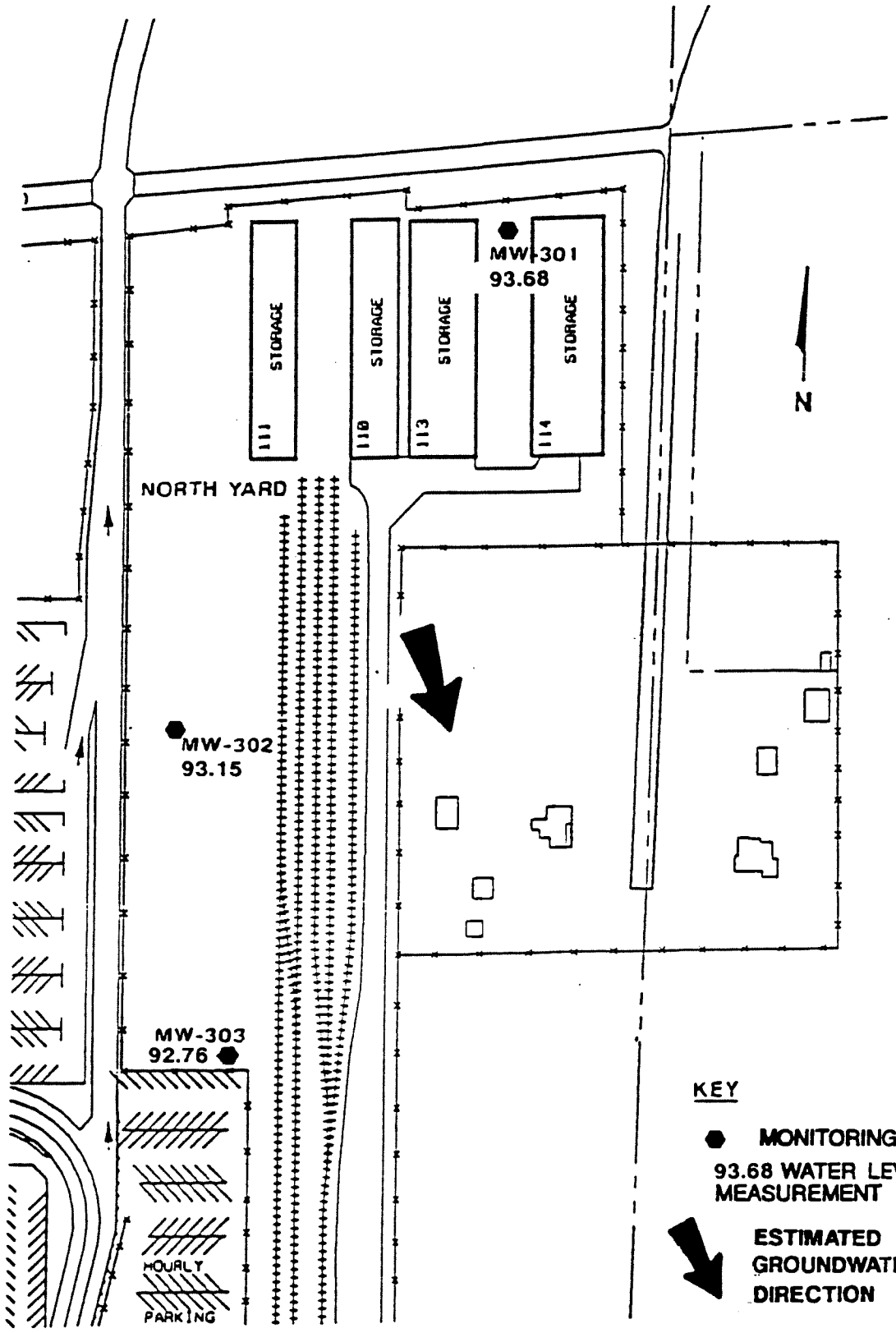
Table 2 presents the analytical data for December 1990, as well as the data collected during all previous sampling events. Laboratory analytical reports for December 1990 are contained in Appendix C.

The sampler blank (MW-350) contained 0.002 milligrams per liter (mg/L) of chloroform, a common contaminant found in jugs of distilled water. Sample MW-302 showed excellent correlation with its duplicate sample MW-351, indicating good quality control.

8.3 Groundwater Quality

As shown in Table 2, dissolved iron was detected in all three wells at concentrations ranging from 0.03 to 12 mg/L. These concentrations are similar to those detected during previous sampling events, and are not uncommon for shallow groundwater in Michigan.

No site-related organic chemicals were found in groundwater samples collected from the North Yard in December, 1990.



SCALE

0 100 200 400 FEET

FIGURE 4
GROUNDWATER LEVEL MEASUREMENTS
DECEMBER 1990
NORTH YARD
GM HYDRA-MATIC PLANT
YPSILANTI, MICHIGAN

GM DRAWING # HWR-NY-1

C-E Environmental, Inc.

TABLE 1
Summary of Water Levels and Groundwater Flow Directions
Observed in the North Yard During 1989 and 1990

MONTH/YEAR	MONITORING WELL			GENERAL GROUNDWATER FLOW DIRECTION
	MW-301	MW-302	MW-303	
3/89	93.97	92.90	92.41	S
6/89	93.03	93.20	92.75	SE
9/89	92.45	92.89	92.63	ESE
12/89	92.09	92.33	92.11	ESE
3/90	93.50	93.15	92.80	SSE
7/90	91.94	92.70	92.48	SE
9/90	94.77	93.25	92.88	SW
12/90	93.68	93.15	92.76	SSE

Notes:

1. All elevations in feet. Referenced to temporary benchmark designated eleveation 100.00.

TABLE 2

ORGANIC AND INORGANIC CHEMICALS IN GROUNDWATER AT THE NORTH YARD
GM HYDRA-MATIC, YPSILANTI, MICHIGAN

Date	Well No.	Cd	Cr	Cu	Fe	Pb	Ni	Zn	1,1,1-TCA	BDCM	CHLOROFORM	PCB-1248
December 1990	MW-301	U	U	U	0.03	U	U	U	U	U	U	U
	MW-302	U	U	U	4.3	U	U	U	U	U	U	U
	MW-351 (Dup of MW-302)	U	U	U	12	U	U	U	U	U	U	U
	MW-303	U	U	U	3.7	U	U	U	U	U	U	U
	MW-350 (Sampler Blank)	U	U	U	U	U	U	U	U	U	0.002	U
September 1990	MW-301	U	U	U	5.1	0.02	U	U	U	U	U	U
	MW-302	U	U	U	4.7	U	U	U	U	U	U	U
	MW-303	U	U	U	4.7	U	U	U	U	U	U	U
	MW-351 (Dup of MW-303)	U	U	U	10	U	U	U	U	U	U	U
	MW-350 (Sampler Blank)	U	U	U	0.30	0.02	U	U	U	U	0.002	U
July 1990	MW-301	U	U	U	0.31	U	U	U	U	U	U	U
	MW-302	U	U	U	5.3	U	U	0.11	U	U	U	U
	MW-303	U	U	U	11	U	U	U	U	U	U	U
	MW-351 (Dup of MW-303)	U	U	U	10	U	U	U	U	U	U	U
	MW-350 (Sampler Blank)	U	U	0.14	U	U	U	0.15	U	U	U	U
March 1990	MW-301	U	U	NA	U	U	U	U	U	U	U	U
	MW-302	U	U	NA	5.1	U	U	U	U	U	U	U
	MW-360 (Dup of MW-302)	U	U	NA	4.9	U	U	U	U	U	U	U
	MW-303	U	U	NA	7.5	U	U	U	U	U	U	0.00077
	MW-350 (Sampler Blank)	U	U	NA	U	U	U	0.03	U	U	U	U
December 1989	MW-301	U	U	U	U	U	U	U	U	U	U	U
	MW-302	U	U	U	8.9	U	U	U	U	U	U	U
	MW-303	U	U	U	7.2	U	U	U	U	U	U	0.0031
	MW-360 (Dup of MW-303)	U	U	U	7.3	U	U	U	U	U	U	0.0060
	MW-350 (Sampler Blank)	U	U	0.03	U	U	U	0.09	U	U	U	U
September 1989	MW-301	U	U	U	0.16	U	U	0.03	U	U	U	NA
	MW-302	U	U	0.02	5.9	U	U	0.03	U	U	U	NA
	MW-360 (Dup of MW-302)	U	U	0.02	5.9	U	U	0.02	U	U	U	NA
	MW-303	U	U	U	7.9	U	U	0.03	U	U	U	NA
	MW-350 (Sampler Blank)	U	U	0.51	0.06	0.03	U	0.32	U	U	0.003	NA
June 1989	MW-301	U	U	U	0.03	U	U	U	U	U	U	NA
	MW-351 (Dup of MW-301)	U	U	0.04	0.04	U	U	U	U	U	U	NA
	MW-302	U	U	U	2.0	U	U	U	U	U	U	NA
	MW-303	U	U	U	2.0	U	U	U	0.002	U	U	NA
	MW-350 (Sampler Blank)	U	U	0.02	U	U	U	U	U	0.001	0.005	NA
March 1989	MW-301	NA	U	U	U	U	U	U	U	U	U	NA
	MW-351 (Dup of MW-301)	NA	U	U	U	U	U	U	U	U	U	NA
	MW-302	NA	U	U	2.8	U	U	U	U	U	U	NA
	MW-303	NA	U	U	8.1	U	U	U	U	U	U	NA
	MW-350 (Sampler Blank)	NA	U	U	U	U	U	U	U	U	U	NA

NOTES:

1. All concentrations in mg/L.
2. U - Compound was analyzed but not detected.
3. NA - Not analyzed.
4. BDCM - Bromodichloromethane
5. 1,1,1-TCA - 1,1,1-Trichloroethane
6. Each sample was analyzed for DNR Scans 1 and 2 and HSL PCBs (EPA method 8080) unless otherwise noted; only the compounds detected are shown on this table.
7. All metals are dissolved fraction.

APPENDIX A

GROUNDWATER SAMPLE RECORDS

GROUNDWATER SAMPLE RECORD

SITE: Gm Hmo YPSI - North Yard JOB NO. 5883-00 DATE: 12/21/90

Sampler Blank

SAMPLE LOCATION MW-350 LAB NUMBER _____

WATER LEVEL/WELL DATA

MEASURED WELL DEPTH ~~_____~~ FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL DIAM.
[ ] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH _____ FT
MONITORING:
AMBIENT AIR _____ PPM
WELL MOUTH _____ PPM

HISTORICAL WELL DEPTH _____ FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[ ] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND)
_____ FT

PURGE DATA

HEIGHT OF WATER COLUMN _____ FT
[ ] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] _____ GAL/FT (____ IN)
X ___ CASING VOLUMES = GALLONS TO BE PURGED
PURGE TIME START _____ END _____
SAMPLE TIME START _____ END 0915

	@ ___ GAL	@ ___ GAL	@ ___ GAL	@ ___ GAL	@ ___ GAL
PURGE VOLUME					
TEMP, DEG C					
pH, UNITS					
SPECIFIC CONDUCTIVITY, umhos/cm					

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID
[ ]	[X] PERISTALTIC PUMP	_____
[ ]	[ ] SUBMERSIBLE PUMP	_____
[ ]	[X] BAILER (PVC/SS/TEFLON)	_____
[ ]	[ ] PVC/SILICON TUBING	
[ ]	[ ] TEFLON/SILICON TUBING	
[ ]	[ ] AIR LIFT	
[ ]	[ ] WATERRA	_____
	[ ] IN-LINE FILTER	
	[ ] PRESS/VAC FILTER	
[ ]	[ ] _____	_____

DECON FLUIDS USED
[ ] ETHYL ALCOHOL
[ ] DEIONIZED WATER
[ ] HNO3/D.I. WATER
[ ] POTABLE WATER
[ ] TSP SOLUTION
[ ] NONE
[ ] _____

WATER LEVEL EQUIP.USED
[ ] ELECTRIC COND. PROBE
[ ] FLOAT ACTIVATED
[ ] KECK INTERFACE PROBE
[ ] OTHER

NUMBER OF FILTER PAPERS USED ____

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	VOA	Scan Hz	80ml	_____	No	No
_____	Diss. Metals	6010	1l	_____	Yes	HNO_3/2ml
_____	PCBs	8080	2l	_____	No	No
_____	_____	_____	_____	_____	_____	_____

NOTES Blank taken through peristaltic/filter - metals, and teflon bailer - VOA, PCBs @ start of day

SIGNATURE Lisa S Kelly/Michael DeLong

SIGNATURE/FUNCTION: _____

90303.WP
REVISED 3/90

GROUNDWATER SAMPLE RECORD

SITE: Gm HMD YBI - North Yard JOB NO. 5883-CO DATE: 12/21/90

SAMPLE LOCATION MW-301 LAB NUMBER

WATER LEVEL/WELL DATA

3.13 + .98

MEASURED WELL DEPTH 12 FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ]
WELL DIAM.
[X] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ]
WATER DEPTH 4.11 FT
MONITORING:
AMBIENT AIR PPM
WELL MOUTH PPM

HISTORICAL WELL DEPTH FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ]
WELL MATERIAL:
[X] PVC
[ ] SS
[ ]
PROTECTIVE CASING STICK-UP (FROM GROUND) FT

PURGE DATA

HEIGHT OF WATER COLUMN 8 FT
[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] GAL/FT (IN)
X 3 CASING VOLUMES = 4 GALLONS TO BE PURGED

PURGE TIME START END
SAMPLE TIME START END 0945

	a 1 GAL	a 2 GAL	a 3 GAL	a 4 GAL	a GAL
PURGE VOLUME					
TEMP, DEG C	9.0	8.3	7.9	7.9	
pH, UNITS	7.1	7.1	7.1	7.1	
SPECIFIC CONDUCTIVITY, umhos/cm	850	690	670	671	

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID	DECON FLUIDS USED	WATER LEVEL EQUIP.USED
[X]	[X] PERISTALTIC PUMP		[ ] ETHYL ALCOHOL	[ ] ELECTRIC COND. PROBE
[ ]	[ ] SUBMERSIBLE PUMP		[ ] DEIONIZED WATER	[X] FLOAT ACTIVATED
[ ]	[X] BAILER (PVC/SS/TEFLON)		[ ] HNO3/D.I. WATER	[ ] KECK INTERFACE PROBE
[ ]	[ ] PVC/SILICON TUBING		[ ] POTABLE WATER	[ ] OTHER
[ ]	[ ] TEFLON/SILICON TUBING		[X] TSP SOLUTION	
[ ]	[ ] AIR LIFT		[ ] NONE	NUMBER OF IN-LINE FILTERS/PAPERS USED 1
[ ]	[ ] WATERRA		[ ]	
	[ ] IN-LINE FILTER			
	[ ] PRESS/VAC FILTER			
[ ]	[ ]			

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
	VOA		80ml		No	No
	DISSOLVED METALS		1l		yes	HNO3/2ml
	PCB's		80 oz		No	No

NOTES

Water Clear @ 2 gallons
Sample slightly cloudy

SIGNATURE Craig S. Kielty / Michael J. DeLong

SIGNATURE/FUNCTION:

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REVISED 3/90

Page __ of __

GROUNDWATER SAMPLE RECORD

SITE: Sm #MO WKS1 - North Yard JOB NO. 5883-00 DATE: 12/21/90

SAMPLE LOCATION MW-302 LAB NUMBER _____

WATER LEVEL/WELL DATA

6.08 + .98

MEASURED WELL DEPTH 15 FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ] _____
WELL DIAM.
[X] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH 6.98 FT
MONITORING:
AMBIENT AIR _____ PPM
WELL MOUTH _____ PPM

HISTORICAL WELL DEPTH _____ FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND)
_____ FT

PURGE DATA

HEIGHT OF WATER COLUMN 8 FT
[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] ____ GAL/FT (____ IN)
X 3 CASING VOLUMES = 4 GALLONS TO BE PURGED
PURGE TIME START _____ END _____
SAMPLE TIME START 1500 END 1500

	a 1 GAL	2 GAL	a 3 GAL	a 4 GAL	a ___ GAL
TEMP, DEG C	8.2	7.9	7.8	7.8	
pH, UNITS	7.1	7.2	7.2	7.2	
SPECIFIC CONDUCTIVITY, umhos/cm	1650	1525	1625	1625	

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID
[X]	[X] PERISTALTIC PUMP	_____
[ ]	[ ] SUBMERSIBLE PUMP	_____
[ ]	[X] BAILER (PVC/SS/TEFLON)	_____
[ ]	[ ] PVC/SILICON TUBING	
[ ]	[X] TEFLON/SILICON TUBING	
[ ]	[ ] AIR LIFT	
[ ]	[ ] WATERRA	_____
	[ ] IN-LINE FILTER	
	[ ] PRESS/VAC FILTER	
[ ]	[ ] _____	_____

DECON FLUIDS USED
[ ] ETHYL ALCOHOL
[ ] DEIONIZED WATER
[ ] HNO3/D.I. WATER
[ ] POTABLE WATER
[X] TSP SOLUTION
[ ] NONE
[ ] _____

WATER LEVEL EQUIP.USED
[ ] ELECTRIC COND. PROBE
[X] FLOAT ACTIVATED
[ ] KECK INTERFACE PROBE
[ ] OTHER

NUMBER OF FILTER PAPERS USED ____

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	VOA	Scan 8Z	80ml	_____	No	No
_____	D. Metals	6010	1l	_____	Yes	HNO3
_____	PCBs	8080	2l	_____	No	No
_____	_____	_____	_____	_____	_____	_____

NOTES

Water Clear;
PCB + VOA sample
Slightly Cloudy

SIGNATURE Craig S. Kelly Michael J. DeLong

SIGNATURE/FUNCTION: _____

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Page ___ of ___

GROUNDWATER SAMPLE RECORD

SITE: Sm And YBI - North Yard JOB NO. 5883-00 DATE: 12/21/90

SAMPLE LOCATION MW-303 LAB NUMBER _____

WATER LEVEL/WELL DATA

6.28.18

MEASURED WELL DEPTH 15 FT
[ ] TOP OF WELL
[X] TOP OF CASING
[ ] _____
WELL DIAM.
[X] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____
WATER DEPTH 7.26 FT
MONITORING:
AMBIENT AIR _____ PPM
WELL MOUTH _____ PPM

HISTORICAL WELL DEPTH _____ FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____
WELL MATERIAL:
[X] PVC
[ ] SS
[ ] _____
PROTECTIVE CASING STICK-UP (FROM GROUND) _____ FT

PURGE DATA

HEIGHT OF WATER COLUMN 8 FT
[X] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] ____ GAL/FT (____ IN)
X 3 CASING VOLUMES = 4 GALLONS TO BE PURGED
PURGE TIME START _____ END _____
SAMPLE TIME START _____ END 1015

	a 1 GAL	a 2 GAL	a 3 GAL	a 4 GAL	a ___ GAL
PURGE VOLUME					
TEMP, DEG C	9.0	8.5	8.2	8.2	
pH, UNITS	6.8	6.9	6.9	6.9	
SPECIFIC CONDUCTIVITY, umhos/cm	1390	1375	1351	1352	

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID
[X]	[X] PERISTALTIC PUMP	_____
[ ]	[ ] SUBMERSIBLE PUMP	_____
[ ]	[X] BAILER (PVC/SS/TEFLON)	_____
[ ]	[ ] PVC/SILICON TUBING	
[ ]	[ ] TEFLON/SILICON TUBING	
[ ]	[ ] AIR LIFT	
[ ]	[ ] WATERRA	_____
	[ ] IN-LINE FILTER	
	[ ] PRESS/VAC FILTER	
[ ]	[ ] _____	_____

DECON FLUIDS USED
[ ] ETHYL ALCOHOL
[ ] DEIONIZED WATER
[ ] HNO3/D.I. WATER
[ ] POTABLE WATER
[X] TSP SOLUTION
[ ] NONE
[ ] _____

WATER LEVEL EQUIP.USED
[ ] ELECTRIC COND. PROBE
[X] FLOAT ACTIVATED
[ ] KECK INTERFACE PROBE
[ ] OTHER

NUMBER OF FILTER PAPERS USED ____

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	VOA	Scan 1&2	80ml	_____	No	No
_____	D. Metals	6010	1l	_____	Yes	HNO3/1ml
_____	PCBs	8080	2l	_____	No	No
_____	_____	_____	_____	_____	_____	_____

NOTES

Water Clear Sample Slightly Cloudy VOA & PCB

SIGNATURE [signature] / Michael DeLong

SIGNATURE/FUNCTION: _____

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ABB ENVIRONMENTAL SERVICES, INC.

GROUNDWATER SAMPLE RECORD

SITE: Sm Hmo Yard - North Yard JOB NO. 5883-00 DATE: 12/21/90

SAMPLE LOCATION MW-351 LAB NUMBER Dup of 302

WATER LEVEL/WELL DATA

MEASURED WELL DEPTH _____FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____

WELL DIAM.
[ ] 2 INCH
[ ] 4 INCH
[ ] 6 INCH
[ ] _____

WATER DEPTH _____FT

MONITORING:
AMBIENT AIR _____PPM
WELL MOUTH _____PPM

HISTORICAL WELL DEPTH _____FT
[ ] TOP OF WELL
[ ] TOP OF CASING
[ ] _____

WELL MATERIAL:
[ ] PVC
[ ] SS
[ ] _____

PROTECTIVE CASING STICK-UP (FROM GROUND)
_____FT

PURGE DATA

HEIGHT OF WATER COLUMN _____FT

[ ] .16 GAL/FT (2 IN)
[ ] .65 GAL/FT (4 IN)
[ ] 1.5 GAL/FT (6 IN)
[ ] _____ GAL/FT (_____IN)

X ___ CASING VOLUMES = GALLONS TO BE PURGED

PURGE TIME START _____ END _____

SAMPLE TIME START _____ END _____

	a ___ GAL	a ___ GAL	a ___ GAL	a ___ GAL	a ___ GAL
PURGE VOLUME					
TEMP, DEG C					
pH, UNITS					
SPECIFIC CONDUCTIVITY, umhos/cm					

EQUIPMENT DOCUMENTATION

PURGING	SAMPLING	EQUIPMENT ID
~~[ ]~~	~~[ ]~~ PERISTALTIC PUMP	_____
[ ]	[ ] SUBMERSIBLE PUMP	_____
[ ]	~~[ ]~~ BAILER (PVC/SS/TEFLON)	_____
[ ]	[ ] PVC/SILICON TUBING	
[ ]	[ ] TEFLON/SILICON TUBING	
[ ]	[ ] AIR LIFT	
[ ]	[ ] WATERRA	_____
	[ ] IN-LINE FILTER	
	[ ] PRESS/VAC FILTER	
[ ]	[ ] _____	_____

DECON FLUIDS USED
[ ] ETHYL ALCOHOL
[ ] DEIONIZED WATER
[ ] HNO3/D.I. WATER
[ ] POTABLE WATER
[ ] TSP SOLUTION
[ ] NONE
[ ] _____

WATER LEVEL EQUIP.USED
[ ] ELECTRIC COND. PROBE
[ ] FLOAT ACTIVATED
[ ] KECK INTERFACE PROBE
[ ] OTHER

NUMBER OF FILTER PAPERS USED ____

SAMPLES COLLECTED

BOTTLE ID	ANALYSIS REQUESTED	METHOD NUMBER	VOLUME	JAR TYPE	FILTERED	PRESERVATIVE/ VOLUME
_____	VOA	Scan 12	80ml	_____	No	No
_____	D. Metals	6010	1l	_____	Yes	HNO3 5ml
_____	PCBs	8080	2l	_____	No	No
_____	_____	_____	_____	_____	_____	_____

NOTES

Duplicate sample of MW-302

SIGNATURE Michael DeLong

SIGNATURE/FUNCTION: _____

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90303.WP
REVISED 3/90

APPENDIX B

ANALYTICAL METHODS

ANALYTICAL PROGRAM
QUARTERLY GROUNDWATER MONITORING PROGRAM

NORTH YARD
GM HYDRA-MATIC

PARAMETER	METHOD NUMBER
Dissolved Metals:	
Cadmium	1310/6010
Chromium	1310/6010
Iron	3010/7380
Nickel	1310/6010
Lead	3010/7420
Zinc	1310/6010
DNR Scan 1 Compounds:	8020
Bromodichloromethane	
Bromoform	
Carbon tetrachloride	
Chlorobenzene	
Chloroform	
Dibromochloromethane	
Dichlorodifluoromethane	
1,1-Dichloroethane	
1,2-Dichloroethane	
1,1-Dichloroethene	
cis-1,2-Dichloroethene	
trans-1,2-Dichloroethene	
1,3-Dichloropropene	
1,1,2,2-Tetrachloroethane	
Tetrachloroethene	
1,1,1-Trichloroethane	
1,1,2-Trichloroethane	
Trichloroethene	
DNR Scan 2 Compounds:	8020
Benzene	
Ethylbenzene	
Styrene	
Toluene	
Total Xylenes	
HSL Pesticides and PCBs:	8080
Aldrin	
Alpha-BHC	
Beta-BHC	
Delta-BHC	
Gamma-BHC (Lindane)	
Chlordane	
4-4'-DDD	
4-4'-DDE	
4-4'-DDT	
Dieldrin	
Alpha-Endosulfan	
Beta-Endosulfan	
Endosulfan Sulfate	
Endrin	
Endrin Ketone	
Heptachlor	
Heptachlor Epoxide	
Methoxychlor	
Toxaphene	
PCB-1016	
PCB-1221	
PCB-1232	
PCB-1242	
PCB-1248	
PCB-1254	
PCB-1260	

APPENDIX C

LABORATORY ANALYTICAL REPORTS

ENCOTEC
3985 RESEARCH PARK DR.
ANN ARBOR, MI 48108
(313) 761-1389

DATA SUMMARY SHEET

PROJECT: ABB Environmental
PROJECT NO.: 40650
SAMPLE TYPE: Filtrate
REPORT DATE: January, 1991

SAMPLE NAME		MW-301	MW-302	MW-303	MW-350	MW-351
SAMPLE DATE		12-21-90	12-21-90	12-21-90	12-21-90	12-21-90
PARAMETER	UNITS	ENCOTEC SAMPLE I.D. NUMBER				
		66031	66032	66033	66034	66035
Cadmium	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Copper	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Iron	mg/L	0.03	4.3	12	<0.02	3.7
Lead	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Nickel	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
Zinc	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02
						01

ENCOTEC
3985 RESEARCH PARK DR.
ANN ARBOR, MI 48108
(313) 761-1389

DATA SUMMARY SHEET

PROJECT: ABB Environmental
PROJECT NO.: 40650
SAMPLE TYPE: Water
REPORT DATE: January, 1991

SAMPLE NAME		MW-301	MW-302	MW-303	MW-350	MW-351
SAMPLE DATE		12-21-90	12-21-90	12-21-90	12-21-90	12-21-90
PARAMETER	UNITS	ENCOTEC SAMPLE I.D. NUMBER				
		66026	66027	66028	66029	66030
Aroclor 1016	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate Recovery		84%	88%	90%	87%	91%
Analysis Date:						
Analyst: J. Hoag						
						02

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: January 21, 1991

Sample: MW-301
ENCOTEC Number: 66026
Sample Date: 12-21-90
Date Received: 12-21-90
Date Extracted: NA
Date Analyzed: 12-28-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: January 21, 1991

Sample: MW-301
ENCOTEC Number: 66026
Sample Date: 12-21-90
Date Received: 12-21-90
Date Extracted: NA
Date Analyzed: 12-28-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.002
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: January 21, 1991

Sample: MW-302
ENCOTEC Number: 66027
Sample Date: 12-21-90
Date Received: 12-21-90
Date Extracted: NA
Date Analyzed: 12-28-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

ENVIRONMENTAL CONTROL TECHNOLOGY CORPORATION
3985 Research Park Drive * Ann Arbor, MI 48108
313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 2
Report Date: January 21, 1991

Sample: MW-302
ENCOTEC Number: 66027
Sample Date: 12-21-90
Date Received: 12-21-90
Date Extracted: NA
Date Analyzed: 12-28-90

U = Analyzed, Not Detected
J = Present at Level Less Than Detection Limit
B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
Ethylbenzene	100-41-4	mg/L	U	0.001
Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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313 / 761-1389

ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: January 21, 1991

Sample: MW-303
ENCOTEC Number: 66028
Sample Date: 12-21-90
Date Received: 12-21-90
Date Extracted: NA
Date Analyzed: 12-28-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
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Report Date: January 21, 1991

Sample: MW-303
ENCOTEC Number: 66028
Sample Date: 12-21-90
Date Received: 12-21-90
Date Extracted: NA
Date Analyzed: 12-28-90

U = Analyzed, Not Detected
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B = Present in Method Blank

VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
Benzene	71-43-2	mg/L	U	0.001
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Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

*Reported together under 1,3-Xylene

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: January 21, 1991

Sample: MW-350
ENCOTEC Number: 66029
Sample Date: 12-21-90
Date Received: 12-21-90
Date Extracted: NA
Date Analyzed: 12-28-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	0.002	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
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ORGANIC ANALYSIS DATA SUMMARY SHEET

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Report Date: January 21, 1991

Sample: MW-350
ENCOTEC Number: 66029
Sample Date: 12-21-90
Date Received: 12-21-90
Date Extracted: NA
Date Analyzed: 12-28-90

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1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

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ORGANIC ANALYSIS DATA SUMMARY SHEET

Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: January 21, 1991

Sample: MW-351
ENCOTEC Number: 66030
Sample Date: 12-21-90
Date Received: 12-21-90
Date Extracted: NA
Date Analyzed: 12-28-90

U = Analyte not detected
B = Analyte present in method blank
J = Present at level less than detection limit

VOLATILE ORGANICS	CAS #	UNITS	CONC.	DETECTION LIMIT
Bromodichloromethane	75-27-4	mg/L	U	0.001
Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
Dibromochloromethane	124-48-1	mg/L	U	0.001
1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
cis-1,2-Dichloroethene*	540-59-0	mg/L	U	0.001
trans-1,2,-Dichloroethene*	156-60-5	mg/L	U	0.001
1,2-Dichloropropane	78-87-5	mg/L	U	0.001
cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
1,1,1-Trichloroethane	71-55-6	mg/L	U	0.001
1,1,2-Trichloroethane	79-00-5	mg/L	U	0.001
Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

*Reported separately. Some data may report the cis- and trans- isomers together under trans-1,2-dichloroethene.

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Sample: MW-351
ENCOTEC Number: 66030
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Date Received: 12-21-90
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1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
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Project Name: ABB Environmental
Project Number: 40650
Method: Mich DNR Scan 1
Report Date: January 21, 1991

Sample: Method Blank
ENCOTEC Number: NA
Sample Date: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 12-28-90

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Bromoform	75-25-2	mg/L	U	0.001
Bromomethane	74-83-9	mg/L	U	0.001
Carbon Tetrachloride	56-23-5	mg/L	U	0.001
Chlorobenzene	108-90-7	mg/L	U	0.001
Chloroethane	75-00-3	mg/L	U	0.001
Chloroform	67-66-3	mg/L	U	0.001
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1,1-Dichloroethane	75-34-3	mg/L	U	0.001
1,2-Dichloroethane	107-06-2	mg/L	U	0.001
1,1-Dichloroethene	75-35-4	mg/L	U	0.001
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cis-1,3-Dichloropropene	10061-01-5	mg/L	U	0.001
trans-1,3-Dichloropropene	10061-02-6	mg/L	U	0.001
Methylene Chloride	75-09-2	mg/L	U	0.001
1,1,2,2-Tetrachloroethane	79-34-5	mg/L	U	0.001
Tetrachloroethene	127-18-4	mg/L	U	0.001
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Trichloroethene	79-01-6	mg/L	U	0.001
Trichlorofluoromethane	75-69-4	mg/L	U	0.001
Vinyl Chloride	75-01-4	mg/L	U	0.001

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VOLATILE ORGANICS	CAS #	Units	Conc.	Detection Limit
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Toluene	108-88-3	mg/L	U	0.001
1,2-Xylene	95-47-6	mg/L	U	0.001
1,3-Xylene*	108-38-3	mg/L	U	0.002
1,4-Xylene*	106-42-3			

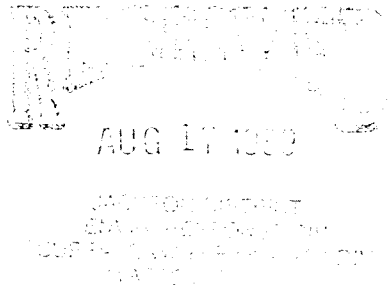
*Reported together under 1,3-Xylene

AOI 4
Physical File

HYDRA-MATIC

Division of General Motors Corporation Ypsilanti, Michigan 48198-6198

August 15, 1989



Mr. Charles F. San Juan
Geologist
Environmental Response Division
Michigan Department of Natural Resources
Jackson State Office Building
301 E. Louis Glick Hwy.
Jackson, Michigan 49201

Dear Mr. San Juan:

This letter is being issued to confirm the items that we discussed during our meeting on August 7, 1989. During the meeting, you were provided the final reports for five initial hydrogeological investigations that have been completed, along with proposals for 'Phase II' investigative work for three of these areas. In addition, we would like to highlight the following agreements that were made during our meeting.

1. Powerhouse Tank Farm Area

   The results and conclusions from the hydrogeological study demonstrate that the oil contamination noticed in the excavation has not significantly moved from this area, and that any residual oil contamination that does exist will be contained and eventually removed by the permanent groundwater collection (underdrain) system below the concrete tank vault floor. Also, the bulk of the contaminated soil was removed and properly disposed of as part of the construction project. As such, further hydrogeological work is not necessary in this area.

2. North Yard

   The analytical results from the first round of groundwater sampling indicate that the past activities in this area have not impacted groundwater quality. During our discussion, we agreed that PCB analysis would be performed on one set of samples during the course of the analytical program. In addition, the monitoring data will be reviewed at the end of one year to determine the need for proceeding with the monitoring program.

3. Building #19 Tank Farm, Subtest Area and Bay Q-24 Area

We will proceed with the Phase II investigative work as proposed to you during our meeting. Upon receipt, we would like to discuss the results, conclusions and recommendations from these investigations with MDNR to formulate remedial measures as needed.

4. Drum Handling Area

The one year sampling program has been completed. Enclosed with this letter you will find the last data set. Due to the nature of the problem in this area, the sampling program will be extended for a period of one year. At the end of that year, Hydra-matic would like to meet with MDNR to discuss the data base generated by the monitoring program. This information will aid in the development of remedial strategies as needed.

I will be contacting you in November of this year to schedule another status meeting to discuss our progress on the proposed work plans. If you have any questions or concerns regarding this matter or would like more information on the ongoing remedial activities at this facility, please contact myself at (313) 481-7232.

Sincerely,

Chris Winkeljohn
Environmental Engineering

Enclosure

437
3/93
ENV003:Binder # 039 Tank 2 Summary
Hydro Elevations (1 of 3)
9803-039

Investigation of Soil Contamination in a Machine Storage Area at the Hydra-matic Plant in Ypsilanti, Michigan

Thomas L. Gibson and Abdul S. Abdul

Environmental Science Department
General Motors Research Laboratories
Warren, Michigan 48090-9055

For submission to the
Michigan Department of Natural Resources

ABSTRACT

An outdoor storage yard for disused machinery at the Hydra-matic plant in Ypsilanti, Michigan was contaminated by residual fluids that leaked from the machines. Hydra-matic, with the agreement of the Michigan Department of Natural Resources, decided to implement a plan designed by the authors of this report to define the potential contamination. A phased investigation was carried out during 1988 to delineate contamination at the site.

In phase 1, surface soil sampling was used to define the lateral extent of contamination. The results demonstrated that the foreign constituents measured in the soil were most concentrated horizontally in an approximately 100 by 200 foot central region of the yard. Maximum concentrations of contaminants in surface soil in the central region were, hydrocarbons, 14,000 mg/kg; chromium, 74 mg/kg; nickel, 34 mg/kg; lead, 210 mg/kg; zinc, 140 mg/kg; cadmium, 5.6 mg/kg; iron, 34,000 mg/kg; and total PCBs, 4 mg/kg. Other parts of the storage area generally had lower concentrations, mostly background levels. In phase 2, soil cores were taken using a specially designed coring device (the GMR sampler) to adequately define the vertical spread of contaminants. The results showed that, in all areas, the unsaturated soil zone below the upper 22 inches was not contaminated. Therefore, investigation of the deeper perched aquifer system (phase 3), which starts about 6 feet below the surface, was unneccesary. Since no vapor-phase organics were detected in the soil samples, delineation of vapor contamination (phase 4) was unnecessary.

Retardation processes such as adsorption, cation exchange, and low contaminant solubility, prevented contaminant migration beyond the storage area or into the aquifer. Furthermore, current environmental regulations did not require cleanup action. Therefore, the GMR investigation concluded that no remedial action was necessary at this site.

INTRODUCTION

An outdoor area (about 800 by 200 feet), north of the General Motors Hydra-matic Plant at Ypsilanti, Michigan, was used for approximately 30 years to store machinery removed from the plant. A site map is shown in Figure 1. In some cases, the machinery, including hydraulic presses and metal cutting machines, was incompletely drained, and leaking fluids could have contaminated the surface soil with their organic and inorganic constituents. Further, in the unlikely event of a large spill or leak the contamination could have migrated through the sandy subsurface material to a shallow perched aquifer. After agreeing with the Michigan Department of Natural Resources to address the situation, Hydra-matic requested the help of the Environmental Science Department to plan and carry out the investigation.

To approach the problem definition systematically and rationally, available data were gathered to characterize the local hydrogeology and the potential contaminants. Hydrogeologic data from a nearby site indicated that the subsurface is comprised mainly of fine to medium sand and a shallow perched aquifer extends from a depth of about 6 feet to a dense clay layer at a depth of about 13 feet (Abdul et al., 1988a). Analysis of fluids sampled from pieces of machinery had shown the presence of oily hydrocarbons, heavy metals, and very low levels of PCBs.

From theoretical considerations and from the available data about the site and the potential contaminants, it appeared possible that contamination would be contained near the surface sources, and migration laterally and below the surface might be restricted. A large volume of oil can be retained in the pores of a sandy matrix as residual saturation (approximately 16 gallons/yd^3, Abdul, 1988). The presence of small amounts

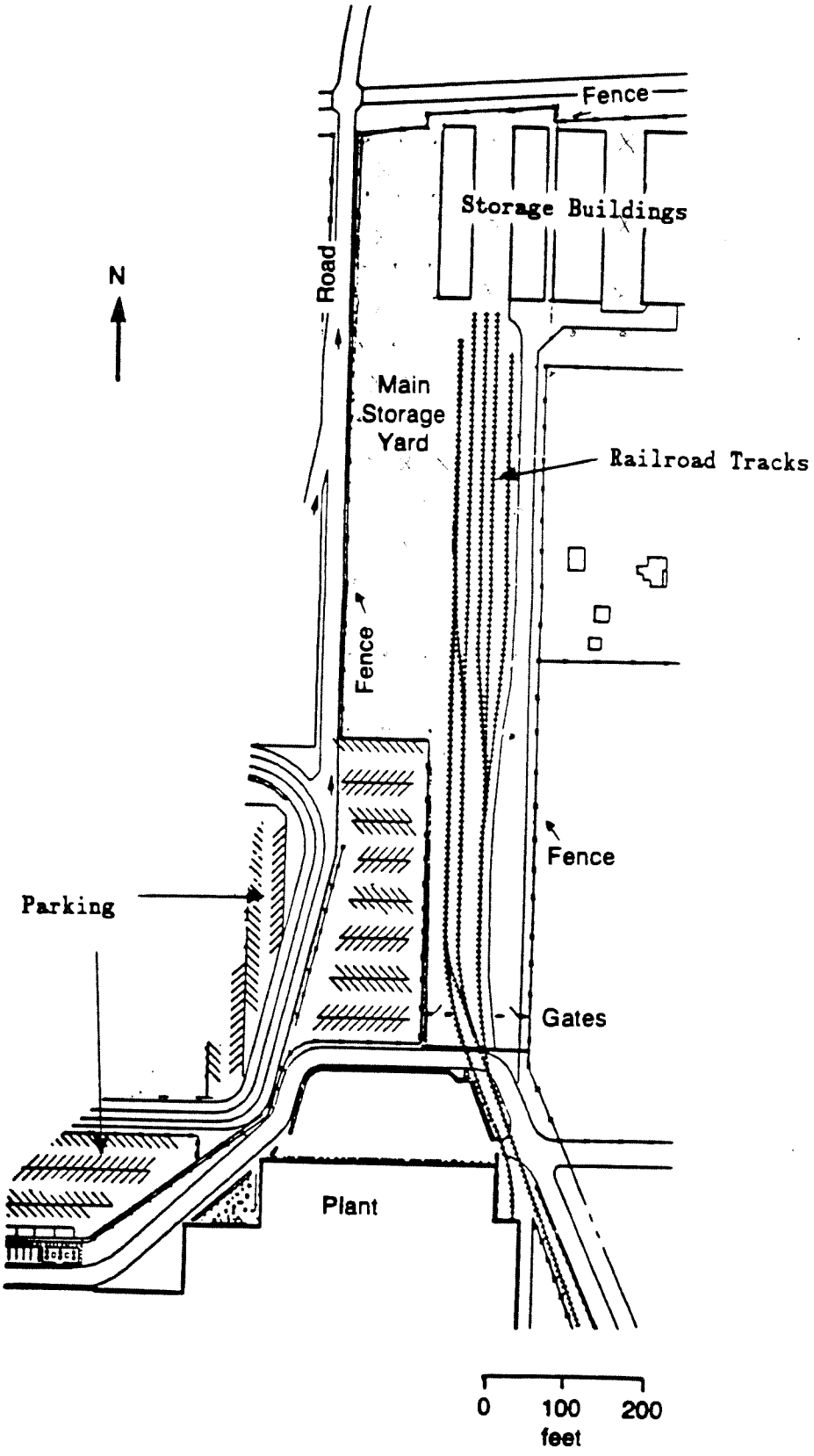


Figure 1. Map of the machine storage area at the Willow Run Hydra-matic Plant.

of clay, having a high cation exchange capacity, could tie up metal ions (Grimshaw, 1971), and the migration of PCBs is known to be strongly retarded by hydrophobic adsorption on sandy aquifer material (Abdul and Gibson, 1986; Abdul et al., 1987). Thus, extensive and costly investigations deep into the subsurface might be unnecessary at this site. Coring and drilling through contaminated surface material to some arbitrary depth below the water table should be avoided if possible because this can spread the contaminants downward into otherwise clean layers.

APPROACH

To systematically assess the problem, the investigation was divided into the following four phases: phase 1- delineating the extent of surface contamination; phase 2- delineating the spread of contamination downward into the unsaturated zone and characterizing the geologic material in this zone; phase 3- delineating contamination in the perched aquifer and describing the hydrology and geology of this aquifer; and phase 4- delineating the extent of vapor contamination. It was decided that the implementation of any phase was to be based on the results of the preceeding phases. By this decision, phase 2 was to be implemented only if comtamination was found in the surface material, phase 3 was to be implemented only if contamination was found throughout the unsaturated zone, and phase 4 was to be implemented if volatile organic compounds were found in surface and subsurface materials.

Since the contaminants were released at the surface, it was appropriate in the first phase of investigation to sample and analyze only surface material. This was done by taking shallow soil samples from the surface to a depth of 12 inches at locations 100 feet apart north to south

and 50 feet apart east to west (Figure 2). Since this sampling scheme would cover the machine storage yard (800 by 200 ft), the concentrations of organic and inorganic constituents revealed by chemical analysis could be used to look for patterns of contamination in the surface material. By this method, we could judge where to concentrate our greatest efforts in delineating the lateral spread of the contaminants.

Because machinery was stored infrequently in other areas, adjacent to the yard, as well (Figure 2), it was decided to also investigate those areas. The same phased investigative approach was followed and samples were typically taken at intervals of about 100 feet.

After assessing the distribution of the contaminants in the surface material, deeper coring was planned in phase 2 of the investigation to determine the vertical distribution of the contaminants in the unsaturated zone down to the shallow water table. The GMR soil core sampler, used to take the samples, was designed specifically to take soil cores for delineating zones of subsurface contamination (Gibson and Abdul, 1989). With this device, it is possible to obtain soil cores through the shallow unsaturated soil zone without cross contamination by surface material, which the standard split spoon sampler (ASTM, 1988), most commonly used for soil sampling, is not designed to do.

Liquid or dissolved-phase contaminants in the unsaturated zone would spread mostly downward under the influence of gravity. The tendency of oils to leave behind residual contamination in the pore spaces between soil particles and the strong adsorption of hydrophobic contaminants by the soil would ensure that there could be no contamination below a surface location unless the same constituents were also found in the surface samples. Spread of constituents by diffusion could likewise not contaminate underlying

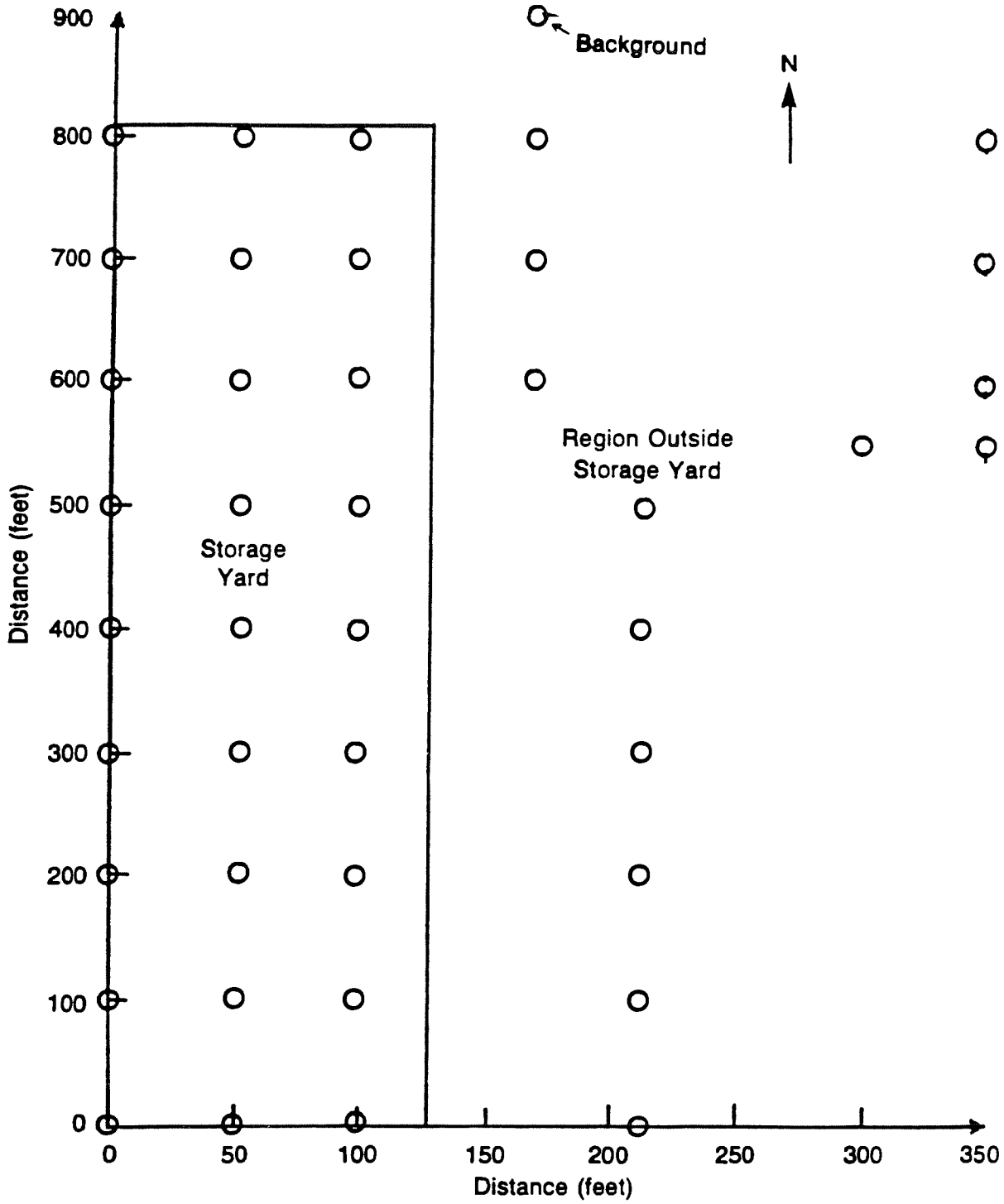


Figure 2. The surface material sampling grid at the machine storage area: Sampling locations (O).

zones without leaving evidence of contamination in surface material. Thus, if contaminants are not present at the water table it is not necessary to implement phase 3 to look for comtamination of the aquifer.

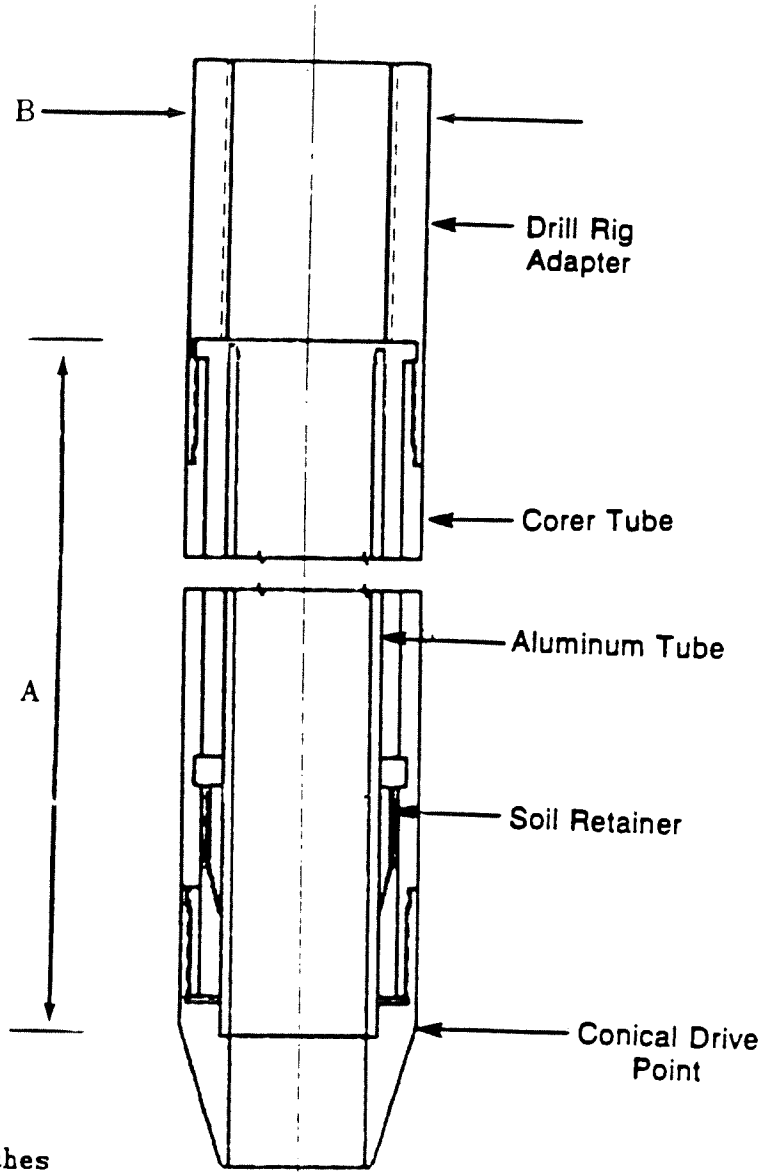
METHODS

Surface Material Samples

The split-spoon or split-barrel sampler (SSP), used to obtain grab samples of surface material from the surface to a depth of 12 inches, was that described in ASTM method D 1586 - 84, Standard Method for Penetration Test and Split-Barrel Sampling of Soils (ASTM, 1988). This device consisted of a steel sampler barrel, 3.0 inches O.D. and 2.4 inches I.D. by 24 inches long, which splits longitudinally, to be easily opened for inspection in the field. The split spoon was driven vertically into the ground by a truck-mounted drill rig. Each soil core, once taken out of the ground, was visually inspected and then mixed to provide a homogeneous grab sample.

Subsurface Material Samples

The GMR soil sampler used to core the unsaturated zone consists of three main parts: (1) an outer stainless steel corer tube (Figure 3), with a drill rig adapter, to mount the corer on a standard drill rod of a truck mounted rig, and a conical drive point, that can be driven into the ground; (2) an inner tube for collecting the soil made from 2.0-inch OD aluminum pipe; and (3) a metal soil retainer held in a recessed area in the bottom end of the corer tube, so that the aluminum tube extends through the retainer holding it open during soil coring (Figure 2). After the corer was driven into the ground, the leaves of the retainer could be made to



A = 48 inches

B = 3.00 inches

Figure 3. The GMR soil core sampler.

close by backing out the aluminum tube about one inch, thus preventing the soil from falling out (Figure 4).

To break through the uppermost layer of compacted surface material and old pavement and to reduce stresses on the sampler, a hollow-stem auger (10 inch OD by 6.5 inch ID) was first used to bore out the upper 12 inches of material. At the machine storage site, coring to a depth of 48 inches proved sufficient to delineate the shallow contaminated zone. After coring, the borehole was backfilled with bentonite clay. The drilling was performed by Professional Services Industries, Inc., Michigan Testing Engineers Division.

Vapor Phase Organics

A Model TIPI hand-held photoionization detector (Photovac, Inc.) was used to measure organic vapor concentrations in the surface and subsurface soil during the investigation. The TIPI can detect a minimum of 0.1 ppm hydrocarbon vapor by volume in air. Before use, the detector was calibrated with a standard gas mixture of isobutylene in air following the manufacturer's directions.

Total Hydrocarbons

Soil samples were first extracted with methylene chloride using a soxhlet apparatus. Total hydrocarbons were measured in the extracts by gas chromatography using a 30-m DB-5 capillary column and flame ionization detection, and by comparing the integrated area under the peaks with that obtained using Fuel Oil #6 as reference (modified Method 601, USEPA, 1986). A typical chromatogram is shown in Figure 5. These analyses were done under contract by Encotec, Inc., Ann Arbor, MI.

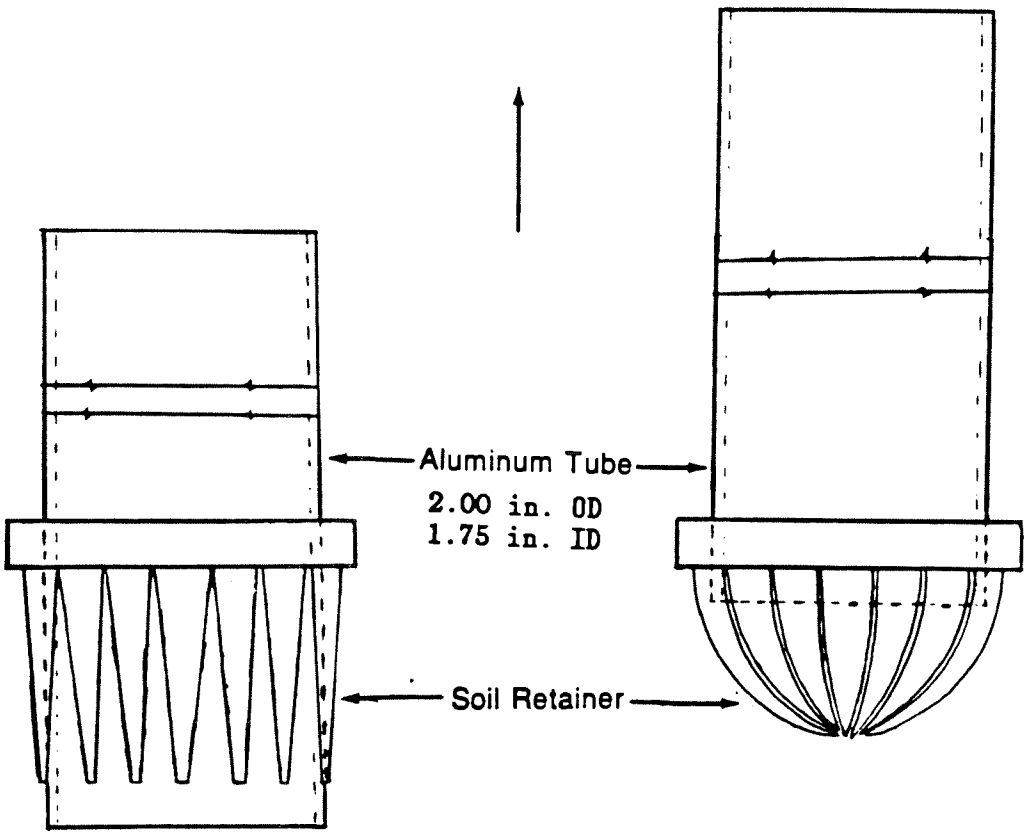


Figure 4. Operation of the soil retainer. Manually withdrawing the aluminum tube about one inch closes the retainer, holding the soil sample in the tube.

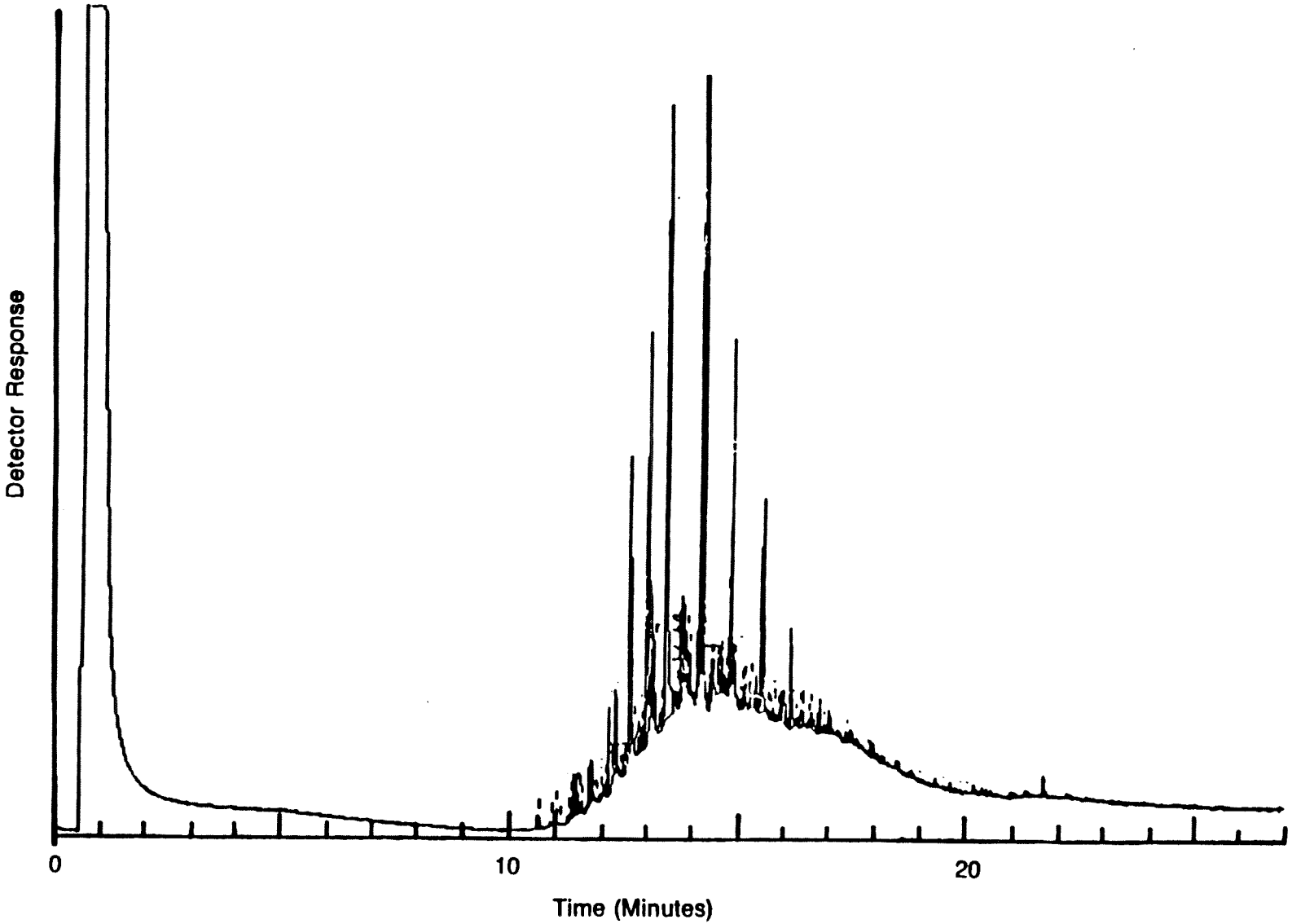


Figure 5. Typical gas chromatogram of the total hydrocarbon in a soil extract from the machine storage area (flame ionization detector). Concentration was determined from the integrated area under the peaks.

Freon Extractables

Soil samples were analyzed for total grease and oil by a procedure based on the partition-gravimetric and extraction methods described in Standard Methods for the Examination of Water and Wastewater (1985) and Method 418.1 (USEPA, 1979). Oil and grease are defined by the conditions used in the method, as any material extracted by the solvent and not volatilized when the solvent is removed. Using this method, the total Freon-extractable organic materials were measured by extracting each soil sample (approximately 100 g) with four 50-mL portions of 1,1,2-trichloro-1,2,2-trifluoroethane (Freon-113) with vigorous stirring for 5 min each. Freon was evaporated from the combined extracts by heating on a steam bath, and the residue was weighed.

Polychlorinated Biphenyls (PCBs)

PCBs were determined as Aroclors 1016, 1221, 1232, 1248, 1254, and 1260 by gas chomatography with electron capture detection in methylene chloride extracts of the soil samples , according to EPA Method 8080 (USEPA, 1986). The analyses were carried out under contract by Encotec, Inc., Ann Arbor, MI, and the results are reported as total PCBs.

Heavy Metals

The total concentrations of heavy metals, including chromium, nickel, lead, zinc, cadmium, and iron, were measured in the soil samples, after nitric acid digestion, by the inductively coupled plasma method, following EPA Methods 3050, 6010, and 7420 (USEPA, 1986). Examples of spectra for each of the metals are shown in Figure 6. Extraction Procedure (EP) toxicity tests (RCRA Method 1310, USEPA, 1986) were also performed on selected samples from the most contaminated surface material to determine

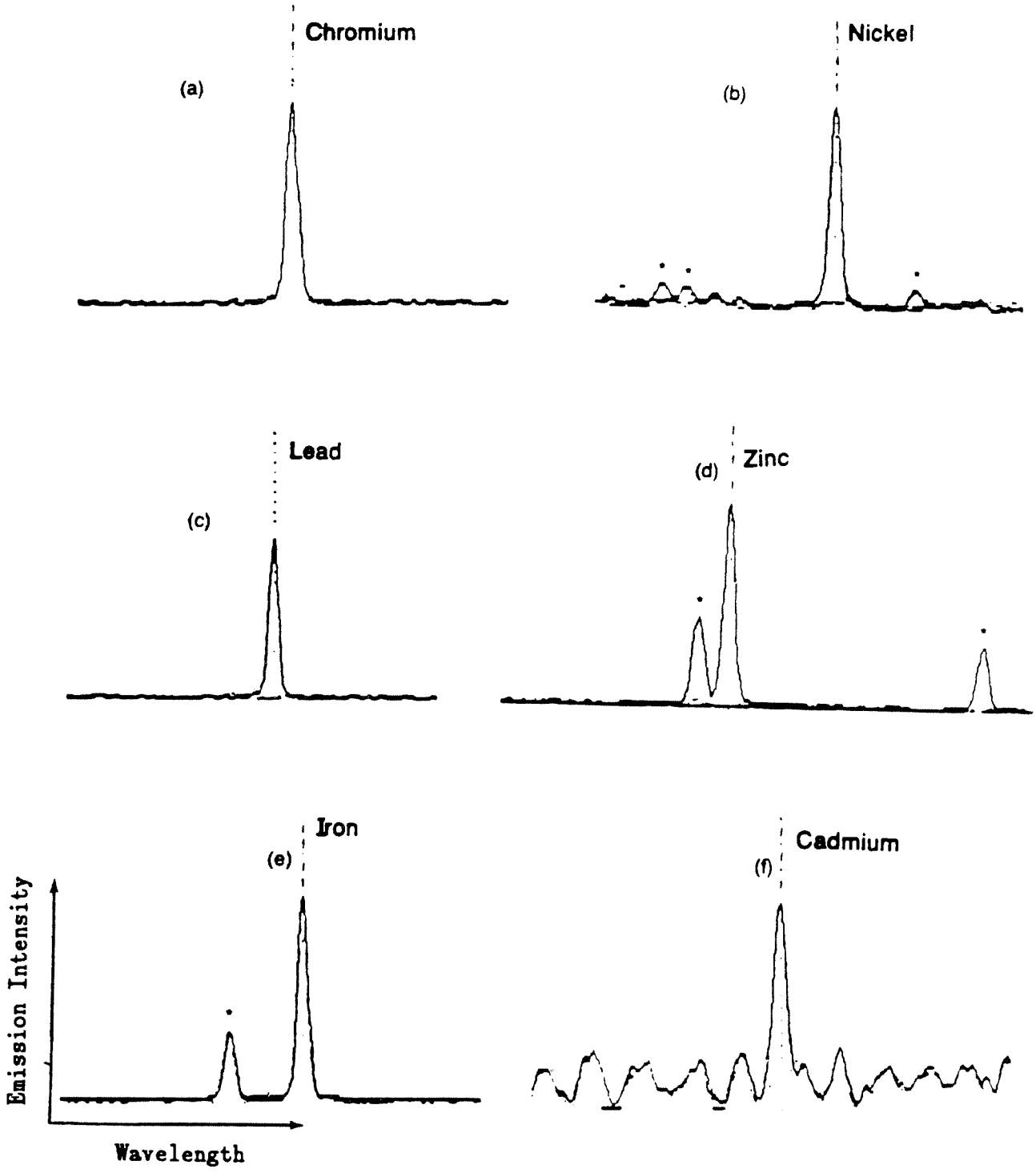


Figure 8. Typical inductively coupled plasma (ICP) spectra of heavy metals measured in soil samples from the machine storage area.
Metal, wavelength: (a) chromium, 205.552 nm; (b) nickel, 231.604 nm; (c) lead, 220.353; (d) zinc, 206.200 nm; (e) iron, 259.940 nm; and (f) cadmium, 214.438 nm. Other noninterfering metals (*).

the leachability of the metals under acidic conditions (pH about 5.0). The samples were treated with acetic acid, overnight in a rotary extractor. These analyses were carried out by Encotec, Inc., Ann Arbor, MI.

RESULTS

Contaminant Distribution in the Surface Material

The sampling grid for surface material is shown in Figure 2. This figure indicates two areas of interest: the storage yard and the area on the east side of the yard where machinery was less frequently stored. The area of primary interest is the storage yard. To identify any point on this grid, the x-(west-east) and y-(south-north) coordinates will be used, starting from the origin at the southwest corner of the site. For example, a surface sample taken 100 feet east and 400 feet north of the origin, will be labeled location (100, 400). The soil was sampled from the surface to a depth of 12 inches, and a homogenized subsample was analyzed for hydrocarbons, heavy metals, and PCBs.

Total Hydrocarbons: The total hydrocarbon concentrations in mg per kg of surface soil are shown in Figure 7 for 27 sampling locations within the storage yard and for 15 locations outside the yard. The concentrations of total hydrocarbons ranged from below the detection limit of 50 mg/kg to 14000 mg/kg. The area with the highest hydrocarbon concentration was in a central zone (shown as a hatched area in Figure 7) of the storage yard. In addition, seven locations outside the central zone, including five outside the storage yard to the east, had concentrations of hydrocarbons greater than 1000 mg/kg. Locations surrounding the central zone mostly had hydrocarbon levels of less than 300 mg/kg.

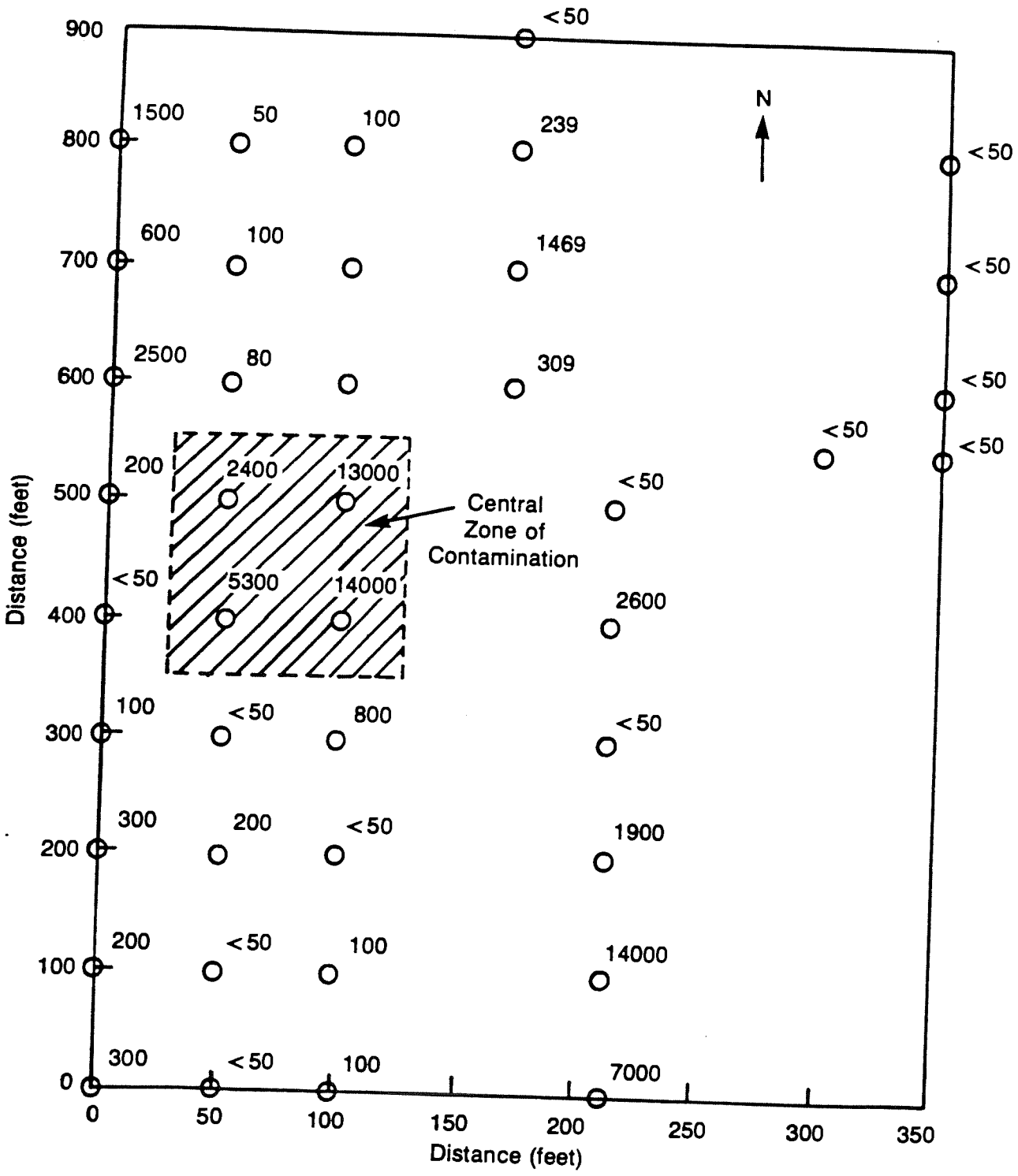


Figure 7. Concentrations of total hydrocarbons (mg/kg of soil) in surface samples from the machine storage yard. Sampling locations (○).

Heavy Metals: Figures 8 through 13 show the concentrations of individual metals in mg per kg of surface soil at 27 locations within the yard and 6 locations outside the yard. Chromium concentrations in the samples ranged from 1.5 to 74 mg/kg, nickel from 2.2 to 34 mg/kg, lead from 2.1 to 210 mg/kg, zinc from 10 to 140 mg/kg, iron from 2800 to 34000 mg/kg, and cadmium from <1 to 5.6 mg/kg. Chromium, nickel, lead, cadmiun, iron, and zinc were all found in highest concentrations in the central zone of the storage area. Concentrations about 4-20 times less than these maximum levels were found at most locations in the peripheral regions. The significance of these levels in relation to background soil concentrations will be discussed in a subsequent section.

Polychlorinated Biphenyls (PCBs): Samples from 27 surface locations in the storage yard and 6 locations outside the yard to the east were analyzed for PCBs. PCBs were found in low concentrations (4 mg/kg or less) at 4 locations in the storage yard and 2 outside (Figure 14). Again the higher concentrations were clustered in the central zone of the yard, where hydrocarbons and metals were also highest.

Contaminant Distribution in the Unsaturated Zone

Since hydrocarbons, heavy metals, and PCBs were found in surface samples, the second phase of investigation was implemented. The main objective of phase 2 was to delineate the vertical spread of contaminants beneath the upper 12 inches of surface material through the unsaturated zone toward the water table. The locations for sampling in the second phase were selected on the basis of the previously determined distribution of contaminants in the surface material. Eleven soil cores were taken

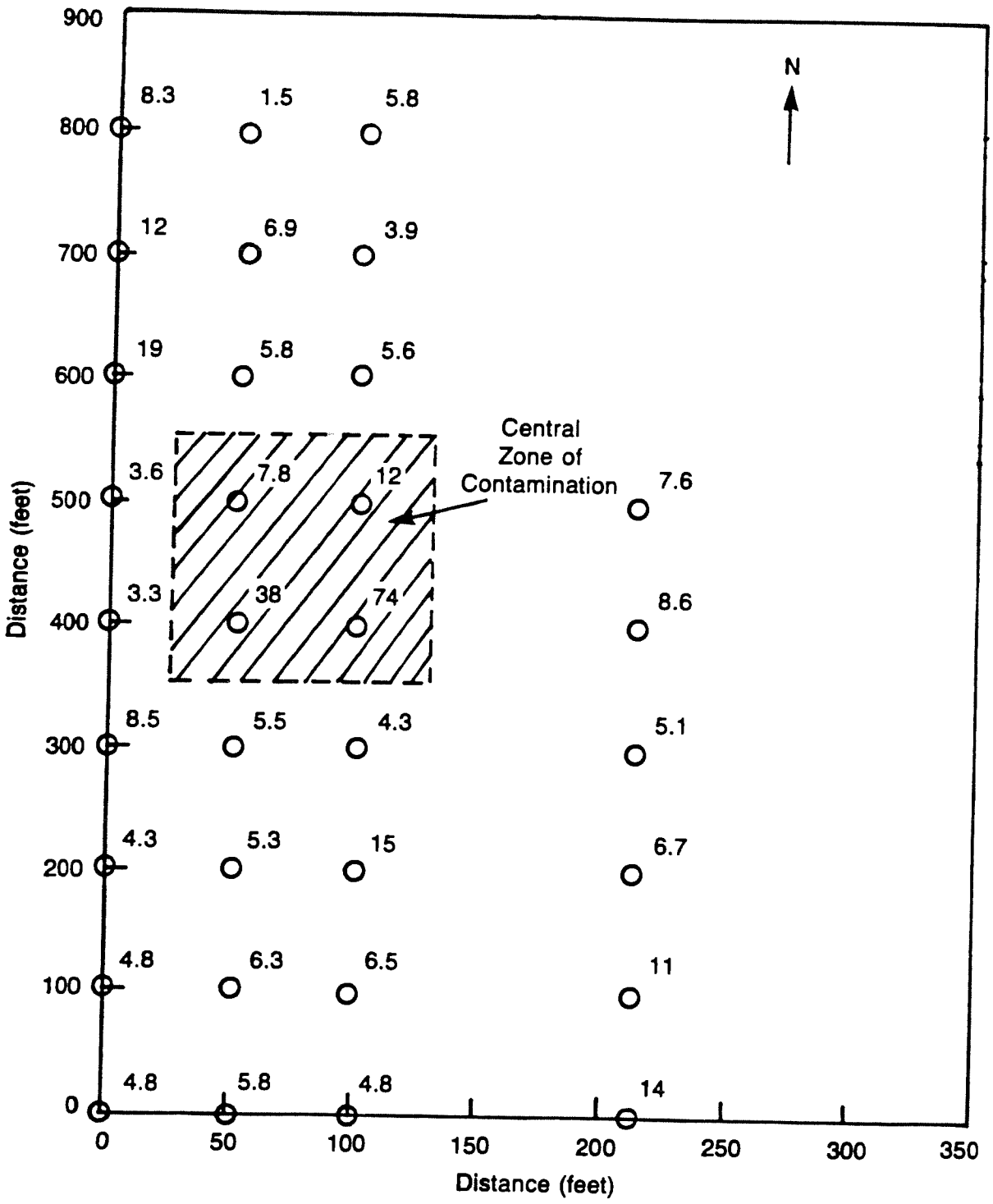


Figure 8. Concentrations of chromium (mg/kg) in surface samples. Sampling locations (○).

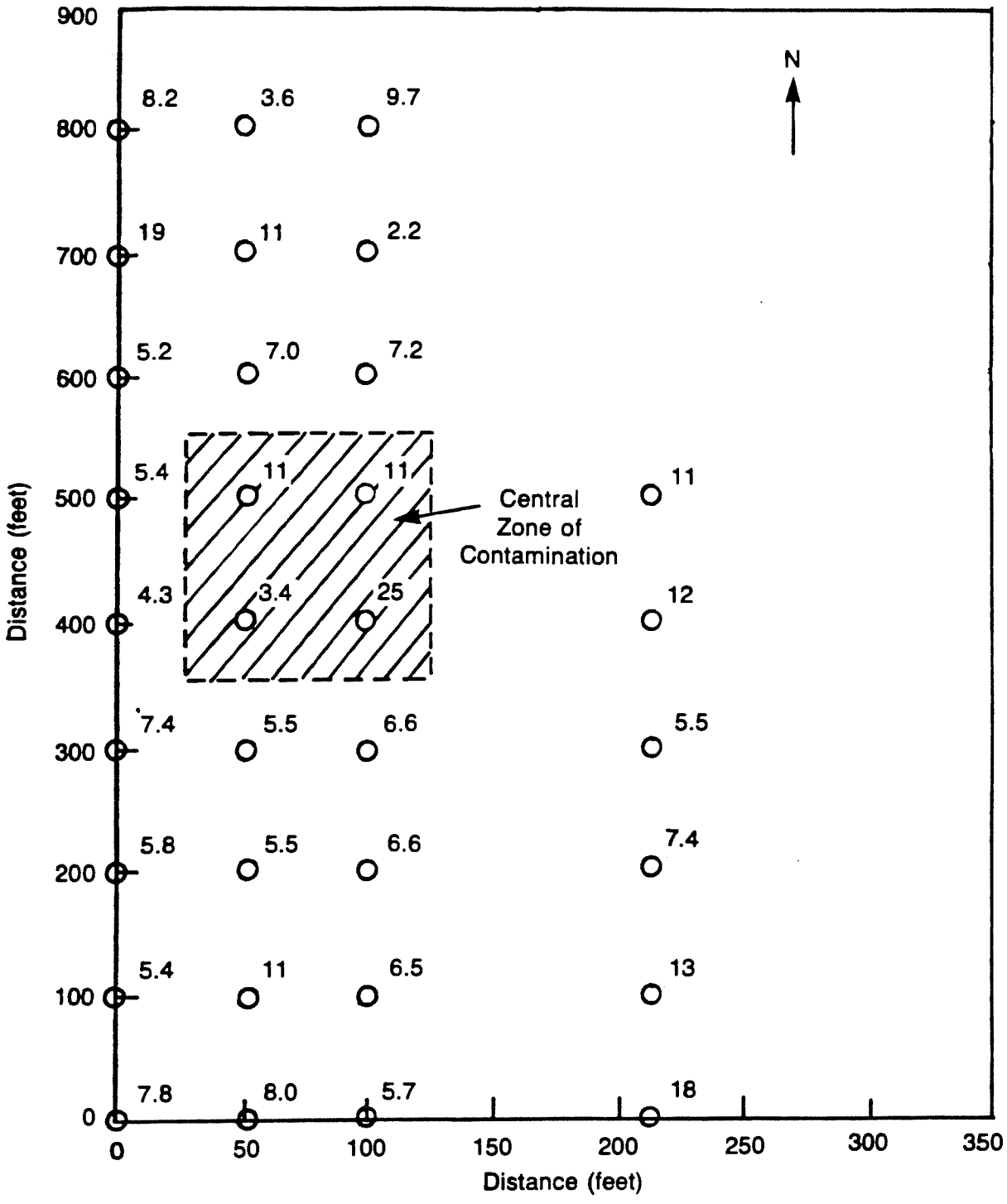


Figure 9. Concentrations of nickel (mg/kg) in surface samples. Sampling locations (○).

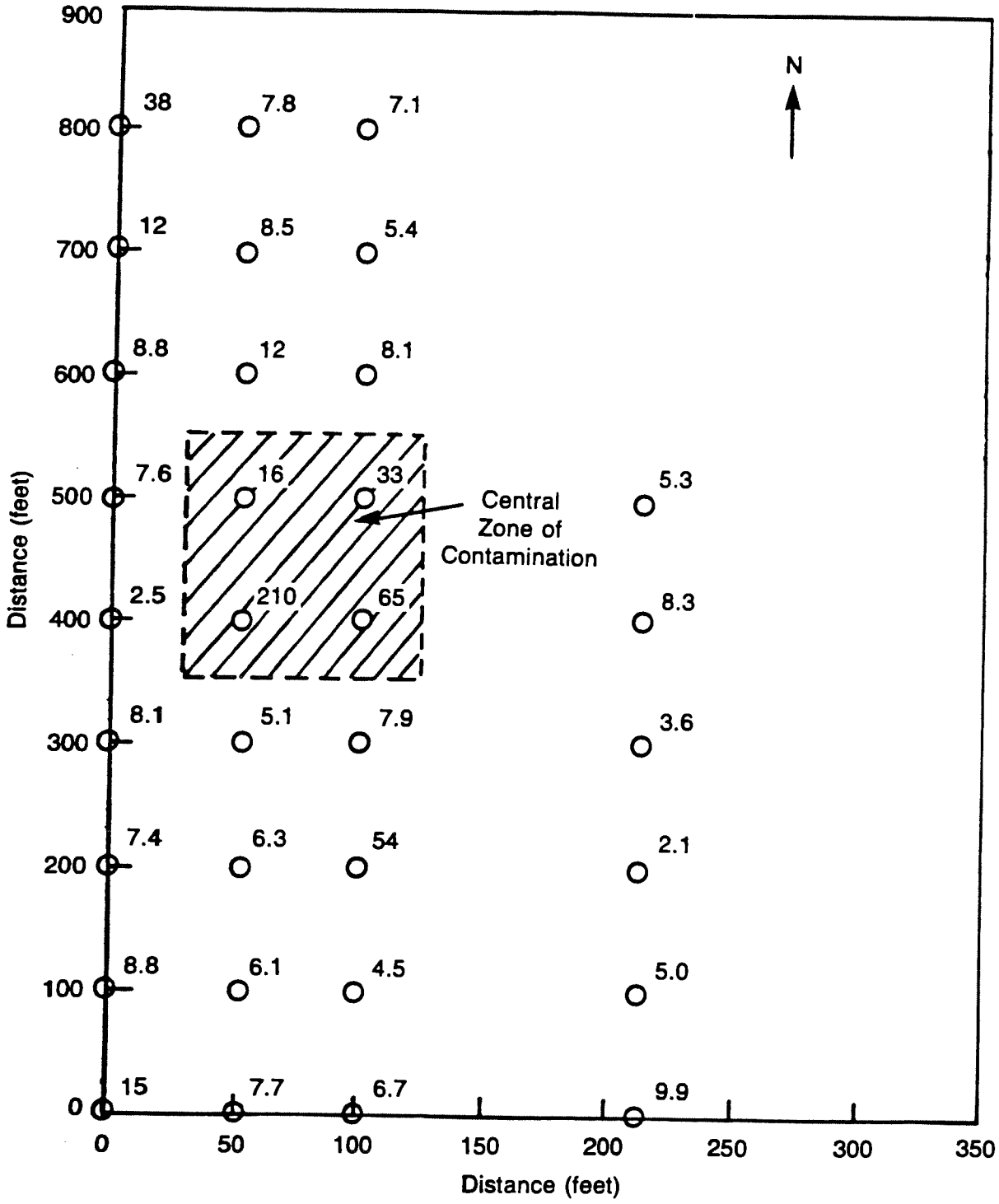


Figure 10. Concentrations of lead (mg/kg) in surface samples. Sampling locations (O).

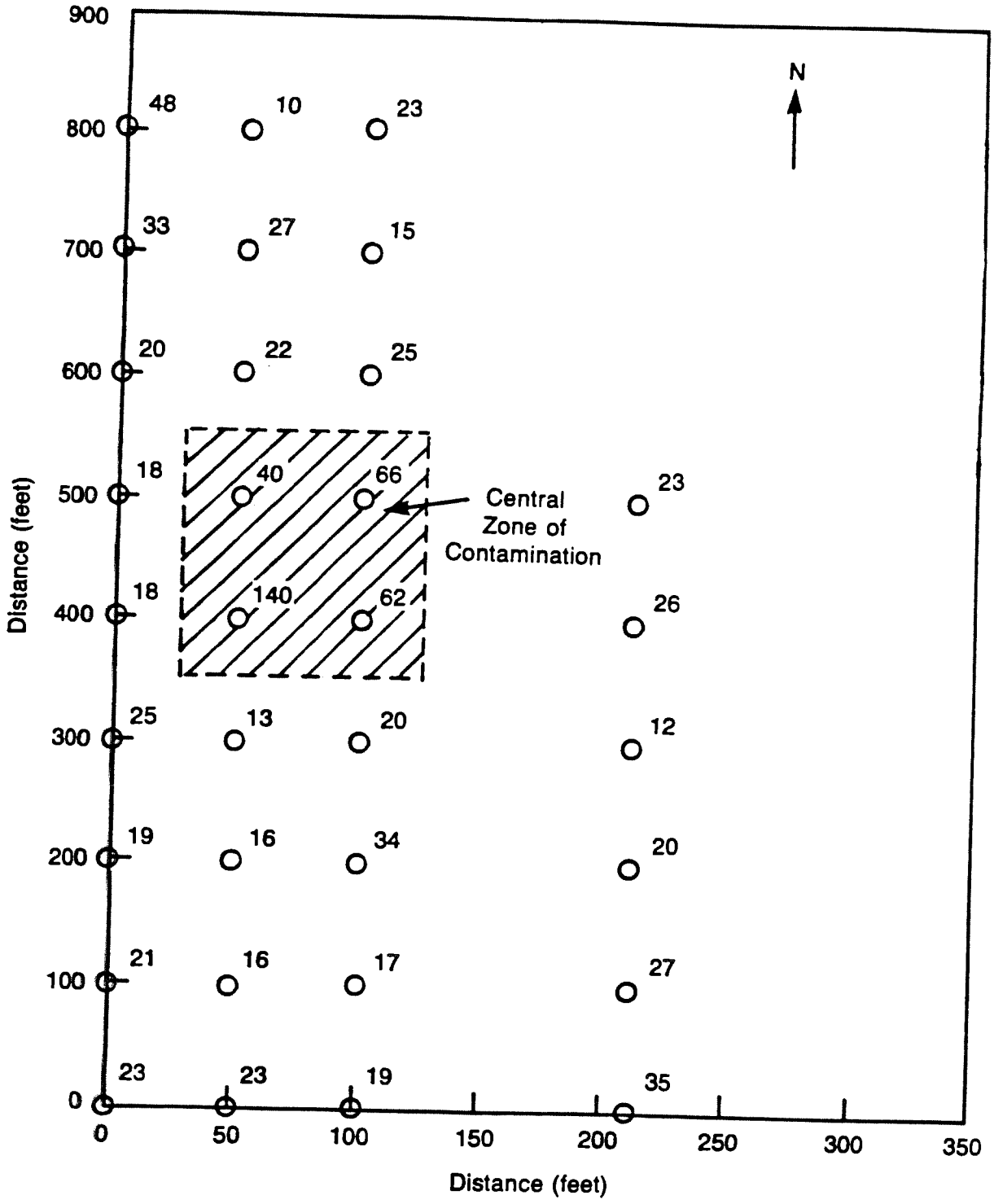


Figure 11. Concentrations of zinc (mg/kg) in surface samples. Sampling location (O).

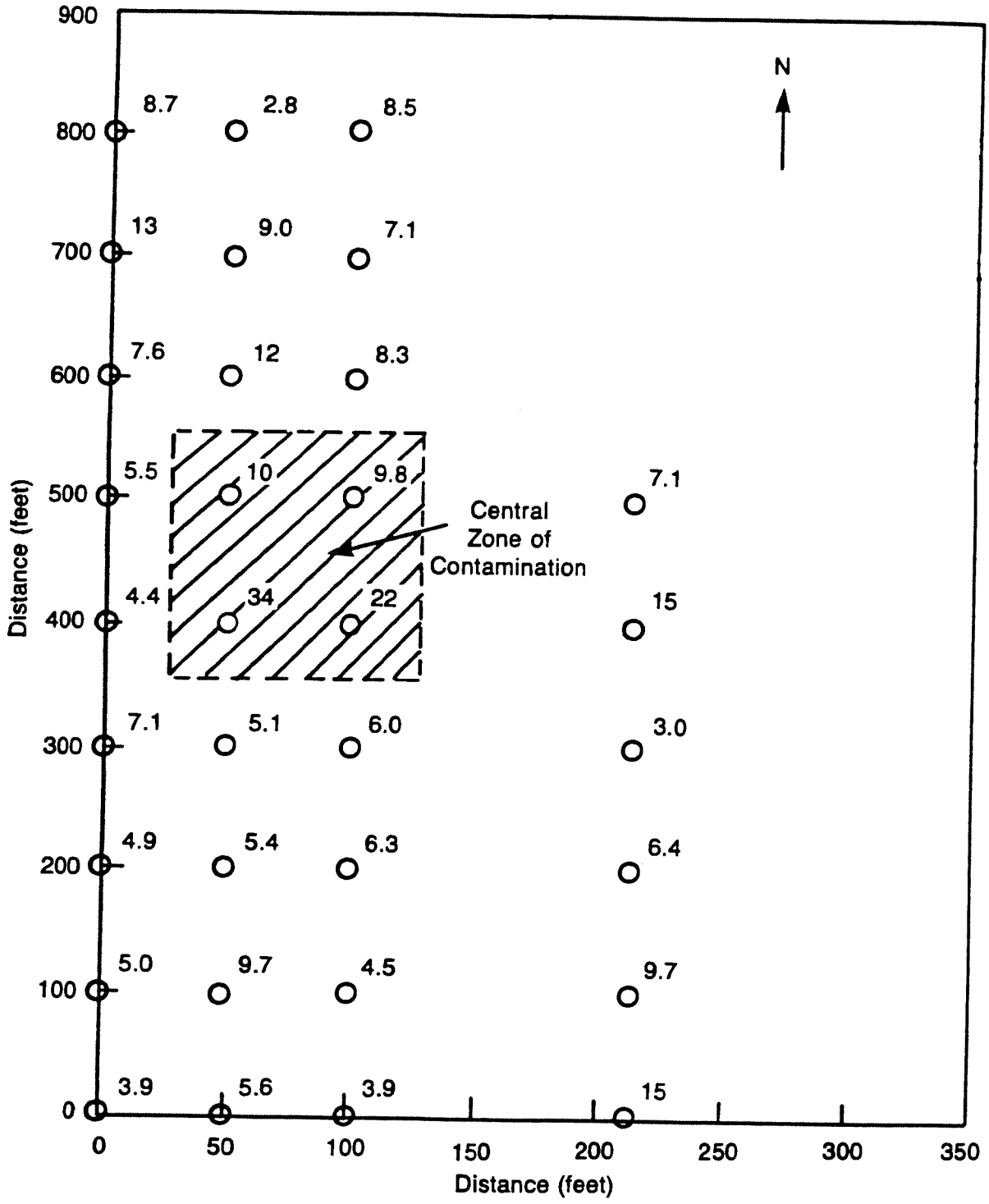


Figure 12. Concentrations of iron (mg/kg x 10^{-3}) in surface samples.

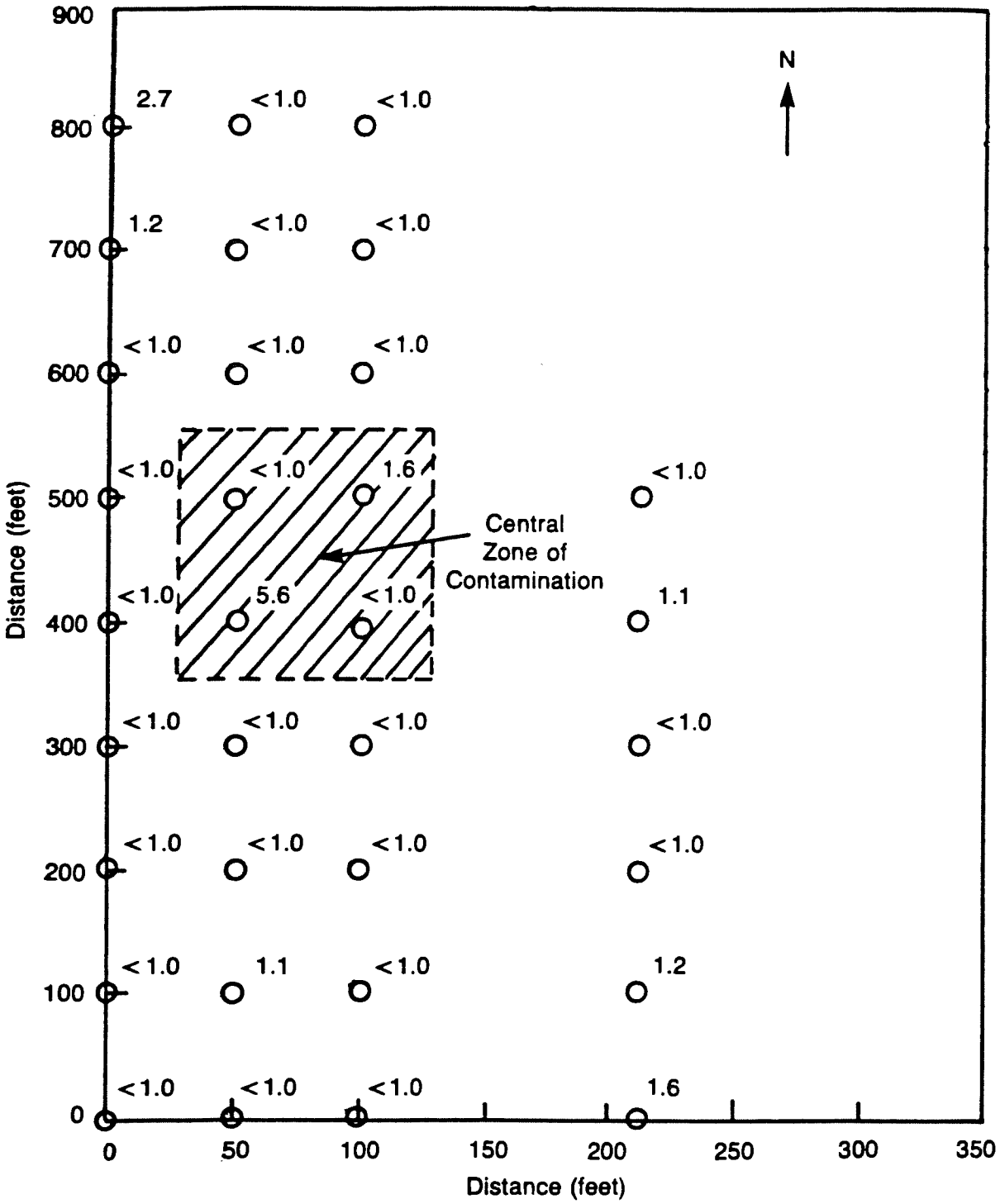


Figure 13. Concentrations of cadmium (mg/kg) in surface samples. Sampling locations (O).

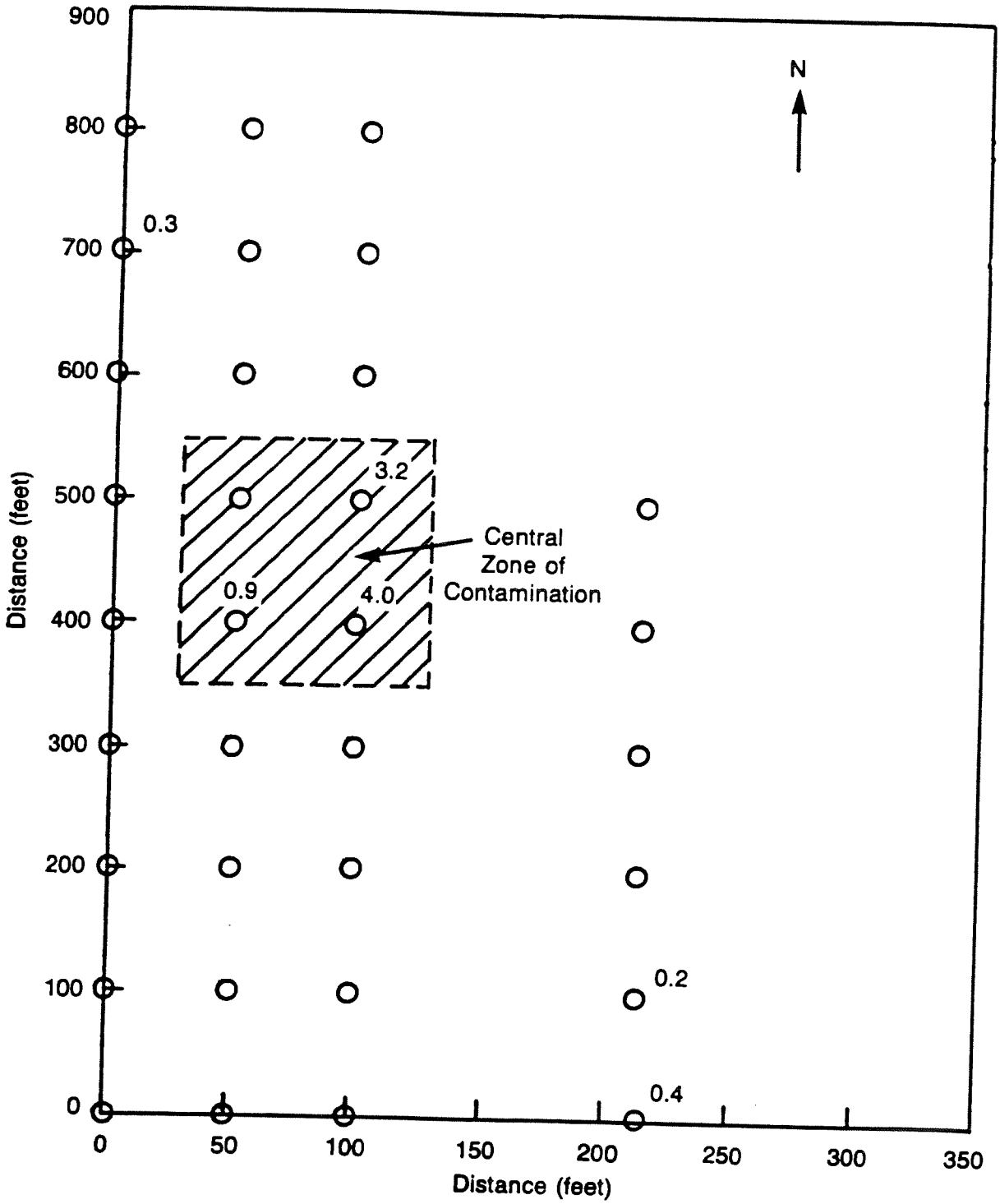


Figure 14. Concentrations of polychlorinated biphenyls (PCBs) (mg/kg) in the surface samples. The concentrations at the unlabeled sampling locations were less than the detection limit (0.2 mg/kg).

along two north-south cross-sections in the storage yard, while 10 soil cores were taken outside the yard (see Figure 15) Typically, the soil cores were taken from a depth of 1 to 4 feet using the GMR soil sampler.

Each subsurface soil core was collected in a 1.75-inch ID aluminum tube, which was then sealed at each end and taken to the laboratory for careful study. There, the tubes were split lengthwise to expose the soil core, which was examined and divided into 5-inch sections. Visual soil characteristics were recorded, and each section was extracted with Freon to determine the concentration of Freon-extractable organics. Two cores from the central zone (*locations in Figure 15) were also analyzed for metals and PCBs.

Freon Extractables: The results for Freon extractables along two north-south sections (A and B) within the storage yard and one north-south section outside the yard (C) are shown in Figure 16. The concentrations of Freon extractables range from less than 50 mg/kg to about 4000 mg/kg of soil. The vertical spread of measureable Freon extractables (>50 mg/kg) was confined to the upper 22 inches of the subsurface. The maximum concentration was found in a soil sample at a depth from 12 to 17 inches at one of the locations (75, 350) adjacent to a surface location (100, 400) with the highest total hydrocarbon level (14,000 mg/kg).

Heavy Metals: To determine the vertical spread of metals at the site, chromium, lead, nickel, cadmium, iron, and zinc were measured in soil cores at locations (75, 350) and (75, 450) in the central zone where the highest levels of surface contamination were found. The results from both locations are similar. Figure 17 shows the concentrations of chromimum, lead, nickel, and zinc at various depths of location (75, 450). The

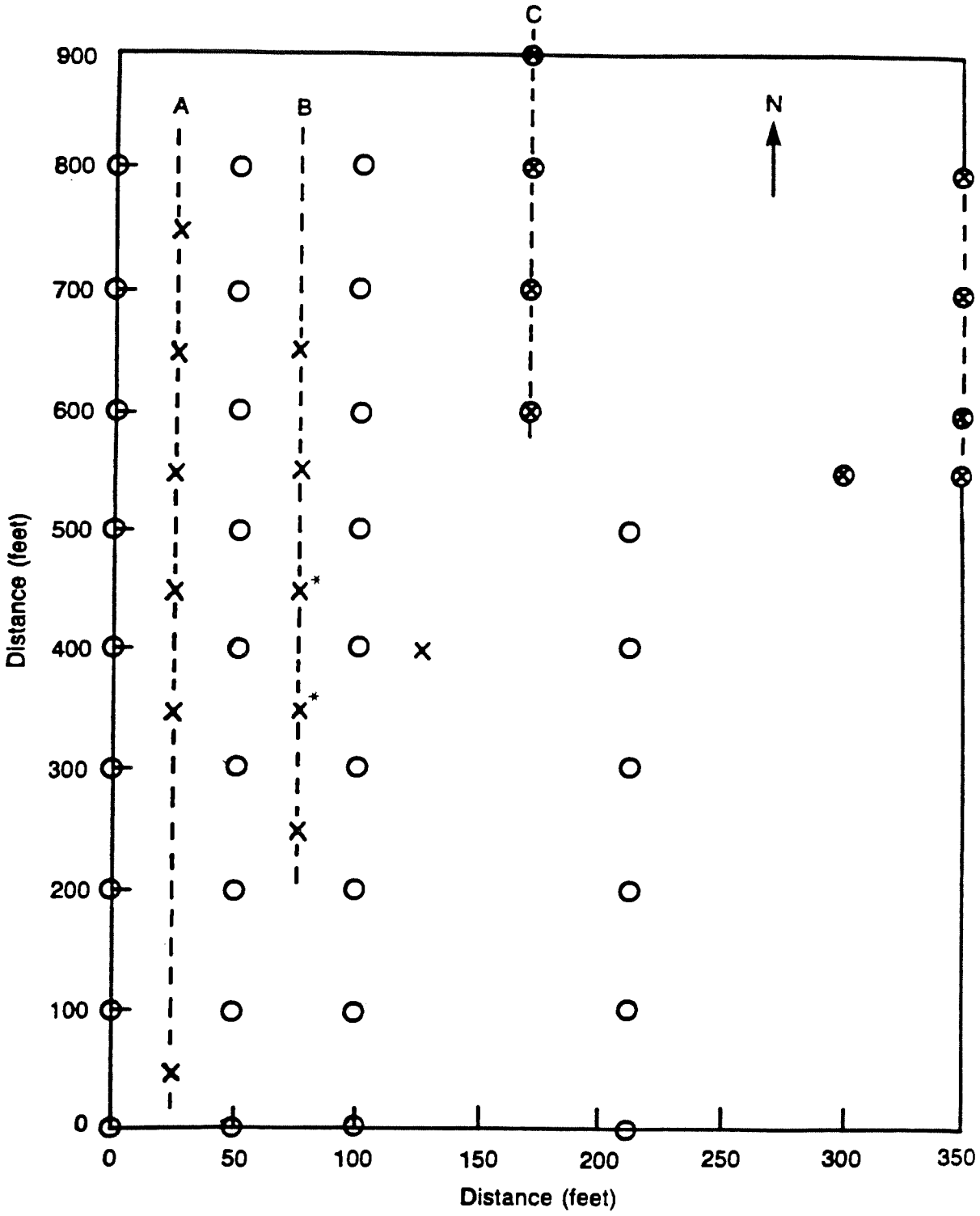


Figure 15. Phase 2 coring locations (X) used to investigate the subsurface zone (GMR soil core sampler). North-south cross-sections; A, B, C. Two coring locations for vertical distributions of metals, PCBs, and particle sizes (*).

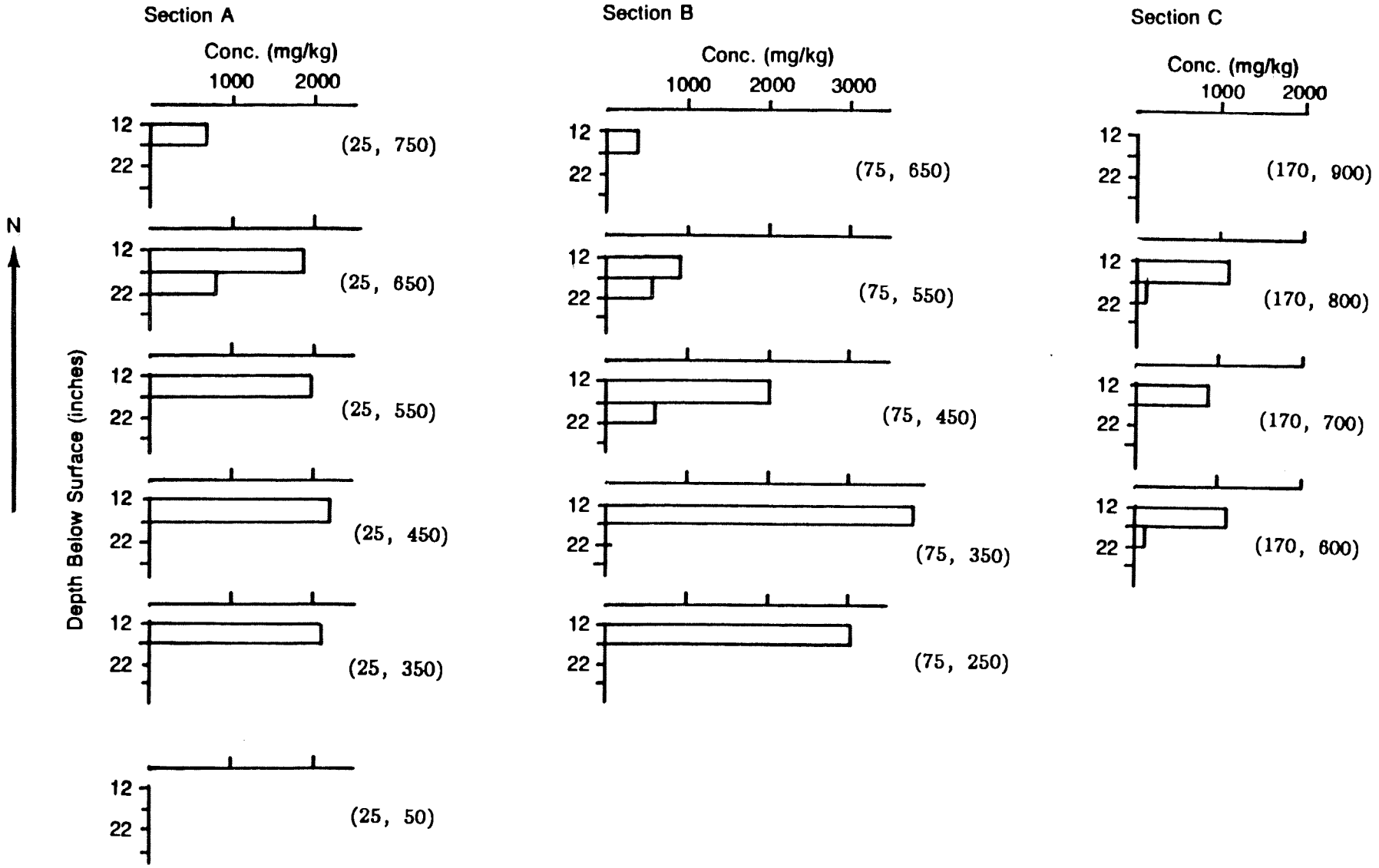


Figure 16. The vertical distribution of Freon extractables in the subsurface zone. Each bar graph corresponds to a soil core from one of the locations on north-south cross-sections shown in the previous figure. Coordinates are given in feet from the SW corner of the yard. The concentrations were measured in 5-in. core segments.

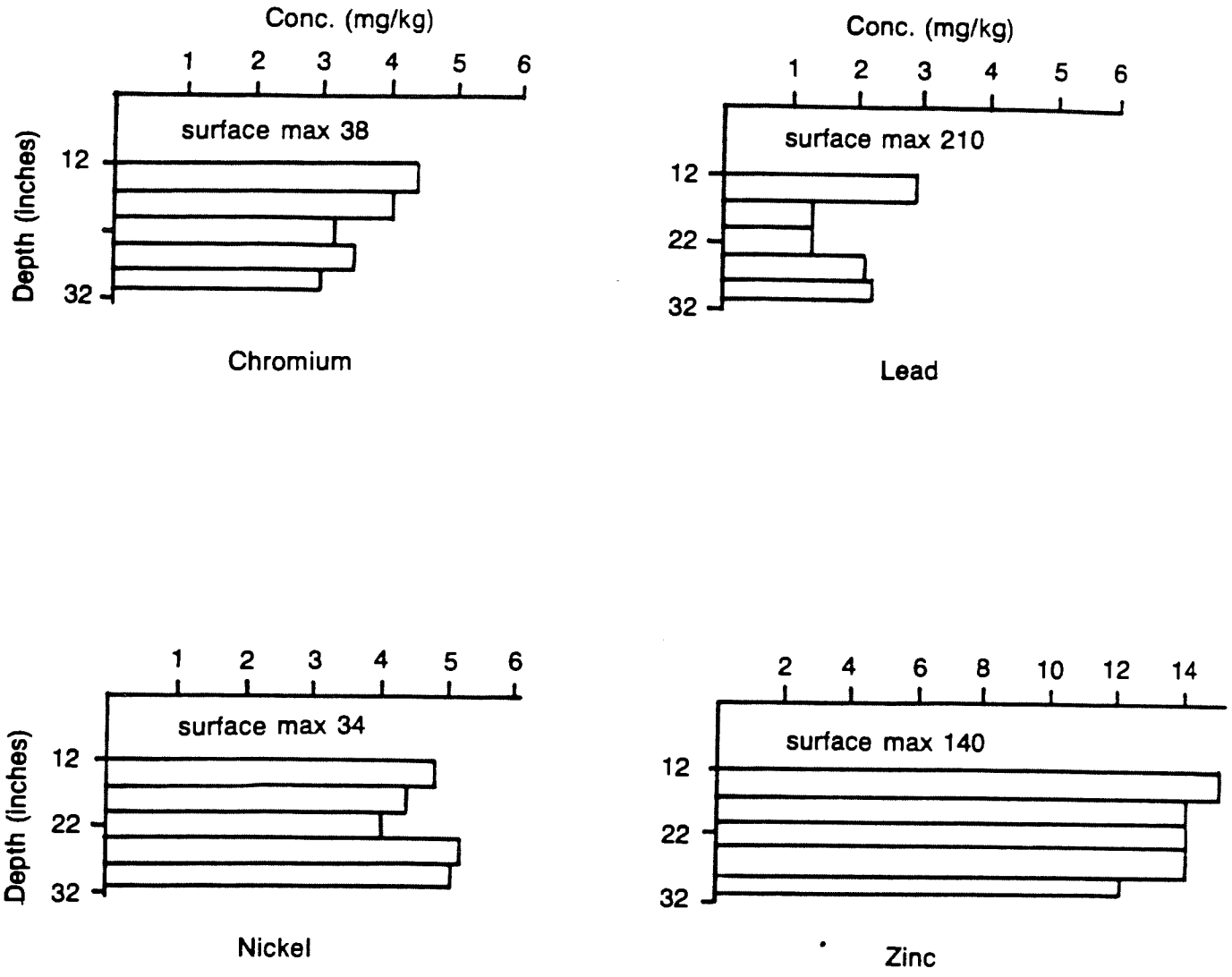


Figure 17. The vertical distribution of heavy metals in the subsurface zone at coring location (75,450).

results show that the concentrations below a depth of 12 inches are always much less than the adjacent surface concentrations. Moreover, the vertical profiles show only slight changes from depths of 1 to 4 feet, suggesting that the concentrations may be background. The results for cadimum and iron are similar to those for the other four metals.

Polychlorinated Biphenyls (PCBs): The two soil cores analyzed for metals were also analyzed for PCBs. PCBs could not be detected (<0.2 mg/kg) in any of the samples taken from below the surface (12 inches).

Vapor Phase Organics

No volatile organic compounds (VOCs) were detected by the portable photoionization detector. Samples of soil from the surface to a depth of 4 feet were tested during the surface sampling and coring investigation.

Site Characterization

The site material was first characterized by visual inspection of the surface soil samples and subsurface soil cores. Several distinct subsurface soil layers were observed in all regions of the machine storage area with only minor variations in their depth and thickness. Like the other areas at the plant, the shallow subsurface material at the site consisted mainly of sand and some gravel with less than 1% of clay and silt. The upper 12 inches of surface material in the storage yard was coarse sand, gravel and stones. However, areas outside the yard are typically covered with grass and have natural soil.

The particle size distribution of subsurface materials from locations (75, 350) and (75, 450) at the storage yard was investigated more precisely by fractionating soil core samples from various depths. The masses of

seven size fractions (>1000, 1000-500, 500-250, 250-125, 125-90, 90-53, and 53-0 μm) were determined by first sieving a section of soil core through a series of standard size steel meshes and then weighing each size fraction. Although the core segments contained varying distributions of particle sizes, the subsurface material was predominantly fine and medium sand with considerable gravel mainly near the surface. The results from the two cores are similar; therefore, two typical particle size distributions in core segments from location (75, 450) are shown in Figure 18: (A) material nearest the surface containing substantial amounts of fine gravel and (B) sandy material from a depth below 2 feet. The mean particle size of the sandy material was typically about 200 μm.

The hydraulic conductivity of water through two soil samples from the lower region of the unsaturated zone was measured in the laboratory by the falling head method (Freeze and Cherry, 1979). In these measurements, about 50 g of soil was added to a glass column that was fitted at the base with a fritted-glass plate and connected at the top to an upright burette. While water from the burette flowed through the sand, the change in water head in the burette and the flow rate were measured. The saturated hydraulic conductivity (k_s) was calculated by using Equation (1) (Freeze and Cherry, 1979):

$$k_s = (aL/A\delta t)\ln(h_i/h_t) \qquad (1)$$

where, L is the thickness of the soil column, δt is the time interval, h_i is initial head of fluid in the burette, h_t is the head of fluid in the burette after time δt, and a and A are the cross-sectional areas of the burette and soil column, respectively. From these tests the average saturated hydraulic conductivity of the soil to water was 5×10^{-3} cm/sec.

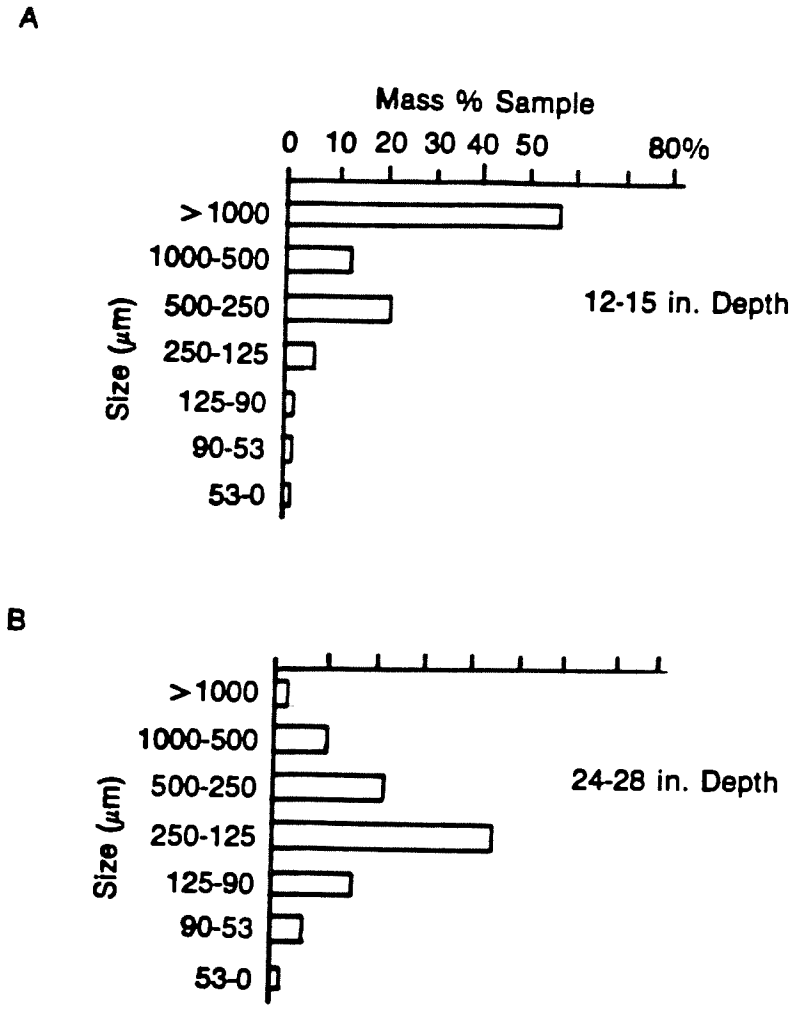


Figure 18. Particle size distribution in subsurface samples from the machine storage yard at coring location (75, 450). (A) The sample nearest the surface zone, containing fine gravel. (B) Fine-medium sand most typical of the subsurface material.

The organic carbon content of a sample of sandy material from the deeper region of the unsaturated zone was measured using a carbon analyser (Abdul et al, 1987) and was approximately 0.5 percent.

DISCUSSION

Based on the distributions and concentrations of contaminants measured at the site, it was possible to assess the situation and to determine what clean-up steps were needed, if any.

Polychlorinated Biphenyls (PCBs): Of 27 sampling locations in the storage yard and 6 outside the yard, PCBs were detected at only six locations. The total PCB levels ranged from undetectable to 4 mg/kg and exceeded 1 mg/kg at only two locations, both being in the certral zone of the storage yard. At this time, there are no regulations which apply directly to low level soil contamination by small oil leaks over a long period. Federal spill cleanup policy (Federal Register, 1987) applies only to spills of oils with more than 50 ppm PCBs, occurring after 1987. However, the concentrations of PCBs found at the time of the site investigation can at least be compared to the levels that the policy requires after site cleanup. The machine storage yard represented a fenced, restricted access area. According to the policy, when a spill has occurred in a restricted-access area, it is necessary to clean the contaminated plot to a soil PCB concentration of 25 ppm (mg/kg) by weight. The stricter requirements for decontaminating spills in nonrestricted-access areas would also not remove PCBs to the 4 ppm (mg/kg) level. At such places, contaminated soil should be decontaminated to 10 ppm (mg/kg)

PCBs by weight. At the machine storage yard the levels of PCBs are less than the levels to be left behind after cleanup of either the restricted or nonrestricted areas.

Moreover, the low level PCBs, if left in place at the storage site could not migrate through the unsaturated zone to the underlying perched water table (below a depth of 6 feet). The migaration of PCBs, due to leaching by rainfall, through soils is retarded by the strong adsorption of PCBs on soil particles. Adsorption is determined by the K_d, i.e. the adsorption coefficients of the compounds. K_d defines the concentration of contaminant in water (C_w) in equilibrium with contaminant adsorbed on soil (C_s) according to equation 2.

$$C_s = K_d \times C_w \qquad (2)$$

The value of K_d can be estimated from the octanol-water partition coefficient (Kow) and the organic carbon content of the soil (Foc) using equations 3 and 4 (Abdul et al., 1987).

$$K_d = Foc \times Koc \qquad (3)$$

$$\log Koc = 1.04 \log Kow - 0.88 \qquad (4)$$

For the machine storage site, where the Foc of the surface material is about 0.5% and for PCBs whose Kow is about 4×10^5, a value of $K_d = 442$ was calculated. Based on this value of K_d, infiltrating water in equilibrium with surface soil having 4 mg/kg PCBs could remove an aqueous concentration of just 9.0×10^{-3} mg/L. As soon as these dissolved PCBs contacted clean soil, however, perhaps one centimeter deeper, the aqueous concentration of

9.0×10^{-3} mg/L would be reduced to 20.5×10^{-6} mg/L at equilibrium, according to the same equations. Thus, water percolating down from the contaminated surface soil would be readily cleansed when it had migrated a very short distance.

Heavy Metals: The mobility of metals through soils is dependent on the cation exchange capacity (CEC) of the soil. The CEC is defined as the quantity of exchangeable cations in milliequivalents per 100 g of soil that can adsorb on the negatively charged particles (clay minerals). Typically in the approximately neutral environment of surface soils at the site (pH 6-7), where the CEC is expected to range from 5 to 10 meq/100 g of soil, the mobility of metals is insignificant (Abdul et al., 1988b; Grimshaw, 1971). The cation exchange of metals, including chromium, nickel, lead, cadimum, iron, and zinc, with soil cations such as Ca^{+2} and Mg^{+2} can explain why they were contained in the thin upper layer above 12 inches at the contaminated site. Table 1 summarizes the results of measuring these six metals at the machine storage yard in the surface and subsurface layers and compares their concentrations with average background values found in Michigan (MDNR, 1988), and in Pennsylvania and Tennessee (EPRI, 1986). From a comparison of the results at the site with the reference values, it apppears that the subsurface concentrations of these metals represented background levels, and even the surface concentrations exceeded the reference ranges only for lead, cadmium and perhaps zinc.

The results of measurements of heavy metals in the leachate from the most contaminated surface soil (EP Toxicity test) are given in Table 2. These results indicate that none of the six metals in the surface soil was leached under the conditions of the test, which uses acetic acid to lower the pH to 5. Thus, the influx of even acid precipitation could not cause

Table 1. Heavy metal concentrations in soils from the machine storage area and typical background averages.

Metal	Storage Yard Maximum conc.[1] Surface (mg/kg soil)	Subsurf. (mg/kg soil)	Michigan avg.[2] Sand (mg/kg soil)	Clay (mg/kg soil)	Pennsylvania[3] Soils (mg/kg soil)	Tennessee[3] Soils (mg/kg soil)
Chromium	74	5.7	3-4	9-25	66-100	26-74
Nickel	34	5.2	3-10	25-34	25-45	6-17
Lead	210	2.9	9-14	13-23	25-32	5-19
Zinc	140	16	--	41-51	81-115	25-168
Iron	34000	5000	--	--	37000-56000	13000-47000
Cadmium	5.6	<1	1-1.4	1-1.6	--	--

[1]Total metal concentration in soil sample measured by the inductively coupled plasma method after nitric acid digestion.

[2]MDNR (1988).

[3]EPRI (1986).

Table 2. Metal leaching measurements for the most contaminated surface soil at the machine storage yard.

Metal	Concentration (mg/kg) Soil sample locations[1] (50, 400)	(100, 400)	(200, 100)	RCRA[2] stds	Drinking[3] water stds
Chromium	<0.03	<0.03	<0.03	5.0	0.05
Nickel	<0.05	0.07	<0.05	--	--
Lead	0.05	0.06	<0.02	5.0	0.05
Zinc	0.08	0.25	0.02	500	5.0
Iron	4.1	5.5	0.33	--	--
Cadmium	0.01	0.01	<0.005	1.0	0.01

[1]Metal concentration in leachate after overnight extraction (pH 5) following the EP Tox Test, RCRA Method 1310 (USEPA, 1986).

[2]Title 40, CFR, Sec. 261.24.; MDNR (1985).

[3]Title 40, CFR, Sec. 141 and 143.

significant migration of the metals. Further, the concentrations of the metals in the acidic leachate were within the RCRA and Federal Drinking Water Standards. Based on these results, like those for PCBs, there was no need for site remediation due to contamination by metals.

Total Hydrocarbons - Freon Extractables: When oily hydrocarbon mixtures, such as the Freon extractable material or total hydrocarbons measured at the machine storage yard, drain through soils, they leave behind a residual fraction trapped in the pore spaces between soil grains. The residual oil is not continuous and cannot migrate under the influence of gravity (Abdul, 1988). This residual fraction could occupy about 22% of the pore volume as determined by laboratory measurements on the soil at the Hydra-matic site. A residual oil volume of 22% is equivalent to 50,000 mg of oil per kg of soil (57 mL oil/kg of soil). Even this relatively low, immobile concentration of oil is much higher than the levels found in the surface soil at the most contaminated locations in the storage yard. The maximum concentration of total hydrocarbon found at the site (at location 100, 400) was only 14,000 mg/kg of soil. This level of contamination is equivalent to 5.8% saturation of the pore spaces. As an example, based on similar theoretical considerations, it would take about 11,000 gallons of oil to fill the residual volume of a soil layer 200 ft by 100 ft by 1 ft. Since the surface layer (1 ft) had much less oil than that required for residual saturation, the results suggested that there had never been a massive spill of oils to form a surface pool to cause significant migration through the unsaturated zone. Instead, the minor drips and spills from the disused machinery could not saturate the surface region in the yard. The lower levels of hydrocarbon contamination (about 200 mg/kg) typical of much of the yard were equivalent to less than 0.1% pore saturation and would be

even less able to migrate under the influence of processes such as rainwater percolation.

No evidence of contamination by volatile organic compounds (VOCs) was found during coring at the machine storage yard and regions outside the yard when the surface and subsurface soil were tested using a portable photoionization detector, able to detect <1 ppm organic vapor in air. Since residual VOCs were not found in the soil, easily dissolved and vaporized organic contaminants such as gasoline were unlikely to have been present. The absence of both volatile and oily contaminants in the lower subsurface zone further demonstrated that contamination did not spread in any form beyond the upper 22 inches of the site.

CONCLUDING REMARKS

Because of the low concentrations and limited vertical migration of the contaminants, and their insignificant potential for future migration, the site could have been left in its then current state. However, Hydramatic plant management decided to excavate the surface soil in PCB-containing areas, prior to grading the site. With the agreement of the Michigan Department of Natural Resources, an area of about 27,000 ft^2 including the central zone of higher contaminant concentrations in the storage yard, was excavated to a depth of 2 ft (Figure 19). Another more lightly affected area, about 5,000 ft^2, was excavated to 1 ft. The excavated soil, about 60,000 ft^3, disposed of as nonhazardous waste, represented only a small part of the surface and subsurface material in the machine storage area. If the same areas had been excavated down to the water table, at a depth of six feet, about four times as much soil would have been involved. The limited extent of the actual excavation was

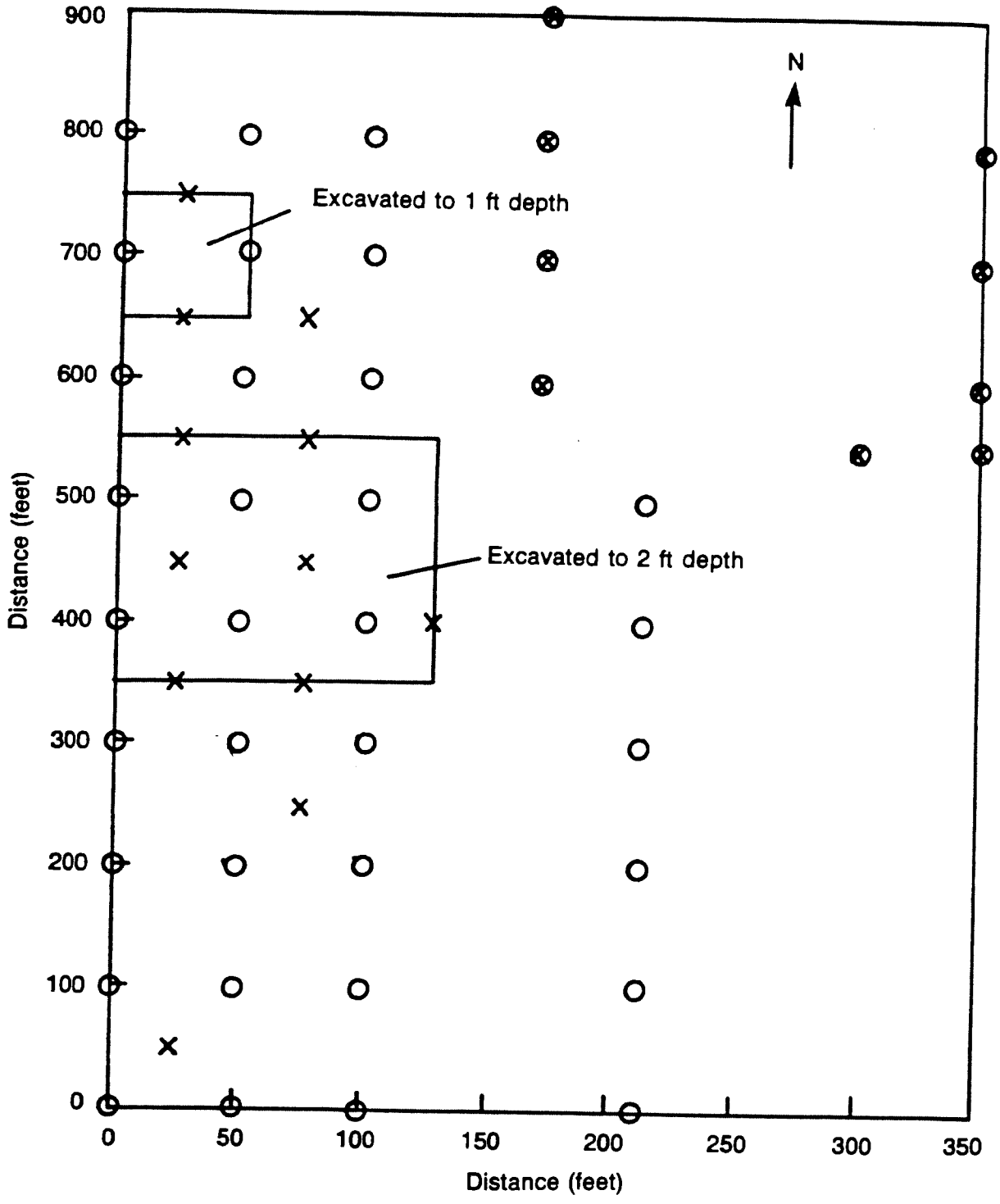


Figure 19. Areas excavated at the machine storage yard (1988).

possible only because of the precise delineation of the shallow contaminated zone demonstrated by the phased soil-coring investigation at the site.

Using the wrong methods of investigation could have overestimated the soil contamination. The standard device, most commonly used to sample subsurface material, is the split spoon sampler. In field tests of the GMR sampler and split spoon sampler at the storage yard, the GMR sampler showed contamination only in the upper portion of the soil core down to a depth of 22 inches, but the split spoon sampler showed cross-contamination by surface material in samples taken as deep as 6 feet (Gibson and Abdul, 1989). Thus, the contamination would have appeared to extend much deeper based on erroneous results if the split-spoon method had been used to investigate the unsaturated zone at this site.

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APPENDIX B

LEGAL SURVEY OF LAND TO BE TRANSFERRED

DRAWING OF DESCRIPTION

SHOWING PROPERTY BEING CONVEYED FROM THE RACER TRUST TO THE WAYNE COUNTY AIRPORT AUTHORITY, BEING OF PART OF SECTION 12, T. 3 S., R. 7 E., YPSILANTI TOWNSHIP, WASHTENAW COUNTY, AND OF PART OF SECTION 7, T. 3 S., R. 8 E., VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN.

MARCH 6, 2013

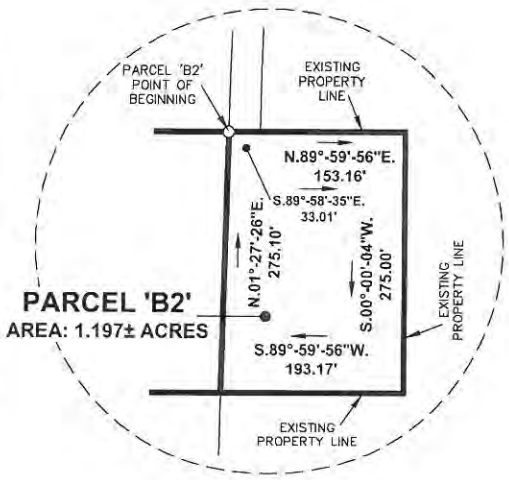
SHEET 1 OF 2 SHEETS

0' 30' 75' 150' 300' 600'

SCALE: 1"= 300'

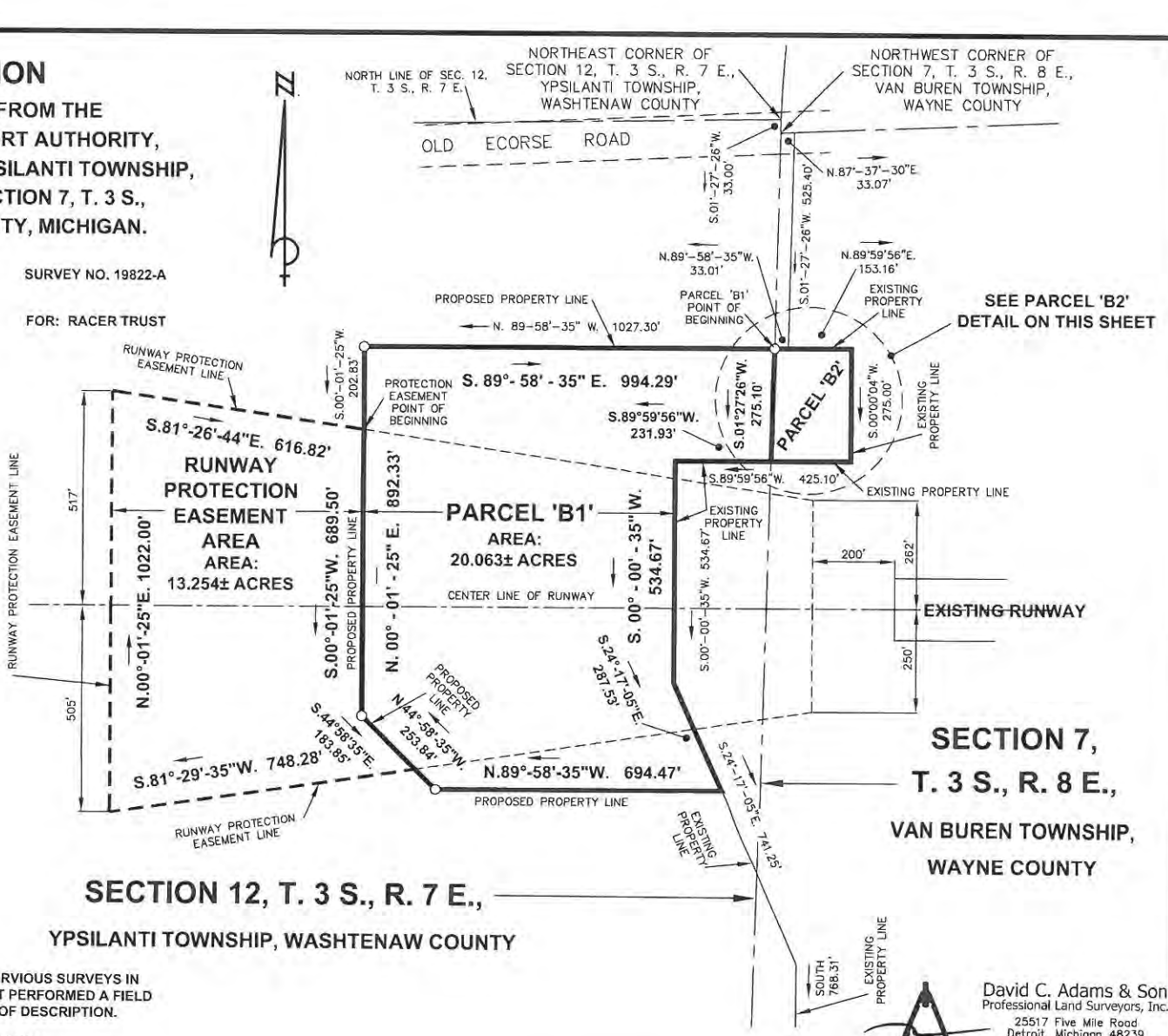
SURVEY NO. 19822-A

FOR: RACER TRUST



PARCEL 'B2' DETAIL

SCALE: NONE



DRAWING OF DESCRIPTION NOTES

THIS DRAWING OF DESCRIPTIONS HAS BEEN PREPARED FROM OUR PERVIOUS SURVEYS IN THIS AREA AND FROM AVAILABLE MUNICIPAL RECORDS. WE HAVE NOT PERFORMED A FIELD SURVEY IN CONJUNCTION WITH THE PREPARATION OF THIS DRAWING OF DESCRIPTION.

EXISTING EASEMENTS AFFECTING THESE PARCELS HAVE NOT BEEN SHOWN.

David C. Adams & Son
Professional Land Surveyors, Inc.
25517 Five Mile Road
Detroit, Michigan 48239
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Fax: 313-538-8438
www.DCAsurveys.com

ADAMS & SON
PROFESSIONAL SURVEYORS

PARCEL 'B1' DESCRIPTION

PART OF THE NORTHEAST 1/4 OF SECTION 12, T. 3 S, R. 7 E., YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SECTION 12, T. 3 S., R. 7 E., YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN; RUNNING THENCE SOUTH 01 DEGREE 27 MINUTES 26 SECONDS WEST, ALONG THE EAST LINE OF SAID SECTION 12, A DISTANCE OF 33.00 FEET TO THE NORTHWEST CORNER OF SECTION 7, T. 3 S., R. 8 E., VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN; THENCE NORTH 87 DEGREES 37 MINUTES 30 SECONDS EAST, ALONG THE NORTH LINE OF SAID SECTION 7, A DISTANCE OF 33.07 FEET TO A POINT; THENCE SOUTH 01 DEGREE 27 MINUTES 26 SECONDS WEST A DISTANCE OF 525.40 FEET TO A POINT; THENCE NORTH 89 DEGREES 58 MINUTES 35 SECONDS WEST A DISTANCE OF 33.01 FEET TO A POINT ON THE EAST LINE OF SAID SECTION 12, SAID POINT BEING ALSO THE POINT OF BEGINNING OF THE PARCEL OF LAND HEREIN BEING DESCRIBED; PROCEEDING THENCE FROM SAID POINT OF BEGINNING SOUTH 01 DEGREE 27 MINUTES 26 SECONDS WEST, ALONG THE EAST LINE OF SAID SECTION 12, A DISTANCE OF 275.10 FEET TO A POINT; THENCE SOUTH 89 DEGREES 59 MINUTES 56 SECONDS WEST A DISTANCE OF 231.93 FEET TO A POINT; THENCE SOUTH 00 DEGREES 00 MINUTES 35 SECONDS WEST A DISTANCE OF 534.67 FEET TO A POINT; THENCE SOUTH 24 DEGREES 17 MINUTES 05 SECONDS EAST A DISTANCE OF 287.53 FEET TO A POINT; THENCE NORTH 89 DEGREES 58 MINUTES 35 SECONDS WEST A DISTANCE OF 694.47 FEET TO A POINT; THENCE NORTH 44 DEGREES 58 MINUTES 35 SECONDS WEST A DISTANCE OF 253.84 FEET TO A POINT; THENCE NORTH 00 DEGREES 01 MINUTE 25 SECONDS EAST A DISTANCE OF 892.33 FEET TO A POINT; THENCE SOUTH 89 DEGREES 58 MINUTES 35 SECONDS EAST A DISTANCE OF 994.29 FEET TO THE POINT OF BEGINNING. CONTAINING 20.063 ACRES, MORE OR LESS, OF LAND IN AREA.

PARCEL 'B2' DESCRIPTION

PART OF THE NORTHWEST 1/4 OF SECTION 7, T. 3 S, R. 8 E., VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SECTION 12, T. 3 S., R. 7 E., YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN; RUNNING THENCE SOUTH 01 DEGREE 27 MINUTES 26 SECONDS WEST, ALONG THE EAST LINE OF SAID SECTION 12, A DISTANCE OF 33.00 FEET TO THE NORTHWEST CORNER OF SECTION 7, T. 3 S., R. 8 E., VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN; THENCE NORTH 87 DEGREES 37 MINUTES 30 SECONDS EAST, ALONG THE NORTH LINE OF SAID SECTION 7, A DISTANCE OF 33.07 FEET TO A POINT; THENCE SOUTH 01 DEGREE 27 MINUTES 26 SECONDS WEST A DISTANCE OF 525.40 FEET TO THE POINT OF BEGINNING OF THE PARCEL OF LAND HEREIN BEING DESCRIBED; PROCEEDING THENCE FROM SAID POINT OF BEGINNING NORTH 89 DEGREES 59 MINUTES 56 SECONDS EAST A DISTANCE OF 153.16 FEET TO A POINT; THENCE SOUTH 00 DEGREES 00 MINUTES 04 SECONDS WEST A DISTANCE OF 275.00 FEET TO A POINT; THENCE SOUTH 89 DEGREES 59 MINUTES 56 SECONDS WEST A DISTANCE OF 193.17 FEET TO A POINT ON THE WEST LINE OF SAID SECTION 7; THENCE NORTH 01 DEGREE 27 MINUTES 26 SECONDS EAST, ALONG THE WEST LINE OF SAID SECTION 7, A DISTANCE OF 275.10 FEET TO A POINT; THENCE SOUTH 89 DEGREES 58 MINUTES 35 SECONDS EAST A DISTANCE OF 33.01 FEET TO THE POINT OF BEGINNING. CONTAINING 1.197 ACRES, MORE OR LESS, OF LAND IN AREA.

RUNWAY PROTECTION EASEMENT DESCRIPTION

PART OF THE NORTHWEST 1/4 OF SECTION 12, T. 3 S, R. 7 E., YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF SECTION 12, T. 3 S., R. 7 E., YPSILANTI TOWNSHIP, WASHTENAW COUNTY, MICHIGAN; RUNNING THENCE SOUTH 01 DEGREE 27 MINUTES 26 SECONDS WEST, ALONG THE EAST LINE OF SAID SECTION 12, A DISTANCE OF 33.00 FEET TO THE NORTHWEST CORNER OF SECTION 7, T. 3 S., R. 8 E., VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN; THENCE NORTH 87 DEGREES 37 MINUTES 30 SECONDS EAST, ALONG THE NORTH LINE OF SAID SECTION 7, A DISTANCE OF 33.07 FEET TO A POINT; THENCE SOUTH 01 DEGREE 27 MINUTES 26 SECONDS WEST A DISTANCE OF 525.40 FEET TO A POINT; THENCE NORTH 89 DEGREES 58 MINUTES 35 SECONDS WEST, ACROSS THE LINE COMMON TO SAID SECTIONS 7 AND 12 AND INTO SAID SECTION 12, A DISTANCE OF 1027.30 FEET TO A POINT; THENCE SOUTH 00 DEGREES 01 MINUTE 25 SECONDS WEST, A DISTANCE OF 202.83 FEET TO THE POINT OF BEGINNING OF THE PARCEL OF LAND HEREIN BEING DESCRIBED; PROCEEDING THENCE FROM SAID POINT OF BEGINNING SOUTH 00 DEGREES 01 MINUTE 25 SECONDS WEST A DISTANCE OF 689.50 FEET TO A POINT; THENCE SOUTH 44 DEGREES 58 MINUTES 35 SECONDS EAST A DISTANCE OF 183.85 FEET TO A POINT; THENCE SOUTH 81 DEGREES 29 MINUTES 35 SECONDS WEST A DISTANCE OF 748.28 FEET TO A POINT; THENCE NORTH 00 DEGREES 01 MINUTE 25 SECONDS EAST A DISTANCE OF 1022.00 FEET TO A POINT; THENCE SOUTH 81 DEGREES 26 MINUTES 44 SECONDS EAST A DISTANCE OF 616.82 FEET TO THE POINT OF BEGINNING. CONTAINING 13.254 ACRES, MORE OR LESS, OF LAND IN AREA.

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APPENDIX C

LABORATORY REPORTS AND DATA VALIDATION MEMORANDUM

CONESTOGA-ROVERS
& ASSOCIATES

14496 Sheldon Road, Suite #200
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www.CRAworld.com

MEMORANDUM

TO:	Beth Landale	REF. NO.:	017358-23
FROM:	Rawa Fleisher/tl/102/DET	DATE:	December 6, 2012
RE:	Data Quality Assessment and Reduced Validation RFI Investigation - February through April 2012 Willow Run Powertrain Site - Ypsilanti, Michigan	SSOW NO:	11991-T01-008

The following details a quality assessment and validation of the analytical data resulting from the February through August 2012, collection of 181 soil samples, eight (8) groundwater samples, 16 air samples, and 25 quality control samples from the Willow Run Powertrain Site in Ypsilanti, 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) in accordance 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 Organic Data 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), semi-volatile organic compounds (SVOC), polychlorinated biphenyls (PCB) 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"; these concentrations should be qualified as estimated (J) values unless qualified otherwise in this memorandum.

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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.

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 these concentrations with a "B" 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 that could be evaluated with the exception of the qualified samples presented in Table 4.

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 or the laboratory and the NFG.

The MS/MSD percent recoveries and associated RPD acceptance criteria with the exception of the qualified samples present in Table 5.

Laboratory Control Sample Analyses

The laboratory control sample (LCS) analyses serves as a monitor of the overall performance in all steps of the sample analysis and is analyzed with each sample batch. The LCS percent recoveries were evaluated against method and laboratory established control limits.

The LCS 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 6.

Tentatively Identified Compounds – Organic Analyses

The air (soil gas) sample GC/MS data was further evaluated for isopropyl alcohol (IPA) by conducting a forward library search to identify tentative matches between the GS/MS instrument response and the laboratory's mass spectral library, reporting these "matches" as tentatively identified compounds (TIC). These compounds should be qualified as (J) tentatively identified compounds (TIC) with approximate concentrations.

Field Quality Assurance/Quality Control

The field quality assurance/quality control consisted of 11 field duplicate sample sets and 14 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. 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.

Table 7 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 remainder of the sampling event.

Trip Blank Samples

To monitor potential cross-contamination of VOC during 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 8. No additional target analytes were reported as detected in the trip blank samples.

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 with the exception of the following:

- VOC and SVOC data were rejected in a number of samples due to MS/MSD violations and;
- VOC and SVOC data were rejected in a number of samples due to LCS violations.

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	QC Samples	Parameters: TCL VOC	VOC (T015)	TCL SVOC	PCB	TPH- GRO	TPH-DRO	Select TAL Metals	Cr, Cr III, Cr VI	Amenable Cyanide
CRA SDG No: 01-07	**TA-NC SDG Number: 240-8714**															
SO-17358-022112-DR-039	CRA-702SB	soil	1	2	2/21/2012	2:15:00 PM		X		X	X			X		
SO-17358-022112-DR-040	CRA-702SB	soil	2	4	2/21/2012	2:20:00 PM		X		X	X			X		
SO-17358-022212-DR-041	CRA-712I	soil	1	2	2/22/2012	4:10:00 PM		X		X	X			X		
SO-17358-022212-DR-042	CRA-712I	soil	4	6	2/22/2012	4:15:00 PM		X		X	X			X		
TB-17358-022112	Trip Blank	soil			2/21/2012	2/21/2012	Trip Blank	X								
CRA SDG No: 01-08	**TA-NC SDG Number: 240-8798**															
SO-17358-022712-DR-043	CRA-711I	soil	0	2	2/27/2012	10:07:00 AM		X		X	X			X		
SO-17358-022712-DR-044	CRA-711I	soil	0	2	2/27/2012	10:10:00 AM	FD (043) MS/MSD	X		X	X			X		
SO-17358-022712-DR-045	CRA-711I	soil	5	7	2/27/2012	10:15:00 AM	MS/MSD	X		X	X			X		
TB-17358-022712	Trip Blank	soil	---	---	2/27/2012	2/27/2012	Trip Blank	X								
CRA SDG No: 01-10	**TA-NC SDG Number: 240-8933**															
SO-17358-022912-DR-046	CRA-737M	soil	1	2	2/29/2012	11:10:00 AM									X	
SO-17358-022912-DR-047	CRA-737M	soil	5	7	2/29/2012	11:25:00 AM									X	
SO-17358-030112-DR-048	CRA-731I	soil	1	3	3/1/2012	10:40:00 AM	MS/MSD	X		X	X			X		
SO-17358-030112-DR-049	CRA-731I	soil	6	8	3/1/2012	10:55:00 AM		X		X	X			X		
SO-17358-030112-DR-050	CRA-730SB	soil	1	3	3/1/2012	4:05:00 PM									X	
SO-17358-030112-DR-051	CRA-730SB	soil	4	6	3/1/2012	4:10:00 PM		X		X	X			X		
SO-17358-030112-DR-052	CRA-730SB	soil	7	9	3/1/2012	4:25:00 PM									X	
TB-17358-030112A	Trip Blank	soil	---	---	3/1/2012	3/1/2012	Trip Blank	X								

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	QC Samples	Parameters: TCL VOC	VOC (TO15)	TCL SVOC	PCB	TPH- GRO	TPH-DRO	Select TAL Metals	Cr, Cr III, Cr VI	Amenable Cyanide
CRA SDG No: 01-11	TA-NC SDG Number: 240-8986															
SO-17358-030512-CB-119	CRA-757M	soil	0	2	3/5/2012	8:25:00 AM		X		X	X			X	X	
SO-17358-030512-CB-128	CRA-803M	soil	0	2	3/5/2012	3:00:00 PM		X		X	X			X	X	
SO-17358-030512-CB-129	CRA-803M	soil	7	9	3/5/2012	3:10:00 PM	MS/MSD	X		X	X			X	X	
SO-17358-030612-CB-130	CRA-769M	soil	0	2	3/6/2012	8:15:00 AM		X		X	X			X	X	
SO-17358-030612-CB-131	CRA-769M	soil	4	6	3/6/2012	8:25:00 AM		X		X	X			X	X	
SO-17358-030612-CB-132	CRA-789M	soil	0	2	3/6/2012	9:45:00 AM		X		X	X			X	X	
SO-17358-030612-CB-133	CRA-789M	soil	6	8	3/6/2012	9:55:00 AM		X		X	X			X	X	
SO-17358-030612-CB-134	CRA-790M	soil	0	2	3/6/2012	11:00:00 AM	MS/MSD	X		X	X			X	X	
SO-17358-030612-CB-135	CRA-790M	soil	5	7	3/6/2012	11:10:00 AM	MS/MSD	X		X	X			X	X	
SO-17358-030612-CB-136	CRA-792M	soil	0	2	3/6/2012	1:45:00 PM		X		X	X			X	X	
SO-17358-030612-CB-137	CRA-792M	soil	5	7	3/6/2012	1:55:00 PM		X		X	X			X	X	
SO-17358-030512-CB-120	CRA-757M	soil	5	7	3/5/2012	8:35:00 AM		X		X	X			X	X	
SO-17358-030612-CB-138	CRA-793SB	soil	0	2	3/6/2012	2:55:00 PM		X		X	X			X	X	
SO-17358-030612-CB-139	CRA-793SB	soil	5	7	3/6/2012	3:00:00 PM		X		X	X			X	X	
SO-17358-030612-CB-140	CRA-795M	soil	0	2	3/6/2012	3:50:00 PM		X		X	X			X	X	
SO-17358-030612-CB-141	CRA-795M	soil	5	7	3/6/2012	4:00:00 PM	MS/MSD	X		X	X			X	X	
TB-17358-030612-CB	Trip Blank	soil	---	---	3/6/2012	3/6/2012	Trip Blank	X								
SO-17358-030512-CB-121	CRA-807M	soil	0	2	3/5/2012	9:40:00 AM		X		X	X			X	X	
SO-17358-030512-CB-122	CRA-807M	soil	5	7	3/5/2012	9:50:00 AM		X		X	X			X	X	
SO-17358-030512-CB-123	CRA-808M	soil	0	2	3/5/2012	11:30:00 AM		X		X	X			X	X	
SO-17358-030512-CB-124	CRA-808M	soil	0	2	3/5/2012	11:35:00 AM	FD (123)	X		X	X			X	X	
SO-17358-030512-CB-125	CRA-808M	soil	5.5	7.5	3/5/2012	11:40:00 AM		X		X	X			X	X	
SO-17358-030512-CB-126	CRA-820M	soil	2.5	4.5	3/5/2012	2:00:00 PM		X		X	X			X		
SO-17358-030512-CB-127	CRA-820M	soil	6	8	3/5/2012	2:10:00 PM		X		X	X			X		

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	QC Samples	Parameters: TCL VOC	VOC (TO15)	TCL SVOC	PCB	TPH- GRO	TPH-DRO	Select TAL Metals	Cr, Cr III, Cr VI	Amenable Cyanide
CRA SDG No: 01-12	TA-NC SDG Number: 240-9040															
SO-17358-030712-CB-142	CRA-796SB	soil	0	2	3/7/2012	9:35:00 AM		X		X	X			X		
SO-17358-030712-CB-151	CRA-768SB	soil	0	2	3/7/2012	1:30:00 PM		X		X	X			X		
SO-17358-030712-CB-152	CRA-768SB	soil	4	6	3/7/2012	1:35:00 PM		X		X	X			X		
SO-17358-030712-CB-153	CRA-823SB	soil	0	2	3/7/2012	2:15:00 PM		X		X	X			X		
SO-17358-030712-CB-154	CRA-823SB	soil	3	5	3/7/2012	2:20:00 PM		X		X	X			X		
SO-17358-030712-CB-155	CRA-760SB	soil	0	2	3/7/2012	2:40:00 PM		X		X	X			X		
SO-17358-030712-CB-156	CRA-760SB	soil	5	7	3/7/2012	2:45:00 PM	MS/MSD	X		X	X			X		
SO-17358-030712-CB-157	CRA-759SB	soil	0	2	3/7/2012	3:05:00 PM		X		X	X			X	X	
SO-17358-030712-CB-158	CRA-759SB	soil	5	7	3/7/2012	3:10:00 PM		X		X	X			X	X	
SO-17358-030712-CB-159	CRA-815SB	soil	0	2	3/7/2012	3:45:00 PM		X		X	X			X		
SO-17358-030712-CB-160	CRA-815SB	soil	7	9	3/7/2012	3:55:00 PM		X		X	X			X		
SO-17358-030712-CB-143	CRA-796SB	soil	0	2	3/7/2012	9:40:00 AM	FD (142) MS/MSD	X		X	X			X		
SO-17358-030712-DR-055	CRA-729I	soil	1	3	3/7/2012	9:25:00 AM		X		X	X			X		
SO-17358-030712-DR-056	CRA-729I	soil	6	8	3/7/2012	9:35:00 AM		X		X	X			X		
SO-17358-030712-DR-057	CRA-740I	soil	1	3	3/7/2012	2:25:00 PM		X		X	X			X		
SO-17358-030712-DR-058	CRA-740I	soil	7	9	3/7/2012	2:35:00 PM		X		X	X			X		
TB-17358-030712	Trip Blank	soil	---	---	3/7/2012	3/7/2012	Trip Blank	X								
SO-17358-030712-CB-144	CRA-796SB	soil	4	6	3/7/2012	9:45:00 AM		X		X	X			X		
SO-17358-030712-CB-145	CRA-771SB	soil	0	2	3/7/2012	10:35:00 AM		X		X	X			X		
SO-17358-030712-CB-146	CRA-771SB	soil	3	5	3/7/2012	10:40:00 AM		X		X	X			X		
SO-17358-030712-CB-147	CRA-824SB	soil	0	2	3/7/2012	10:45:00 AM		X		X	X			X		
SO-17358-030712-CB-148	CRA-824SB	soil	3.5	5.5	3/7/2012	10:55:00 AM		X		X	X			X		
SO-17358-030712-CB-149	CRA-767SB	soil	0	2	3/7/2012	11:30:00 AM		X		X	X			X		
SO-17358-030712-CB-150	CRA-767SB	soil	3	5	3/7/2012	11:40:00 AM		X		X	X			X		

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	QC Samples	Parameters: TCL VOC	VOC (T015)	TCL SVOC	PCB	TPH- GRO	TPH-DRO	Select TAL Metals	Cr, Cr III, Cr VI	Amenable Cyanide
CRA SDG No: 01-13	TA-NC SDG Number: 240-9143															
SO-17358-030812-CB-161	CRA-739M	soil	2.75	4.75	3/8/2012	9:10:00 AM									X	
SO-17358-030812-CB-170	CRA-818SB	soil	7	9	3/8/2012	1:25:00 PM		X		X	X			X		
SO-17358-030812-CB-171	CRA-818SB	soil	7	9	3/8/2012	1:30:00 PM	FD (170)	X		X	X			X		
SO-17358-030812-CB-172	CRA-819SB	soil	0	2	3/8/2012	1:50:00 PM		X		X	X			X		
SO-17358-030812-CB-173	CRA-819SB	soil	3	5	3/8/2012	2:00:00 PM		X		X	X			X		
SO-17358-030812-CB-174	CRA-819SB	soil	6.5	8.5	3/8/2012	2:20:00 PM		X		X	X			X		
SO-17358-030812-CB-175	CRA-773SB	soil	0	2	3/8/2012	2:25:00 PM		X		X	X			X		
SO-17358-030812-CB-176	CRA-773SB	soil	6	8	3/8/2012	2:25:00 PM		X		X	X			X		
SO-17358-030912-CB-177	CRA-800M	soil	0	2	3/9/2012	8:10:00 AM	MS/MSD	X		X	X			X	X	
SO-17358-030912-CB-178	CRA-800M	soil	5	7	3/9/2012	8:15:00 AM		X		X	X			X	X	
SO-17358-030912-CB-179	CRA-798M	soil	0	2	3/9/2012	10:25:00 AM		X		X	X			X	X	
SO-17358-030812-CB-162	CRA-739M	soil	7	9	3/8/2012	9:20:00 AM									X	
SO-17358-030912-CB-180	CRA-798M	soil	5	7	3/9/2012	10:30:00 AM		X		X	X			X	X	
SO-17358-030912-CB-181	CRA-799M	soil	0	2	3/9/2012	1:05:00 PM		X		X	X			X	X	
SO-17358-030912-CB-182	CRA-799M	soil	5	7	3/9/2012	1:10:00 PM		X		X	X			X	X	
SO-17358-030912-CB-183	CRA-801M	soil	0	2	3/9/2012	2:30:00 PM		X		X	X			X	X	
SO-17358-030912-CB-184	CRA-801M	soil	3	5	3/9/2012	2:40:00 PM		X		X	X			X	X	
TB-17358-030912	Trip Blank	soil	—	---	3/9/2012	3/9/2012	Trip Blank	X								
SO-17358-030812-DR-059	CRA-741I	soil	0	2	3/8/2012	9:15:00 AM		X		X	X			X	X	
SO-17358-030812-DR-060	CRA-741I	soil	6	8	3/8/2012	9:20:00 AM		X		X	X			X	X	
SO-17358-030812-CB-163	CRA-802SB	soil	0	2	3/8/2012	10:05:00 AM					X					
SO-17358-030812-CB-164	CRA-802SB	soil	6.5	8.5	3/8/2012	10:10:00 AM					X					
SO-17358-030812-CB-165	CRA-831SB	soil	0	2	3/8/2012	10:25:00 AM					X					
SO-17358-030812-CB-166	CRA-831SB	soil	6.5	8.5	3/8/2012	10:30:00 AM					X					
SO-17358-030812-CB-167	CRA-817SB	soil	0	2	3/8/2012	11:45:00 AM		X		X	X			X		
SO-17358-030812-CB-168	CRA-817SB	soil	5.5	7.5	3/8/2012	11:50:00 AM		X		X	X			X		
SO-17358-030812-CB-169	CRA-818SB	soil	0	2	3/8/2012	1:20:00 PM		X		X	X			X		

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	QC Samples	Parameters: TCL VOC	VOC (TO15)	TCL SVOC	PCB	TPH- GRO	TPH-DRO	Select TAL Metals	Cr, Cr III, Cr VI	Amenable Cyanide
CRA SDG No: 01-15	TA-NC SDG Number: 240-9220															
SO-17358-031212-CB-185	CRA-732M	soil	0	2	3/12/2012	9:10:00 AM									X	
TB-17358-031312S	Trip Blank	soil	---	---	3/13/2012	3/13/2012	Trip Blank	X								
SO-17358-031212-DR-062	CRA-725I	soil	0	2	3/12/2012	9:40:00 AM		X		X	X			X		
SO-17358-031212-DR-063	CRA-725I	soil	6	8	3/12/2012	9:45:00 AM		X		X	X			X		
SO-17358-031212-DR-064	CRA-724I	soil	0	2	3/12/2012	2:05:00 PM		X		X	X			X	X	
SO-17358-031212-DR-065	CRA-724I	soil	6	8	3/12/2012	2:10:00 PM		X		X	X			X	X	
SO-17358-031312-DR-066	CRA-720I	soil	0	2	3/13/2012	9:05:00 AM		X		X	X			X	X	
SO-17358-031312-DR-067	CRA-720I	soil	8	10	3/13/2012	9:20:00 AM		X		X	X			X	X	
GW-17358-031312-DR-070	CRA-789M	water	---	---	3/13/2012	10:45:00 AM		X		X	X			X		
TB-17358-031312W	Trip Blank	water	---	---	3/13/2012	3/13/2012	Trip Blank	X								
SO-17358-031212-CB-186	CRA-732M	soil	6.5	8.5	3/12/2012	9:15:00 AM									X	
SO-17358-031212-CB-187	CRA-812SB	soil	0	2	3/12/2012	9:45:00 AM		X		X	X			X		
SO-17358-031212-CB-188	CRA-812SB	soil	6	8	3/12/2012	9:50:00 AM		X		X	X			X		
SO-17358-031212-CB-189	CRA-811SB	soil	0	2	3/12/2012	10:10:00 AM		X		X	X			X		
SO-17358-031212-CB-190	CRA-811SB	soil	5.5	7.5	3/12/2012	10:15:00 AM		X		X	X			X		
SO-17358-031212-CB-191	CRA-811SB	soil	5.5	7.5	3/12/2012	10:20:00 AM	FD (190)	X		X	X			X		
SO-17358-031212-CB-192	CRA-810SB	soil	0	2	3/12/2012	10:40:00 AM		X		X	X			X		
SO-17358-031212-CB-193	CRA-810SB	soil	7	9	3/12/2012	10:45:00 AM		X		X	X			X		

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	QC Samples	Parameters: TCL VOC	VOC (TO15)	TCL SVOC	PCB	TPH- GRO	TPH-DRO	Select TAL Metals	Cr, Cr III, Cr VI	Amenable Cyanide
CRA SDG No: 01-16	**TA-NC SDG Number: 240-9295**															
SO-17358-031412-CB-194	CRA-827ML	soil	2.25	4.25	3/14/2012	8:45:00 AM		X		X	X			X	X	
SO-17358-031412-DR-068	CRA-703I	soil	0	2	3/14/2012	2:10:00 PM		X		X	X			X		
SO-17358-031412-DR-069	CRA-703I	soil	0	2	3/14/2012	2:12:00 PM	FD (068) MS/MSD	X		X	X			X		
SO-17358-031412-DR-071	CRA-703I	soil	4	6	3/14/2012	2:15:00 PM		X		X	X			X		
SO-17358-031512-DR-072	CRA-784I	soil	0	2	3/15/2012	8:55:00 AM	MS/MSD	X		X	X			X		
SO-17358-031512-DR-073	CRA-784I	soil	2	4	3/15/2012	9:00:00 AM		X		X	X			X		
SO-17358-031512-DR-074	CRA-836SB	soil	0	2	3/15/2012	2:00:00 PM		X		X	X			X		
SO-17358-031512-DR-075	CRA-836SB	soil	4	6	3/15/2012	2:05:00 PM		X		X	X			X		
TB-17358-031512	Trip Blank	soil	---	---	3/15/2012	3/15/2012	Trip Blank	X								
SO-17358-031412-CB-195	CRA-772SB	soil	1.5	3.5	3/14/2012	1:15:00 PM		X		X	X			X		
SO-17358-031412-CB-196	CRA-826ML	soil	1	3	3/14/2012	1:45:00 PM		X		X	X			X	X	
SO-17358-031412-CB-197	CRA-766SB	soil	0	2	3/14/2012	3:40:00 PM		X		X	X			X	X	
SO-17358-031412-CB-198	CRA-766SB	soil	3	5	3/14/2012	3:45:00 PM		X		X	X			X	X	
SO-17358-031512-CB-199	CRA-786SB	soil	1.5	3.5	3/15/2012	1:00:00 PM		X		X	X			X		
SO-17358-031512-CB-200	CRA-786SB	soil	3.5	5.5	3/15/2012	1:10:00 PM	MS/MSD	X		X	X			X		
SO-17358-031512-CB-201	CRA-713M	soil	0	2	3/15/2012	2:00:00 PM		X		X	X			X		
SO-17358-031512-CB-202	CRA-713M	soil	6	8	3/15/2012	2:15:00 PM	MS/MSD	X		X	X			X		
CRA SDG No: 01-17	**TA-NC SDG Number: 240-9332**															
SO-17358-031612-DR-076	CRA-717I	soil	0	2	3/16/2012	9:25:00 AM	MS/MSD	X		X	X			X		
SO-17358-031612-DR-077	CRA-717I	soil	2	4	3/16/2012	9:30:00 AM		X		X	X			X		
TB-17358-031612	Trip Blank	soil	---	---	3/16/2012	3/16/2012	Trip Blank	X								

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

								Parameters								
Sample Identification	*Location*	*Matrix*	*Initial Sample Depth (ft. bgs)*	*Final Sample Depth (ft. bgs)*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*QC Samples*	*TCL VOC*	*VOC (T015)*	*TCL SVOC*	*PCB*	*TPH- GRO*	*TPH-DRO*	*Select TAL Metals*	*Cr, Cr III, Cr VI*	*Amenable Cyanide*
CRA SDG No: 01-18	**TA-NC SDG Number: 240-9384**															
SO-17358-031912-CB-203	CRA-728SB	soil	0	2	3/19/2012	9:50:00 AM	MS/MSD	X		X	X			X	X	
SO-17358-032012-CB-212	CRA-726SM	soil	8	10	3/20/2012	11:00:00 AM		X		X	X			X	X	
SO-17358-032012-CB-213	701M	soil	0	2	3/20/2012	2:05:00 PM		X		X	X			X	X	
SO-17358-032012-CB-214	701M	soil	0	2	3/20/2012	2:10:00 PM	FD (213)	X		X	X			X	X	
SO-17358-032012-CB-215	701M	soil	7.5	9.5	3/20/2012	2:15:00 PM		X		X	X			X	X	
SO-17358-032012-DR-078	CRA-726D	soil	0	2	3/20/2012	9:00:00 AM		X		X	X			X	X	
SO-17358-032012-DR-079	CRA-726D	soil	6.5	8.5	3/20/2012	9:10:00 AM		X		X	X			X	X	
TB-17358-032012	Trip Blank	soil	---	---	3/20/2012	3/20/2012	Trip Blank	X								
SO-17358-031912-CB-204	CRA-728SB	soil	7	9	3/19/2012	10:00:00 AM		X		X	X			X	X	
SO-17358-031912-CB-205	CRA-721M	soil	0	2	3/19/2012	1:35:00 PM		X		X	X			X		
SO-17358-031912-CB-206	CRA-721M	soil	3	5	3/19/2012	1:40:00 PM		X		X	X			X		
SO-17358-031912-CB-207	CRA-722M	soil	0	2	3/19/2012	3:05:00 PM		X		X	X			X		
SO-17358-031912-CB-208	CRA-722M	soil	6	8	3/19/2012	3:10:00 PM		X		X	X			X		
SO-17358-032012-CB-209	CRA-726SB	soil	0	2	3/20/2012	9:50:00 AM		X		X	X			X	X	
SO-17358-032012-CB-210	CRA-726SB	soil	6.5	8.5	3/20/2012	9:55:00 AM		X		X	X			X	X	
SO-17358-032012-CB-211	CRA-726SM	soil	0	2	3/20/2012	10:55:00 AM		X		X	X			X	X	

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

								Parameters								
Sample Identification	*Location*	*Matrix*	*Initial Sample Depth (ft. bgs)*	*Final Sample Depth (ft. bgs)*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*QC Samples*	*TCL VOC*	*VOC (TO15)*	*TCL SVOC*	*PCB*	*TPH- GRO*	*TPH-DRO*	*Select TAL Metals*	*Cr, Cr III, Cr VI*	*Amenable Cyanide*
CRA SDG No: 01-19	**TA-NC SDG Number: 240-9458**															
SO-17358-032112-CB-216	CRA-743M	soil	1	3	3/21/2012	8:35:00 AM		X		X	X			X	X	
SO-17358-032112-CB-225	CRA-751M	soil	0	2	3/21/2012	1:40:00 PM		X		X	X			X		
SO-17358-032112-CB-226	CRA-751M	soil	6.5	8.5	3/21/2012	1:45:00 PM		X		X	X			X		
SO-17358-032112-CB-227	CRA-750M	soil	0	2	3/21/2012	2:50:00 PM		X		X	X			X		
SO-17358-032112-CB-228	CRA-750M	soil	0	2	3/21/2012	2:55:00 PM	FD (227)	X		X	X			X		
SO-17358-032112-CB-229	CRA-750M	soil	4	6	3/21/2012	3:00:00 PM		X		X	X			X		
SO-17358-032112-DR-080	CRA-742D	soil	0	2	3/21/2012	2:35:00 PM		X		X	X			X	X	
SO-17358-032112-DR-081	CRA-742D	soil	3	5	3/21/2012	2:45:00 PM		X		X	X			X	X	
TB-17358-032112	Trip Blank	soil	---	---	3/21/2012	3/21/2012	Trip Blank	X								
SO-17358-032112-CB-217	CRA-743M	soil	8	10	3/21/2012	8:40:00 AM		X		X	X			X	X	
SO-17358-032112-CB-218	CRA-744M	soil	0	2	3/21/2012	10:05:00 AM		X		X	X			X		
SO-17358-032112-CB-219	CRA-744M	soil	5.5	7.5	3/21/2012	10:10:00 AM	MS/MSD	X		X	X			X		
SO-17358-032112-CB-220	CRA-744M	soil	2	4	3/21/2012	10:15:00 AM		X		X	X			X		
SO-17358-032112-CB-221	CRA-747SB	soil	0	2	3/21/2012	11:10:00 AM		X		X	X			X		
SO-17358-032112-CB-222	CRA-747SB	soil	6	8	3/21/2012	11:15:00 AM		X		X	X			X		
SO-17358-032112-CB-223	CRA-749M	soil	0	2	3/21/2012	11:55:00 AM		X		X	X			X		
SO-17358-032112-CB-224	CRA-749M	soil	3	5	3/21/2012	12:00:00 PM		X		X	X			X		

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	QC Samples	Parameters: TCL VOC	VOC (TO15)	TCL SVOC	PCB	TPH- GRO	TPH-DRO	Select TAL Metals	Cr, Cr III, Cr VI	Amenable Cyanide
CRA SDG No: 01-20	**TA-NC SDG Number: 240-9554**															
SO-17358-032212-CB-230	CRA-791M	soil	0	2	3/22/2012	8:45:00 AM		X		X	X			X	X	
SO-17358-032212-CB-239	CRA-753M	soil	7.5	9.5	3/22/2012	2:50:00 PM		X		X	X			X		
SO-17358-032312-CB-240	CRA-748SB	soil	1.5	3.5	3/23/2012	9:10:00 AM	MS/MSD	X		X	X			X		
SO-17358-032312-CB-241	CRA-748SB	soil	7	9	3/23/2012	9:15:00 AM		X		X	X			X		
SO-17358-032312-CB-242	CRA-748SB	soil	7	9	3/23/2012	9:20:00 AM	FD (241)	X		X	X			X		
SO-17358-032312-CB-243	CRA-745M	soil	0	2	3/23/2012	10:35:00 AM		X		X	X			X	X	
SO-17358-032312-CB-244	CRA-745M	soil	5.5	7.5	3/23/2012	10:40:00 AM		X		X	X			X	X	
SO-17358-032312-CB-245	CRA-752M	soil	1.5	3.5	3/23/2012	11:50:00 AM		X		X	X			X		
SO-17358-032312-CB-246	CRA-752M	soil	7	9	3/23/2012	11:55:00 AM		X		X	X			X		
SO-17358-032312-CB-247	CRA-809SB	soil	1.25	3.25	3/23/2012	2:15:00 PM		X		X	X			X		
SO-17358-032312-CB-248	CRA-809SB	soil	7.5	9.5	3/23/2012	2:20:00 PM		X		X	X			X		
SO-17358-032212-CB-231	CRA-791M	soil	4	6	3/22/2012	8:50:00 AM		X		X	X			X	X	
SO-17358-032312-DR-082	CRA-785D	soil	0	2	3/23/2012	8:30:00 AM		X		X	X			X	X	
SO-17358-032312-DR-083	CRA-785D	soil	2.5	4.5	3/23/2012	8:35:00 AM		X		X	X			X	X	
TB-17358-032312	Trip Blank	soil	---	---	3/23/2012	3/23/2012	Trip Blank	X								
SO-17358-032212-CB-232	CRA-813SB	soil	0	2	3/22/2012	9:10:00 AM	MS/MSD	X		X	X			X		
SO-17358-032212-CB-233	CRA-813SB	soil	7.5	9.5	3/22/2012	9:20:00 AM		X		X	X			X		
SO-17358-032212-CB-234	CRA-755M	soil	0	2	3/22/2012	9:45:00 AM		X		X	X			X	X	
SO-17358-032212-CB-235	CRA-755M	soil	6	8	3/22/2012	9:55:00 AM		X		X	X			X	X	
SO-17358-032212-CB-236	CRA-814SB	soil	0	2	3/22/2012	10:15:00 AM		X		X	X			X		
SO-17358-032212-CB-237	CRA-814SB	soil	6.5	8.5	3/22/2012	10:20:00 AM		X		X	X			X		
SO-17358-032212-CB-238	CRA-753M	soil	0	2	3/22/2012	2:45:00 PM		X		X	X			X		

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	QC Samples	Parameters: TCL VOC	VOC (T015)	TCL SVOC	PCB	TPH- GRO	TPH-DRO	Select TAL Metals	Cr, Cr III, Cr VI	Amenable Cyanide
CRA SDG No: 01-21	**TA-NC SDG Number: 240-9590**															
SO-17358-032612-CB-249	CRA-775M	soil	0	2	3/26/2012	8:35:00 AM	MS/MSD	X		X	X			X		
SO-17358-032612-CB-258	CRA-821SB	soil	5.5	7.5	3/26/2012	1:30:00 PM		X		X	X			X		
SO-17358-032612-CB-259	CRA-816SB	soil	1	3	3/26/2012	2:15:00 PM		X		X	X			X		
SO-17358-032612-CB-260	CRA-816SB	soil	4.5	6.5	3/26/2012	2:20:00 PM		X		X	X			X		
SO-17358-032612-CB-261	CRA-816SB	soil	6.5	8.5	3/26/2012	2:25:00 PM		X		X	X			X		
SO-17358-032612-CB-262	CRA-830SB	soil	1	3	3/26/2012	2:45:00 PM		X		X	X			X	X	
SO-17358-032612-CB-263	CRA-830SB	soil	6.5	8.5	3/26/2012	2:50:00 PM	MS/MSD	X		X	X			X	X	
SO-17358-032612-CB-264	CRA-832SB	soil	0	2	3/26/2012	3:10:00 PM					X					
SO-17358-032612-CB-265	CRA-832SB	soil	6.5	8.5	3/26/2012	3:15:00 PM					X					
SO-17358-032612-DR-084	CRA-704D	soil	0	2	3/26/2012	2:05:00 PM	MS/MSD	X		X	X			X	X	
SO-17358-032612-DR-085	CRA-704D	soil	3	5	3/26/2012	2:10:00 PM		X		X	X			X	X	
SO-17358-032612-CB-250	CRA-775M	soil	2.5	4.5	3/26/2012	8:40:00 AM		X		X	X			X		
TB-17358-032612	Trip Blank	soil	---	---	3/26/2012	3/26/2012	Trip Blank	X								
SO-17358-032612-CB-251	CRA-775M	soil	4.5	6	3/26/2012	8:45:00 AM		X		X	X			X		
SO-17358-032612-CB-252	CRA-774SB	soil	1.5	3.25	3/26/2012	9:35:00 AM		X		X	X			X	X	
SO-17358-032612-CB-253	CRA-770SB	soil	0	2	3/26/2012	10:45:00 AM		X		X	X			X		
SO-17358-032612-CB-254	CRA-770SB	soil	3	5	3/26/2012	10:50:00 AM		X		X	X			X		
SO-17358-032612-CB-255	CRA-763SB	soil	0	2	3/26/2012	11:15:00 AM		X		X	X			X	X	
SO-17358-032612-CB-256	CRA-763SB	soil	4	6	3/26/2012	11:20:00 AM		X		X	X			X	X	
SO-17358-032612-CB-257	CRA-821SB	soil	3	5	3/26/2012	1:25:00 PM		X		X	X			X		
CRA SDG No: 01-34	**TA-NC SDG Number: 240-10919**															
SO-17358-050212-DR-001	Tank 58	soil	8	9	5/2/2012	10:35:00 AM						X	X			
SO-17358-050212-DR-002	Tank 61	soil	5	7	5/2/2012	4:35:00 PM						X	X			

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	QC Samples	Parameters: TCL VOC	VOC (T015)	TCL SVOC	PCB	TPH- GRO	TPH-DRO	Select TAL Metals	Cr, Cr III, Cr VI	Amenable Cyanide
CRA SDG No: 01-35	**TA-NC SDG Number: 240-10995**															
GS-17358-043012-DR-001	CRA-811GP	air	---	---	4/30/2012	11:45 AM			X							
GS-17358-043012-DR-002	CRA-811GP	air	---	---	4/30/2012	11:35:00 AM	FD (001)		X							
GS-17358-043012-DR-003	CRA-810GP	air	---	---	4/30/2012	2:12:00 PM			X							
GS-17358-043012-DR-004	CRA-809GP	air	---	---	4/30/2012	3:09:00 PM			X							
GS-17358-050112-DR-005	CRA-814GP	air	---	---	5/1/2012	9:15:00 AM			X							
GS-17358-050112-DR-006	CRA-824GP	air	---	---	5/1/2012	10:35:00 AM			X							
GS-17358-050112-DR-007	CRA-813GP	air	---	---	5/1/2012	4:12:00 PM			X							
GS-17358-050212-DR-008	CRA-816GP	air	---	---	5/2/2012	8:43:00 AM			X							
GS-17358-050212-DR-009	CRA-815GP	air	---	---	5/2/2012	8:55:00 AM			X							
GS-17358-050212-DR-010	CRA-818GP	air	---	---	5/2/2012	9:45:00 AM			X							
GS-17358-050212-DR-011	CRA-819GP	air	---	---	5/2/2012	9:55:00 AM			X							
GS-17358-050212-DR-012	CRA-820GP	air	---	---	5/2/2012	11:40:00 AM			X							
GS-17358-050212-DR-013	CRA-821GP	air	---	---	5/2/2012	11:45:00 AM			X							
GS-17358-050212-DR-014	CRA-822GP	air	---	---	5/2/2012	3:30:00 PM			X							
GS-17358-050212-DR-015	CRA-823GP	air	---	---	5/2/2012	4:15:00 PM			X							
GS-17358-050312-DR-016	CRA-825GP	air	---	---	5/3/2012	8:32:00 AM			X							
CRA SDG No: 01-36	**TA-NC SDG Number: 240-13860**															
GW-17358-080312-CB-001	CRA-705M	water	---	---	8/3/2012	9:15:00 AM								X		
GW-17358-080312-CB-002	CRA-706M	water	---	---	8/3/2012	9:40:00 AM								X		
GW-17358-080312-CB-003	CRA-704M	water	---	---	8/3/2012	10:28:00 AM								X		
GW-17358-080312-CB-004	CRA-703I	water	---	---	8/3/2012	12:50:00 PM								X		
GW-17358-080312-CB-005	CRA-703I	water	---	---	8/3/2012	1:00:00 PM	FD (004)							X		
GW-17358-080312-CB-006	CRA-703M	water	---	---	8/3/2012	1:15:00 PM								X		
CRA SDG No: 01-37	**TA-NC SDG Number: 240-13936**															
GW-17358-080712-BW-007	CRA-701M	water	---	---	8/7/2012	12:39:00 PM								X		

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Sample Identification	*Location*	*Matrix*	*Initial Sample Depth (ft. bgs)*	*Final Sample Depth (ft. bgs)*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*QC Samples*	*Parameters*								
								TCL VOC	*VOC (TO15)*	*TCL SVOC*	*PCB*	*TPH- GRO*	*TPH-DRO*	*Select TAL Metals*	*Cr, Cr III, Cr VI*	*Amenable Cyanide*

Notes:

Cr - Chromium
Cr III - Trivalent Chromium
Cr VI - Hexavalent Chromium
DRO - Diesel Range Organics
FD - Field Duplicate of sample indicated in parenthesis
GRO - Gasoline Range Organics
MS/MSD - Matrix Spike / Matrix Spike Duplicate
PCB - Polychlorinated biphenyls
QC - Quality Control
SVOC - Semivolatile Organic Compounds
TAL - Target Analyte List
TCL - Target Compound List
TPH - Total Petroleum Hydrocarbons
VOC - Volatile Organic Compounds

TABLE 2

SUMMARY OF ANALYTICAL METHODS, HOLDING TIME PERIODS, AND PRESERVATIVES
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, 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
TCL VOC	TO-15	Air	- 30 days from sample collection to completion of analysis.	Iced, 4 ± 2° C
TPH GRO	SW-846 8015	Water	- 14 days from sample collection to completion of analysis.	pH < 2 and Iced, 4 ± 2° C
TCL SVOC	SW-846 8270C	Water	- 7 days from sample collection to extraction - 40 days from extraction to completion of analysis	Iced, 4 ± 2° C
PCB	SW-846 8082	Water	- 7 days from sample collection to extraction - 40 days from extraction to completion of analysis	Iced, 4 ± 2° C
TPH DRO	SW-846 8015	Water	- 7 days from sample collection to extraction - 40 days from extraction to completion of analysis	Iced, 4 ± 2° C
Select TAL Metals		Water	- 180 days from sample collection to completion of analysis	pH < 2 and Iced, 4 ± 2° C
Aluminum	SW-846 6020			
Antimony	SW-846 6020			
Arsenic	SW-846 6020			
Barium	SW-846 6020			
Beryllium	SW-846 6020			
Cadmium	SW-846 6020			
Calcium	SW-846 6010B			
Chromium	SW-846 6020			
Cobalt	SW-846 6020			
Copper	SW-846 6020			
Iron	SW-846 6020			
Lead	SW-846 6020			
Manganese	SW-846 6020			
Magnesium	SW-846 6010B			
Nickel	SW-846 6020			
Potassium	SW-846 6010B			
Selenium	SW-846 6020			
Silver	SW-846 6020			
Sodium	SW-846 6010B			
Thallium	SW-846 6020			
Vanadium	SW-846 6020			
Zinc	SW-846 6020			

TABLE 2

SUMMARY OF ANALYTICAL METHODS, HOLDING TIME PERIODS, AND PRESERVATIVES
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Method* [1]	*Matrix*	*Holding Time*	*Preservation*
Select TAL Metals (continued)				
Mercury	SW-846 7470A		- 28 days from sample collection to completion of analysis	pH < 2 and Iced, 4 ± 2° C
General Chemistry				
Cyanide (Amenable)	SW-846 9012	Water	- 14 days from sample collection to analysis	Iced, 4 ± 2° C
Hexavalent Chromium	SW-846 7196	Water	- 24 hours from sample collection to completion of analysis.	Iced, 4 ± 2° C
Trivalent Chromium	SW-846 7196	Water	- 24 hours from sample collection to completion of analysis.	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 Method TO-15 "Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air", EPA-625/R-96/010b, January 1999

PCB - Polychlorinated biphenyls
SVOC - Semivolatile Organic Compounds
TAL - Target Analyte List
TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 3

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
TCL VOC	1,2,4-Trichlorobenzene	3/15/2012	15	SO-17358-030712-CB-157	210 U	µg/kg
TCL VOC	Toluene	03/08/12	17.3	SO-17358-030612-CB-132	86 U	µg/kg
				SO-17358-030612-CB-136	83 U	µg/kg
				SO-17358-030712-CB-146	83 U	µg/kg
TCL VOC	Xylenes (total)	3/14/2012	16.8	SO-17358-030512-CB-129	130 U	µg/kg
				SO-17358-030612-CB-130	140 U	µg/kg
				SO-17358-030612-CB-131	130 U	µg/kg
				SO-17358-030612-CB-132	130 U	µg/kg
				SO-17358-030612-CB-134	120 U	µg/kg
				SO-17358-030612-CB-136	120 U	µg/kg
				SO-17358-030712-CB-144	120 U	µg/kg
				SO-17358-030712-CB-145	110 U	µg/kg
				SO-17358-030712-CB-146	120 U	µg/kg
TCL SVOC	bis(2-Ethylhexyl)phthalate	03/21/12	19.5	SO-17358-030812-CB-170	270 U	µg/kg
				SO-17358-030812-CB-171	270 U	µg/kg
				SO-17358-030812-CB-172	280 U	µg/kg
				SO-17358-030812-DR-059	280 U	µg/kg
				SO-17358-030912-CB-179	5600 U	µg/kg
				SO-17358-030912-CB-180	1100 U	µg/kg
				SO-17358-030912-CB-181	280 U	µg/kg
				SO-17358-030912-CB-182	300 U	µg/kg

TABLE 3

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
TCL SVOC	bis(2-Ethylhexyl)phthalate	04/03/12	21.5	SO-17358-032112-CB-217	300 U	µg/kg
				SO-17358-032112-CB-218	290 U	µg/kg
				SO-17358-032112-CB-219	280 U	µg/kg
				SO-17358-032112-CB-220	280 U	µg/kg
				SO-17358-032112-CB-222	300 U	µg/kg
				SO-17358-032112-CB-221	310 U	µg/kg
				SO-17358-032112-CB-224	300 U	µg/kg
				SO-17358-032112-CB-225	290 U	µg/kg
				SO-17358-032112-CB-226	280 U	µg/kg
				SO-17358-032112-CB-227	290 U	µg/kg
				SO-17358-032112-CB-228	300 U	µg/kg
				SO-17358-032112-CB-229	300 U	µg/kg
				SO-17358-032112-DR-080	290 U	µg/kg
				SO-17358-032112-DR-081	280 U	µg/kg
TCL SVOC	bis(2-Ethylhexyl)phthalate	4/5/2012	39.2	SO-17358-032212-CB-230	280 U	µg/kg
				SO-17358-032212-CB-232	280 U	µg/kg
				SO-17358-032212-CB-231	290 U	µg/kg
				SO-17358-032212-CB-235	290 U	µg/kg
				SO-17358-032212-CB-234	280 U	µg/kg
				SO-17358-032212-CB-236	16000 U	µg/kg
				SO-17358-032212-CB-237	290 U	µg/kg
				SO-17358-032212-CB-239	300 U	µg/kg
				SO-17358-032312-CB-240	310 U	µg/kg
				SO-17358-032312-CB-241	280 U	µg/kg
				SO-17358-032312-CB-242	280 U	µg/kg
				SO-17358-032312-CB-243	290 U	µg/kg
				SO-17358-032312-CB-244	290 U	µg/kg
				SO-17358-032312-CB-245	350 U	µg/kg

TABLE 3

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
TCL SVOC	bis(2-Ethylhexyl)phthalate	03/08/12	43.1	SO-17358-030112-CB-101	320 U	µg/kg
				SO-17358-030112-CB-103	280 U	µg/kg
				SO-17358-030112-CB-104	290 U	µg/kg
				SO-17358-030112-CB-105	290 U	µg/kg
				SO-17358-030112-CB-107	270 U	µg/kg
				SO-17358-030112-CB-108	280 U	µg/kg
				SO-17358-030112-CB-109	280 U	µg/kg
				SO-17358-030112-CB-110	300 U	µg/kg
				SO-17358-030212-CB-113	280 U	µg/kg
TCL SVOC	bis(2-Ethylhexyl)phthalate	03/07/12	70	SO-17358-030112-DR-048	290 U	µg/kg
				SO-17358-030112-DR-049	270 U	µg/kg
TCL SVOC	Di-n-butylphthalate	04/02/12	37.7	SO-17358-031912-CB-203	290 U	µg/kg
				SO-17358-031912-CB-204	290 U	µg/kg
				SO-17358-031912-CB-206	300 U	µg/kg
				SO-17358-031912-CB-207	280 U	µg/kg
				SO-17358-031912-CB-208	280 U	µg/kg
				SO-17358-032012-DR-078	290 U	µg/kg
				SO-17358-032012-DR-079	280 U	µg/kg
				SO-17358-032012-CB-209	280 U	µg/kg
				SO-17358-032012-CB-210	270 U	µg/kg
				SO-17358-032012-CB-212	280 U	µg/kg
				SO-17358-032012-CB-213	290 U	µg/kg
				SO-17358-032012-CB-214	290 U	µg/kg
				SO-17358-032012-CB-215	300 U	µg/kg

TABLE 3

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
TCL SVOC	Di-n-butylphthalate	04/05/12	38.3	SO-17358-032212-CB-230	280 U	µg/kg
				SO-17358-032212-CB-231	290 U	µg/kg
				SO-17358-032212-CB-232	280 U	µg/kg
				SO-17358-032212-CB-234	280 U	µg/kg
				SO-17358-032212-CB-235	290 U	µg/kg
				SO-17358-032212-CB-237	290 U	µg/kg
				SO-17358-032212-CB-239	300 U	µg/kg
				SO-17358-032312-CB-240	310 U	µg/kg
				SO-17358-032312-CB-243	290 U	µg/kg
				SO-17358-032312-CB-242	280 U	µg/kg
				SO-17358-032312-CB-244	290 U	µg/kg
				SO-17358-032312-CB-245	350 U	µg/kg
Metals	Copper	03/20/12	0.655	GW-17358-031312-DR-070	4.0 U	µg/L
Metals	Mercury	03/21/12	0.0151	SO-17358-031612-DR-076	0.046 U	mg/kg
Metals	Thallium	03/20/12	0.0203	SO-17358-031412-CB-198	0.074 U	mg/kg
				SO-17358-031412-DR-068	0.088 U	mg/kg
				SO-17358-031412-DR-069	0.087 U	mg/kg
				SO-17358-031412-DR-071	0.088 U	mg/kg
				SO-17358-031512-CB-200	0.087 U	mg/kg
				SO-17358-031512-CB-202	0.10 U	mg/kg
				SO-17358-031512-DR-075	0.085 U	mg/kg

TABLE 3

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
Metals	Thallium	03/30/12	0.0207	SO-17358-032612-CB-251	0.096 U	mg/kg
				SO-17358-032612-CB-254	0.077 U	mg/kg
				SO-17358-032612-CB-253	0.075 U	mg/kg
				SO-17358-032612-CB-255	0.077 U	mg/kg
				SO-17358-032612-CB-256	0.083 U	mg/kg
				SO-17358-032612-CB-257	0.081 U	mg/kg
				SO-17358-032612-CB-258	0.095 U	mg/kg
				SO-17358-032612-CB-260	0.066 U	mg/kg
				SO-17358-032612-CB-261	0.084 U	mg/kg
				SO-17358-032612-CB-263	0.071 U	mg/kg
				SO-17358-032612-DR-084	0.10 U	mg/kg
				SO-17358-032612-DR-085	0.089 U	mg/kg
Metals	Thallium	03/19/12	0.0232	SO-17358-030712-CB-150	0.10 U	mg/kg
				SO-17358-030712-CB-151	0.099 U	mg/kg
				SO-17358-030712-CB-152	0.070 U	mg/kg
				SO-17358-030712-CB-155	0.097 U	mg/kg
				SO-17358-030712-CB-156	0.098 U	mg/kg
				SO-17358-030712-CB-157	0.097 U	mg/kg
				SO-17358-030712-CB-159	0.10 U	mg/kg
				SO-17358-030712-CB-160	0.076 U	mg/kg
				SO-17358-030712-DR-055	0.083 U	mg/kg
				SO-17358-030712-DR-058	0.077 U	mg/kg
Metals	Thallium	03/07/12	0.0249	SO-17358-030112-CB-110	0.090 U	mg/kg
				SO-17358-030112-CB-109	0.10 U	mg/kg
				SO-17358-030112-CB-111	0.092 U	mg/kg
				SO-17358-030112-CB-112	0.094 U	mg/kg
				SO-17358-030212-CB-115	0.084 U	mg/kg
				SO-17358-030212-CB-116	0.075 U	mg/kg
				SO-17358-030212-CB-117	0.084 U	mg/kg
				SO-17358-030212-CB-118	0.081 U	mg/kg

TABLE 3

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
Metals	Thallium	03/27/12	0.0267	SO-17358-032112-CB-217	0.11 U	mg/kg
				SO-17358-032112-CB-219	0.13 U	mg/kg
				SO-17358-032112-CB-220	0.073 U	mg/kg
				SO-17358-032112-CB-221	0.071 U	mg/kg
				SO-17358-032112-CB-222	0.080 U	mg/kg
				SO-17358-032112-CB-224	0.079 U	mg/kg
				SO-17358-032112-CB-225	0.093 U	mg/kg
				SO-17358-032112-CB-226	0.072 U	mg/kg
				SO-17358-032112-CB-227	0.083 U	mg/kg
				SO-17358-032112-CB-228	0.10 U	mg/kg
				SO-17358-032112-CB-229	0.076 U	mg/kg
				SO-17358-032112-DR-080	0.088 U	mg/kg
				SO-17358-032112-DR-081	0.072 U	mg/kg
Metals	Thallium	3/7/2012	0.0288	SO-17358-030112-CB-100	0.094 U	mg/kg
				SO-17358-030112-CB-101	0.089 U	mg/kg
				SO-17358-030112-CB-102	0.077 U	mg/kg
				SO-17358-030112-CB-103	0.087 U	mg/kg
				SO-17358-030112-CB-104	0.085 U	mg/kg
				SO-17358-030112-CB-106	0.079 U	mg/kg
				SO-17358-030112-CB-105	0.089 U	mg/kg
				SO-17358-030212-CB-114	0.12 U	mg/kg
Metals	Thallium	03/29/12	0.0293	SO-17358-032212-CB-231	0.086 U	mg/kg
				SO-17358-032212-CB-232	0.10 U	mg/kg
				SO-17358-032212-CB-233	0.086 U	mg/kg
				SO-17358-032212-CB-234	0.094 U	mg/kg
				SO-17358-032212-CB-235	0.10 U	mg/kg
				SO-17358-032212-CB-236	0.12 U	mg/kg
				SO-17358-032212-CB-237	0.077 U	mg/kg
				SO-17358-032212-CB-238	0.075 U	mg/kg
				SO-17358-032212-CB-239	0.083 U	mg/kg
Metals	Thallium	02/28/12	0.0315	SO-17358-022212-DR-042	0.077 U	mg/kg

TABLE 3

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
Metals	Thallium	03/21/12	0.0357	SO-17358-031212-CB-187	0.15 U	mg/kg
				SO-17358-031212-CB-188	0.091 U	mg/kg
				SO-17358-031212-CB-189	0.13 U	mg/kg
				SO-17358-031212-CB-190	0.086 U	mg/kg
				SO-17358-031212-CB-191	0.13 U	mg/kg
				SO-17358-031212-CB-192	0.11 U	mg/kg
				SO-17358-031212-CB-193	0.16 U	mg/kg
				SO-17358-031212-DR-062	0.079 U	mg/kg
				SO-17358-031212-DR-063	0.080 U	mg/kg
				SO-17358-031212-DR-065	0.098 U	mg/kg
				SO-17358-031212-DR-064	0.090 U	mg/kg
				SO-17358-031312-DR-066	0.15 U	mg/kg
				SO-17358-031312-DR-067	0.10 U	mg/kg
Metals	Thallium	03/01/12	0.0425	SO-17358-022712-DR-043	0.086 U	mg/kg
				SO-17358-022712-DR-044	0.099 U	mg/kg
				SO-17358-022712-DR-045	0.099 U	mg/kg
Metals	Thallium	03/23/12	0.0434	SO-17358-031912-CB-204	0.18 U	mg/kg
				SO-17358-031912-CB-205	0.22 U	mg/kg
				SO-17358-031912-CB-206	0.14 U	mg/kg
				SO-17358-031912-CB-207	0.10 U	mg/kg
				SO-17358-031912-CB-208	0.075 U	mg/kg
				SO-17358-032012-DR-078	0.073 U	mg/kg
				SO-17358-032012-DR-079	0.082 U	mg/kg
				SO-17358-032012-CB-209	0.11 U	mg/kg
				SO-17358-032012-CB-210	0.092 U	mg/kg
				SO-17358-032012-CB-211	0.096 U	mg/kg
				SO-17358-032012-CB-212	0.078 U	mg/kg
				SO-17358-032012-CB-213	0.077 U	mg/kg
				SO-17358-032012-CB-214	0.081 U	mg/kg
				SO-17358-032012-CB-215	0.088 U	mg/kg

TABLE 3

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
Metals	Thallium	03/19/12	0.148	SO-17358-030812-CB-168	0.12 U	mg/kg
				SO-17358-030812-CB-167	0.16 U	mg/kg
				SO-17358-030812-CB-169	0.11 U	mg/kg
				SO-17358-030812-CB-170	0.097 U	mg/kg
				SO-17358-030812-CB-171	0.12 U	mg/kg
				SO-17358-030812-CB-172	0.19 U	mg/kg
				SO-17358-030812-CB-173	0.071 U	mg/kg
				SO-17358-030812-CB-174	0.068 U	mg/kg
				SO-17358-030812-CB-175	0.084 U	mg/kg
				SO-17358-030812-CB-176	0.081 U	mg/kg
				SO-17358-030812-DR-059	0.099 U	mg/kg
				SO-17358-030812-DR-060	0.12 U	mg/kg
				SO-17358-030912-CB-177	0.084 U	mg/kg
				SO-17358-030912-CB-178	0.076 U	mg/kg
				SO-17358-030912-CB-179	0.076 U	mg/kg
				SO-17358-030912-CB-180	0.071 U	mg/kg
				SO-17358-030912-CB-182	0.10 U	mg/kg
				SO-17358-030912-CB-181	0.078 U	mg/kg
				SO-17358-030912-CB-183	0.096 U	mg/kg
				SO-17358-030912-CB-184	0.23 U	mg/kg
Metals	Thallium	03/20/12	0.24	GW-17358-031312-DR-070	2.0 U	µg/L
Metals	Cadmium	08/15/12	0.212	GW-17358-080312-CB-001	1.0 U	µg/L
Metals	Cobalt	08/15/12	0.192	GW-17358-080312-CB-001	20 U	µg/L
				GW-17358-080312-CB-002	20 U	µg/L
Metals	Copper	08/15/12	0.786	GW-17358-080312-CB-001	4.0 U	µg/L
				GW-17358-080312-CB-002	4.0 U	µg/L
				GW-17358-080312-CB-003	4.0 U	µg/L
				GW-17358-080312-CB-004	4.0 U	µg/L
Metals	Copper	08/15/12	0.633	GW-17358-080312-CB-006	4.0 U	µg/L

TABLE 3

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
Metals	Lead	08/15/12	0.291	GW-17358-080312-CB-001	3.0 U	µg/L
				GW-17358-080312-CB-003	3.0 U	µg/L
				GW-17358-080312-CB-004	3.0 U	µg/L
Metals	Zinc	08/15/12	3.5	GW-17358-080312-CB-001	50 U	µg/L
				GW-17358-080312-CB-003	50 U	µg/L
				GW-17358-080312-CB-004	50 U	µg/L
				GW-17358-080312-CB-006	50 U	µg/L
				GW-17358-080712-BW-007	50 U	µg/L

Notes:

U - Qualified as Not Detected at the report limit

SVOC - Semivolatile Organic Compounds
TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 4

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO VIOLATION OF SURROGATE RECOVERY ACCEPTANCE CRITERIA
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Surrogate*	*Surrogate Recovery (percent)*	*Control Limits (percent)*	*Sample ID*	*Qualified Result*	*Units*
PCB	Aroclor-1268 (PCB-1268)	Decachlorobiphenyl	280	14-163	SO-17358-032612-CB-259	44 J	µg/kg
	Total PCBs					44 J	µg/kg
TCL VOC	Ethylbenzene	p-Bromofluorobenzene	174	70-130	GS-17358-050312-DR-016	5.6 J	µg/m³
	4-Methyl-2-pentanone					120 J	µg/m³
	Toluene					13 J	µg/m³
	Tetrachloroethene					3.5 J	µg/m³
	Xylenes (total)					14 J	µg/m³
	cis-1,2-Dichloroethene					1.5 J	µg/m³
	2-Hexanone					10 J	µg/m³
	Isopropyl alcohol A					10 J	µg/m³
	Acetone					76 J	µg/m³
	Benzene					2.7 J	µg/m³
	Vinyl chloride					2.0 J	µg/m³
	Carbon disulfide					100 J	µg/m³
	Dichlorodifluoromethane					1.6 J	µg/m³

Notes:

J - Estimated Concentration

PCB - Polychlorinated biphenyls
TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	Analyte	MS Recovery (percent)	MSD Recovery (percent)	RPD	Control Limits Recovery (percent)	Control Limits RPD (percent)	Associated Sample ID	Qualified Result	Units
TCL VOC	Bromomethane	97	0	NC	10-151	30	SO-17358-030912-CB-177	R	µg/kg
TCL SVOC	2,4-Dinitrophenol	0	0	0	10-110	30	SO-17358-022712-DR-044	R	µg/kg
	Hexachlorocyclopentadiene	0	0	0	10-110	30		R	µg/kg
TCL SVOC	Hexachlorocyclopentadiene	0	0	0	10-110	30	SO-17358-030212-CB-114	R	µg/kg
TCL SVOC	2,4-Dinitrophenol	0	0	0	10-110	30	SO-17358-030612-CB-135	R	µg/kg
	4,6-Dinitro-2-methylphenol	0	0	0	10-110	30		R	µg/kg
	Pentachlorophenol	0	0	0	10-182	30		R	µg/kg
TCL SVOC	4-Nitrophenol	0	0	0	10-125	30	SO-17358-030712-CB-156	R	µg/kg
	2,4-Dinitrophenol	0	0	0	10-110	30		R	µg/kg
	4,6-Dinitro-2-methylphenol	0	0	0	10-110	30		R	µg/kg
	Pentachlorophenol	45	0	0	10-182	30		R	µg/kg
TCL SVOC	2,4-Dinitrophenol	0	0	0	10-110	30	SO-17358-031512-CB-200	R	µg/kg
	Hexachlorocyclopentadiene	0	0	0	10-110	30		R	µg/kg
	3,3'-Dichlorobenzidine	9	9	3	10-110	30		R	µg/kg
	Biphenyl	48	48	1	50-130	30		310 UJ	µg/kg
	Acetophenone	44	48	8	50-130	30		310 UJ	µg/kg
TCL SVOC	Biphenyl	44	46	5	50-130	30	SO-17358-031512-CB-202	290 UJ	µg/kg
TCL SVOC	bis(2-Ethylhexyl)phthalate	46	248	124	10-200	30	SO-17358-031512-DR-072	110 J	µg/kg
	2,4-Dinitrophenol	0	0	0	10-110	30		R	µg/kg
	4,6-Dinitro-2-methylphenol	0	0	0	10-110	30		R	µg/kg
	Hexachlorocyclopentadiene	10	9	6	10-110	30		R	µg/kg
TCL SVOC	2,4-Dinitrophenol	0	0	0	10-110	30	SO-17358-031612-DR-076	R	µg/kg
	Dibenz(a,h)anthracene	74	0	NC	10-200	30		R	µg/kg
	Hexachlorocyclopentadiene	0	0	0	10-110	30		R	µg/kg
	Pentachlorophenol	0	0	0	10-182	30		R	µg/kg

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012 WILLOW RUN POWERTRAIN SITE YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
TCL SVOC	Pentachlorophenol	0	0	0	10-182	30	SO-17358-032012-DR-079	R	µg/kg
	2,4-Dinitrophenol	12	0	0	10-110	30		R	µg/kg
TCL SVOC	4-Nitrophenol	0	0	0	10-125	30	SO-17358-032612-CB-249	R	µg/kg
	2,4-Dinitrophenol	0	0	0	10-110	30		R	µg/kg
	4,6-Dinitro-2-methylphenol	0	0	0	10-110	30		R	µg/kg
	Hexachlorocyclopentadiene	0	0	0	10-110	30		R	µg/kg
	Pentachlorophenol	0	0	0	10-182	30		R	µg/kg
Metals	Antimony	31	33	5	75-125	20	SO-17358-030112-DR-048	0.057 J	mg/kg
							SO-17358-030112-DR-051	0.053 J	mg/kg
							SO-17358-030112-DR-049	0.058 J	mg/kg
Metals	Manganese	468	128	54	75-125	20	SO-17358-030112-DR-048	180 J	mg/kg
							SO-17358-030112-DR-049	260 J	mg/kg
							SO-17358-030112-DR-051	970 J	mg/kg
Metals	Antimony	49	51	6	75-125	20	SO-17358-030112-CB-100	0.044 J	mg/kg
							SO-17358-030112-CB-101	0.030 J	mg/kg
							SO-17358-030112-CB-102	0.027 J	mg/kg
							SO-17358-030112-CB-103	0.054 J	mg/kg
							SO-17358-030112-CB-104	0.046 J	mg/kg
							SO-17358-030112-CB-106	0.036 J	mg/kg
							SO-17358-030112-CB-105	0.050 J	mg/kg
							SO-17358-030212-CB-114	0.062 J	mg/kg

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
Metals	Antimony	45	38	15	75-125	20	SO-17358-030112-CB-107	0.43 J	mg/kg
							SO-17358-030112-CB-108	0.044 J	mg/kg
							SO-17358-030112-CB-110	0.043 J	mg/kg
							SO-17358-030112-CB-109	0.037 J	mg/kg
							SO-17358-030112-CB-111	0.035 J	mg/kg
							SO-17358-030112-CB-112	0.053 J	mg/kg
							SO-17358-030212-CB-113	0.070 J	mg/kg
							SO-17358-030212-CB-115	0.044 J	mg/kg
							SO-17358-030212-CB-116	0.029 J	mg/kg
							SO-17358-030212-CB-117	0.39 J	mg/kg
							SO-17358-030212-CB-118	0.062 J	mg/kg
							SO-17358-030212-DR-053	0.078 J	mg/kg
							SO-17358-030212-DR-054	0.086 J	mg/kg
Metals	Copper	164	137	11	75-125	20	SO-17358-030112-CB-107	14 J	mg/kg
							SO-17358-030112-CB-108	8.4 J	mg/kg
							SO-17358-030112-CB-110	4.9 J	mg/kg
							SO-17358-030112-CB-109	5.6 J	mg/kg
							SO-17358-030112-CB-111	15 J	mg/kg
							SO-17358-030112-CB-112	6.8 J	mg/kg
							SO-17358-030212-CB-113	6.7 J	mg/kg
							SO-17358-030212-CB-115	7.1 J	mg/kg
							SO-17358-030212-CB-116	4.2 J	mg/kg
							SO-17358-030212-CB-117	92 J	mg/kg
							SO-17358-030212-CB-118	7.2 J	mg/kg
							SO-17358-030212-DR-053	24 J	mg/kg
							SO-17358-030212-DR-054	12 J	mg/kg

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
Metals	Antimony	58	57	2	75-125	20	SO-17358-030512-CB-119	0.042 J	mg/kg
							SO-17358-030512-CB-120	0.075 J	mg/kg
							SO-17358-030512-CB-121	0.045 J	mg/kg
							SO-17358-030512-CB-122	0.053 J	mg/kg
							SO-17358-030512-CB-123	0.046 J	mg/kg
							SO-17358-030512-CB-124	0.034 J	mg/kg
							SO-17358-030512-CB-125	0.040 J	mg/kg
							SO-17358-030512-CB-126	0.067 J	mg/kg
							SO-17358-030512-CB-127	0.16 UJ	mg/kg
							SO-17358-030512-CB-128	0.065 J	mg/kg
							SO-17358-030512-CB-129	0.11 J	mg/kg
							SO-17358-030612-CB-131	0.052 J	mg/kg
							SO-17358-030612-CB-130	0.054 J	mg/kg
							SO-17358-030612-CB-132	0.052 J	mg/kg
							SO-17358-030612-CB-133	0.080 J	mg/kg
Metals	Antimony	40	44	8	75-125	20	SO-17358-030612-CB-134	0.080 J	mg/kg
							SO-17358-030612-CB-135	0.065 J	mg/kg
							SO-17358-030612-CB-136	0.14 J	mg/kg
							SO-17358-030612-CB-137	0.072 J	mg/kg
							SO-17358-030612-CB-138	0.029 J	mg/kg
							SO-17358-030612-CB-139	0.047 J	mg/kg
							SO-17358-030612-CB-140	0.038 J	mg/kg
							SO-17358-030612-CB-141	0.040 J	mg/kg
							SO-17358-030712-CB-142	0.050 J	mg/kg
							SO-17358-030712-CB-143	0.044 J	mg/kg
							SO-17358-030712-CB-144	0.080 J	mg/kg
							SO-17358-030712-CB-145	0.082 J	mg/kg
							SO-17358-030712-CB-146	0.040 J	mg/kg
							SO-17358-030712-CB-147	0.15 UJ	mg/kg
							SO-17358-030712-CB-148	0.15 UJ	mg/kg
							SO-17358-030712-CB-149	0.024 J	mg/kg

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012 WILLOW RUN POWERTRAIN SITE YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
Metals	Copper	0	168	79	75-125	20	SO-17358-030612-CB-134	42 J	mg/kg
							SO-17358-030612-CB-135	5.6 J	mg/kg
							SO-17358-030612-CB-136	12 J	mg/kg
							SO-17358-030612-CB-137	12 J	mg/kg
							SO-17358-030612-CB-138	6.9 J	mg/kg
							SO-17358-030612-CB-139	11 J	mg/kg
							SO-17358-030612-CB-140	7.0 J	mg/kg
							SO-17358-030612-CB-141	8.3 J	mg/kg
							SO-17358-030712-CB-142	19 J	mg/kg
							SO-17358-030712-CB-143	17 J	mg/kg
							SO-17358-030712-CB-144	18 J	mg/kg
							SO-17358-030712-CB-145	10 J	mg/kg
							SO-17358-030712-CB-146	3.5 J	mg/kg
							SO-17358-030712-CB-147	5.8 J	mg/kg
							SO-17358-030712-CB-148	3.5 J	mg/kg
							SO-17358-030712-CB-149	9.1 J	mg/kg

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012 WILLOW RUN POWERTRAIN SITE YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
Metals	Antimony	46	41	11	75-125	20	SO-17358-030812-CB-168	0.021 J	mg/kg
							SO-17358-030812-CB-167	0.044 J	mg/kg
							SO-17358-030812-CB-169	0.036 J	mg/kg
							SO-17358-030812-CB-170	0.047 J	mg/kg
							SO-17358-030812-CB-171	0.048 J	mg/kg
							SO-17358-030812-CB-172	0.057 J	mg/kg
							SO-17358-030812-CB-173	0.33 J	mg/kg
							SO-17358-030812-CB-174	0.065 J	mg/kg
							SO-17358-030812-CB-175	0.043 J	mg/kg
							SO-17358-030812-CB-176	0.15 UJ	mg/kg
							SO-17358-030812-DR-059	0.050 J	mg/kg
							SO-17358-030812-DR-060	0.080 J	mg/kg
							SO-17358-030912-CB-177	0.039 J	mg/kg
							SO-17358-030912-CB-178	0.038 J	mg/kg
							SO-17358-030912-CB-179	0.054 J	mg/kg
							SO-17358-030912-CB-180	0.14 UJ	mg/kg
							SO-17358-030912-CB-182	0.049 J	mg/kg
							SO-17358-030912-CB-181	0.045 J	mg/kg
							SO-17358-030912-CB-183	0.045 J	mg/kg
							SO-17358-030912-CB-184	0.053 J	mg/kg

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
Metals	Antimony	61	55	12	75-125	20	SO-17358-030712-CB-150	0.17 UJ	mg/kg
							SO-17358-030712-CB-151	0.034 J	mg/kg
							SO-17358-030712-CB-152	0.14 UJ	mg/kg
							SO-17358-030712-CB-153	0.10 J	mg/kg
							SO-17358-030712-CB-154	0.078 J	mg/kg
							SO-17358-030712-CB-155	0.029 J	mg/kg
							SO-17358-030712-CB-156	0.056 J	mg/kg
							SO-17358-030712-CB-157	0.058 J	mg/kg
							SO-17358-030712-CB-158	0.096 J	mg/kg
							SO-17358-030712-CB-159	0.037 J	mg/kg
							SO-17358-030712-CB-160	0.035 J	mg/kg
							SO-17358-030712-DR-055	0.16 J	mg/kg
							SO-17358-030712-DR-056	0.069 J	mg/kg
							SO-17358-030712-DR-057	0.12 J	mg/kg
							SO-17358-030712-DR-058	0.061 J	mg/kg
Metals	Antimony	44	46	4	75-125	20	SO-17358-031412-CB-194	0.060 J	mg/kg
							SO-17358-031412-CB-195	0.056 J	mg/kg
							SO-17358-031412-CB-196	0.11 J	mg/kg
							SO-17358-031412-CB-198	0.036 J	mg/kg
							SO-17358-031412-CB-197	0.12 J	mg/kg
							SO-17358-031412-DR-068	0.045 J	mg/kg
							SO-17358-031412-DR-069	0.045 J	mg/kg
							SO-17358-031412-DR-071	0.035 J	mg/kg
							SO-17358-031512-CB-199	0.042 J	mg/kg
							SO-17358-031512-CB-200	0.064 J	mg/kg
							SO-17358-031512-CB-201	0.078 J	mg/kg
							SO-17358-031512-CB-202	0.064 J	mg/kg
							SO-17358-031512-DR-072	0.030 J	mg/kg
							SO-17358-031512-DR-073	0.035 J	mg/kg
							SO-17358-031512-DR-075	0.074 J	mg/kg

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012 WILLOW RUN POWERTRAIN SITE YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
Metals	Antimony	66	65	2	75-125	20	SO-17358-032112-CB-216	0.37 J	mg/kg
							SO-17358-032112-CB-217	0.061 J	mg/kg
							SO-17358-032112-CB-218	0.067 J	mg/kg
							SO-17358-032112-CB-219	0.076 J	mg/kg
							SO-17358-032112-CB-220	0.045 J	mg/kg
							SO-17358-032112-CB-221	0.027 J	mg/kg
							SO-17358-032112-CB-222	0.041 J	mg/kg
							SO-17358-032112-CB-224	0.034 J	mg/kg
							SO-17358-032112-CB-223	0.14 J	mg/kg
							SO-17358-032112-CB-225	0.044 J	mg/kg
							SO-17358-032112-CB-226	0.058 J	mg/kg
							SO-17358-032112-CB-227	0.044 J	mg/kg
							SO-17358-032112-CB-228	0.052 J	mg/kg
							SO-17358-032112-CB-229	0.047 J	mg/kg
							SO-17358-032112-DR-080	0.041 J	mg/kg
							SO-17358-032112-DR-081	0.14 UJ	mg/kg
Metals	Manganese	64	170	23	75-125	20	SO-17358-032112-CB-216	670 J	mg/kg
							SO-17358-032112-CB-217	88 J	mg/kg
							SO-17358-032112-CB-218	280 J	mg/kg
							SO-17358-032112-CB-219	170 J	mg/kg
							SO-17358-032112-CB-220	210 J	mg/kg
							SO-17358-032112-CB-221	130 J	mg/kg
							SO-17358-032112-CB-222	140 J	mg/kg
							SO-17358-032112-CB-224	280 J	mg/kg
							SO-17358-032112-CB-223	240 J	mg/kg
							SO-17358-032112-CB-225	160 J	mg/kg
							SO-17358-032112-CB-226	140 J	mg/kg
							SO-17358-032112-CB-227	150 J	mg/kg
							SO-17358-032112-CB-228	190 J	mg/kg
							SO-17358-032112-CB-229	81 J	mg/kg
							SO-17358-032112-DR-080	170 J	mg/kg
							SO-17358-032112-DR-081	87 J	mg/kg

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
Metals	Mercury	74	70	5	75-125	20	SO-17358-032112-CB-216	0.36 J	mg/kg
							SO-17358-032112-CB-217	0.041 UJ	mg/kg
							SO-17358-032112-CB-218	0.11 J	mg/kg
							SO-17358-032112-CB-219	0.040 UJ	mg/kg
							SO-17358-032112-CB-220	0.021 J	mg/kg
							SO-17358-032112-CB-221	0.028 J	mg/kg
							SO-17358-032112-CB-222	0.044 UJ	mg/kg
							SO-17358-032112-CB-224	0.036 J	mg/kg
							SO-17358-032112-CB-223	0.045 UJ	mg/kg
							SO-17358-032112-CB-225	0.039 UJ	mg/kg
							SO-17358-032112-CB-226	0.037 UJ	mg/kg
							SO-17358-032112-CB-227	0.039 UJ	mg/kg
							SO-17358-032112-CB-228	0.046 UJ	mg/kg
							SO-17358-032112-CB-229	0.047 UJ	mg/kg
							SO-17358-032112-DR-080	0.020 J	mg/kg
							SO-17358-032112-DR-081	0.042 UJ	mg/kg
Metals	Antimony	31	33	7	75-125	20	SO-17358-032312-CB-240	0.071 J	mg/kg
							SO-17358-032312-CB-241	0.076 J	mg/kg
							SO-17358-032312-CB-242	0.076 J	mg/kg
							SO-17358-032312-CB-243	0.036 J	mg/kg
							SO-17358-032312-CB-244	0.044 J	mg/kg
							SO-17358-032312-CB-245	0.11 J	mg/kg
							SO-17358-032312-CB-246	0.055 J	mg/kg
							SO-17358-032312-CB-247	0.053 J	mg/kg
							SO-17358-032312-CB-248	0.047 J	mg/kg
							SO-17358-032312-DR-082	0.060 J	mg/kg
							SO-17358-032312-DR-083	0.11 J	mg/kg

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012 WILLOW RUN POWERTRAIN SITE YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
Metals	Antimony	48	59	21	75-125	20	SO-17358-032212-CB-230	0.086 J	mg/kg
							SO-17358-032212-CB-231	0.040 J	mg/kg
							SO-17358-032212-CB-232	0.083 J	mg/kg
							SO-17358-032212-CB-233	0.049 J	mg/kg
							SO-17358-032212-CB-234	0.072 J	mg/kg
							SO-17358-032212-CB-235	0.052 J	mg/kg
							SO-17358-032212-CB-236	0.071 J	mg/kg
							SO-17358-032212-CB-237	0.042 J	mg/kg
							SO-17358-032212-CB-238	0.12 J	mg/kg
							SO-17358-032212-CB-239	0.046 J	mg/kg
Metals	Antimony	54	58	7	75-125	20	SO-17358-032612-CB-249	0.069 J	mg/kg
							SO-17358-032612-CB-250	0.12 J	mg/kg
							SO-17358-032612-CB-251	0.065 J	mg/kg
							SO-17358-032612-CB-252	0.071 J	mg/kg
							SO-17358-032612-CB-254	0.024 J	mg/kg
							SO-17358-032612-CB-253	0.091 J	mg/kg
							SO-17358-032612-CB-255	0.023 J	mg/kg
							SO-17358-032612-CB-256	0.067 J	mg/kg
							SO-17358-032612-CB-257	0.045 J	mg/kg
							SO-17358-032612-CB-258	0.087 J	mg/kg
							SO-17358-032612-CB-259	0.060 J	mg/kg
							SO-17358-032612-CB-260	0.045 J	mg/kg
							SO-17358-032612-CB-262	0.077 J	mg/kg
							SO-17358-032612-CB-261	0.056 J	mg/kg
							SO-17358-032612-CB-263	0.066 J	mg/kg
							SO-17358-032612-DR-084	0.061 J	mg/kg
							SO-17358-032612-DR-085	0.030 J	mg/kg

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012 WILLOW RUN POWERTRAIN SITE YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
Metals	Manganese	452	74	70	75-125	20	SO-17358-032612-CB-249	150 J	mg/kg
							SO-17358-032612-CB-250	1200 J	mg/kg
							SO-17358-032612-CB-251	140 J	mg/kg
							SO-17358-032612-CB-252	100 J	mg/kg
							SO-17358-032612-CB-254	38 J	mg/kg
							SO-17358-032612-CB-253	98 J	mg/kg
							SO-17358-032612-CB-255	230 J	mg/kg
							SO-17358-032612-CB-256	82 J	mg/kg
							SO-17358-032612-CB-257	83 J	mg/kg
							SO-17358-032612-CB-258	110 J	mg/kg
							SO-17358-032612-CB-259	220 J	mg/kg
							SO-17358-032612-CB-260	300 J	mg/kg
							SO-17358-032612-CB-262	170 J	mg/kg
							SO-17358-032612-CB-261	160 J	mg/kg
							SO-17358-032612-CB-263	85 J	mg/kg
							SO-17358-032612-DR-084	230 J	mg/kg
							SO-17358-032612-DR-085	79 J	mg/kg

Notes:

UJ - Non-detect with an Estimated Report Limit
J - Estimated Concentration
R - Rejected

MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
SVOC - Semivolatile Organic Compounds
TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 6

SUMMARY OF QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*LCS Date*	*LCS %Rec*	*Control Limits %Rec*	*Associated Sample ID*	*Qualified Results*	*Units*
TCL VOC	Bromomethane	3/8/2012	6	10-114	SO-17358-030212-DR-053	R	µg/kg
					SO-17358-030212-DR-054	R	µg/kg
TCL VOC	Chloroethane	3/16/2012	123	10-120	SO-17358-030812-CB-170	110 J	µg/kg
					SO-17358-030812-CB-171	72 J	µg/kg
TCL SVOC	3,3'-Dichlorobenzidine	03/06/12	24	31-110	SO-17358-022712-DR-043	1800 UJ	µg/kg
					SO-17358-022712-DR-044	1800 UJ	µg/kg
					SO-17358-022712-DR-045	1700 UJ	µg/kg
TCL SVOC	Benzaldehyde	03/15/12	0	10-130	SO-17358-030612-CB-135	R	µg/kg
					SO-17358-030612-CB-136	48 J	µg/kg
					SO-17358-030612-CB-137	R	µg/kg
					SO-17358-030612-CB-138	R	µg/kg
					SO-17358-030612-CB-139	R	µg/kg
					SO-17358-030612-CB-140	R	µg/kg
					SO-17358-030612-CB-141	R	µg/kg
					SO-17358-030712-CB-142	R	µg/kg
					SO-17358-030712-CB-143	R	µg/kg
					SO-17358-030712-CB-144	R	µg/kg
					SO-17358-030712-CB-145	R	µg/kg
					SO-17358-030712-CB-146	R	µg/kg
					SO-17358-030712-CB-147	R	µg/kg
TCL SVOC	Benzaldehyde	03/19/12	0	10-130	GW-17358-031312-DR-070	R	µg/kg
TCL SVOC	Benzaldehyde	03/29/12	0	10-130	SO-17358-031612-DR-076	R	µg/kg
					SO-17358-031612-DR-077	R	µg/kg

SUMMARY OF QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*LCS Date*	*LCS %Rec*	*Control Limits %Rec*	*Associated Sample ID*	*Qualified Results*	*Units*
Gen Chem	Hexavalent Chromium	03/07/12	77	80-120	SO-17358-022912-DR-046	0.86 UJ	mg/kg
					SO-17358-022912-DR-047	0.86 UJ	mg/kg
					SO-17358-030112-DR-050	0.86 UJ	mg/kg
					SO-17358-030112-DR-052	0.86 UJ	mg/kg
					SO-17358-030112-CB-100	0.96 UJ	mg/kg
					SO-17358-030112-CB-101	0.96 UJ	mg/kg
					SO-17358-030112-CB-102	0.84 UJ	mg/kg
					SO-17358-030112-CB-103	0.85 UJ	mg/kg
					SO-17358-030112-CB-104	0.87 UJ	mg/kg
					SO-17358-030212-CB-113	0.83 UJ	mg/kg
					SO-17358-030212-CB-114	0.83 UJ	mg/kg
					SO-17358-030212-CB-115	0.90 UJ	mg/kg
					SO-17358-030212-CB-116	0.83 UJ	mg/kg
					SO-17358-030212-DR-053	0.83 UJ	mg/kg
					SO-17358-030212-DR-054	0.83 UJ	mg/kg
Gen Chem	Hexavalent Chromium	04/05/12	75	80-120	SO-17358-032612-DR-084	0.88 UJ	mg/kg
					SO-17358-032612-DR-085	0.96 UJ	mg/kg
Metals	Selenium	03/19/12	79	80-120	SO-17358-030812-CB-168	0.26 J	mg/kg
					SO-17358-030812-CB-167	0.43 J	mg/kg
					SO-17358-030812-CB-169	0.36 J	mg/kg
					SO-17358-030812-CB-170	0.35 J	mg/kg
					SO-17358-030812-CB-171	0.29 J	mg/kg
					SO-17358-030812-CB-172	0.24 J	mg/kg
					SO-17358-030812-CB-173	0.22 J	mg/kg
					SO-17358-030812-CB-174	0.16 J	mg/kg
					SO-17358-030812-CB-175	0.29 J	mg/kg
					SO-17358-030812-CB-176	0.18 J	mg/kg
					SO-17358-030812-DR-059	0.24 J	mg/kg
					SO-17358-030812-DR-060	0.32 J	mg/kg
					SO-17358-030912-CB-177	0.36 J	mg/kg
					SO-17358-030912-CB-178	0.20 J	mg/kg
					SO-17358-030912-CB-179	0.26 J	mg/kg
					SO-17358-030912-CB-180	0.23 J	mg/kg
					SO-17358-030912-CB-182	0.23 J	mg/kg
					SO-17358-030912-CB-181	0.29 J	mg/kg

TABLE 6

SUMMARY OF QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*LCS Date*	*LCS %Rec*	*Control Limits %Rec*	*Associated Sample ID*	*Qualified Results*	*Units*
Metals	Selenium	03/19/12	79	80-120	SO-17358-030912-CB-183	0.30 J	mg/kg
					SO-17358-030912-CB-184	0.45 J	mg/kg
Metals	Selenium	03/20/12	79	80-120	SO-17358-031412-CB-194	0.29 J	mg/kg
					SO-17358-031412-CB-195	0.39 J	mg/kg
					SO-17358-031412-CB-196	0.52 J	mg/kg
					SO-17358-031412-CB-198	0.24 J	mg/kg
					SO-17358-031412-CB-197	0.36 J	mg/kg
					SO-17358-031412-DR-068	0.38 J	mg/kg
					SO-17358-031412-DR-069	0.26 J	mg/kg
					SO-17358-031412-DR-071	0.42 J	mg/kg
					SO-17358-031512-CB-199	0.40 J	mg/kg
					SO-17358-031512-CB-200	0.74 J	mg/kg
					SO-17358-031512-CB-201	0.37 J	mg/kg
					SO-17358-031512-CB-202	0.26 J	mg/kg
					SO-17358-031512-DR-072	0.18 J	mg/kg
					SO-17358-031512-DR-073	0.21 J	mg/kg
					SO-17358-031512-DR-075	0.19 J	mg/kg
Metals	Selenium	03/23/12	78	80-120	SO-17358-031512-DR-074	0.36 J	mg/kg
					SO-17358-031912-CB-203	0.32 J	mg/kg
					SO-17358-031912-CB-204	0.32 J	mg/kg
					SO-17358-031912-CB-205	0.34 J	mg/kg
					SO-17358-031912-CB-206	0.24 J	mg/kg
					SO-17358-031912-CB-208	0.13 J	mg/kg
					SO-17358-031912-CB-207	0.16 J	mg/kg
					SO-17358-032012-DR-078	0.16 J	mg/kg
					SO-17358-032012-DR-079	0.099 J	mg/kg
					SO-17358-032012-CB-209	0.20 J	mg/kg
					SO-17358-032012-CB-210	0.13 J	mg/kg
					SO-17358-032012-CB-211	0.21 J	mg/kg
					SO-17358-032012-CB-212	0.10 J	mg/kg
					SO-17358-032012-CB-213	0.14 J	mg/kg
					SO-17358-032012-CB-214	0.16 J	mg/kg
					SO-17358-032012-CB-215	0.15 J	mg/kg

SUMMARY OF QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*LCS Date*	*LCS %Rec*	*Control Limits %Rec*	*Associated Sample ID*	*Qualified Results*	*Units*
Metals	Selenium	03/23/12	79	80-120	SO-17358-032612-CB-249	0.21 J	mg/kg
					SO-17358-032612-CB-250	0.23 J	mg/kg
					SO-17358-032612-CB-251	0.21 J	mg/kg
					SO-17358-032612-CB-252	0.35 J	mg/kg
					SO-17358-032612-CB-253	0.29 J	mg/kg
					SO-17358-032612-CB-254	0.30 J	mg/kg
					SO-17358-032612-CB-255	0.22 J	mg/kg
					SO-17358-032612-CB-256	0.34 J	mg/kg
					SO-17358-032612-CB-257	0.23 J	mg/kg
					SO-17358-032612-CB-258	0.33 J	mg/kg
					SO-17358-032612-CB-259	0.28 J	mg/kg
					SO-17358-032612-CB-260	0.26 J	mg/kg
					SO-17358-032612-CB-262	0.37 J	mg/kg
					SO-17358-032612-CB-261	0.20 J	mg/kg
					SO-17358-032612-CB-263	0.24 J	mg/kg
					SO-17358-032612-DR-084	0.32 J	mg/kg
					SO-17358-032612-DR-085	0.22 J	mg/kg

Notes:

J - Estimated Concentration
UJ - Non-detect with an Estimated Report Limit
R - Rejected

LCS - Laboratory Control Spike
%Rec - Percent Recovery
Gen Chem - General Chemistry
SVOC - Semivolatile Organic Compounds
TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 7

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO VARIABILITY IN FIELD DUPLICATE RESULTS
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Criteria*	*RPD / Diff*	*Sample ID*	*Qualified Result*	*Field Duplicate Sample ID*	*Qualified Result*	*Units*
Metals	Beryllium	Diff	0.63	SO-17358-030712-CB-142	0.36 J	SO-17358-030712-CB-143	0.99 J	mg/kg
	Selenium	Diff	0.33		0.47 J		0.80 J	mg/kg
Metals	Arsenic	RPD	172	SO-17358-032112-CB-227	3.0 J	SO-17358-032112-CB-228	40 J	mg/kg
	Iron	RPD	118		20000 J		5100 J	mg/kg

Notes:

J - Estimated Concentration

RPD - Relative Percent Difference
Diff - Difference

TABLE 8

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO TRIP BLANK CONTAMINATION
RFI INVESTIGATION - FEBRUARY THROUGH AUGUST 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Blank Date*	*Blank Result*	*Associated Sample ID*	*Qualified Result*	*Units*
TCL VOC	Methyl acetate	02/27/12	480	SO-17358-022712-DR-043	1100 U	µg/kg
				SO-17358-022712-DR-044	1100 U	µg/kg
TCL VOC	Methyl acetate	03/01/12	490	SO-17358-030112-CB-100	1100 U	µg/kg
				SO-17358-030112-CB-101	1100 U	µg/kg
				SO-17358-030112-CB-104	1100 U	µg/kg
TCL VOC	Tetrachloroethene	03/02/12	12	SO-17358-030212-CB-116	47 U	µg/kg

Notes:

U - Qualified as Not Detected at the report limit

TCL - Target Compound List
VOC - Volatile Organic Compounds

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ANALYTICAL REPORT

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Project Manager II
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Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Definitions/Glossary 7
Sample Summary 8
Detection Summary 9
Method Summary 20
Client Sample Results 21
QC Association Summary 214
QC Sample Results 224
Surrogate Summary 250
Lab Chronicle 253
Certification Summary 264
Chain of Custody 265
Receipt Checklists 270

Job ID: 240-7846-1

Laboratory: TestAmerica North Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 17358-T01-08, RACER Willow Run

Report Number: 240-7846-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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 application 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 01/20/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.2, 0.8 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SO-17358-011712-DR-001 (240-7846-1), SO-17358-011712-DR-002 (240-7846-2), SO-17358-011712-DR-003 (240-7846-3), SO-17358-011712-DR-004 (240-7846-4), SO-17358-011712-DR-005 (240-7846-5), SO-17358-011712-DR-006 (240-7846-6), SO-17358-011812-DR-007 (240-7846-7), SO-17358-011812-DR-008 (240-7846-8), SO-17358-011812-DR-009 (240-7846-9), SO-17358-011812-DR-010 (240-7846-10), SO-17358-011812-DR-011 (240-7846-11), SO-17358-011812-DR-012 (240-7846-12), SO-17358-011812-DR-013 (240-7846-13), SO-17358-011812-DR-014 (240-7846-14), SO-17358-011812-DR-015 (240-7846-15), SO-17358-011812-DR-016 (240-7846-16), SO-17358-011812-DR-017 (240-7846-17), SO-17358-011812-DR-018 (240-7846-18), SO-17358-011912-DR-019 (240-7846-19), SO-17358-011912-DR-020 (240-7846-20), SO-17358-011912-DR-021 (240-7846-21), SO-17358-011912-DR-022 (240-7846-22) and TB-17358-011712 (240-7846-23) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were prepared on 01/23/2012 and 01/24/2012 and analyzed on 01/25/2012 and 01/27/2012.

1,2,4-Trichlorobenzene and Methylcyclohexane were detected in method blank MB 240-31125/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Job ID: 240-7846-1 (Continued)

Laboratory: TestAmerica North Canton (Continued)

Bromomethane and Chloroethane failed the recovery criteria high for LCS 240-31125/2-A. Bromomethane and Chloroethane failed the recovery criteria high for LCS 240-31190/2-A.

The presence of the '4' qualifier in the data indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount.

The continuing calibration verification (CCV) for vinyl chloride associated with batch 31618 recovered above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

No other difficulties were encountered during the VOCs analyses.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples SO-17358-011712-DR-001 (240-7846-1), SO-17358-011712-DR-002 (240-7846-2), SO-17358-011712-DR-003 (240-7846-3), SO-17358-011712-DR-004 (240-7846-4), SO-17358-011712-DR-005 (240-7846-5), SO-17358-011712-DR-006 (240-7846-6), SO-17358-011812-DR-007 (240-7846-7), SO-17358-011812-DR-008 (240-7846-8), SO-17358-011812-DR-009 (240-7846-9), SO-17358-011812-DR-010 (240-7846-10), SO-17358-011812-DR-011 (240-7846-11), SO-17358-011812-DR-012 (240-7846-12), SO-17358-011812-DR-013 (240-7846-13), SO-17358-011812-DR-014 (240-7846-14), SO-17358-011812-DR-015 (240-7846-15), SO-17358-011812-DR-016 (240-7846-16), SO-17358-011812-DR-017 (240-7846-17), SO-17358-011812-DR-018 (240-7846-18), SO-17358-011912-DR-019 (240-7846-19), SO-17358-011912-DR-020 (240-7846-20), SO-17358-011912-DR-021 (240-7846-21) and SO-17358-011912-DR-022 (240-7846-22) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 01/25/2012 and 01/26/2012 and analyzed on 01/27/2012 and 01/30/2012.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Pentachlorophenol exceeded the rpd limit for the MSD of sample SO-17358-011812-DR-012MSD (240-7846-12) in batch 240-31656.

Samples SO-17358-011712-DR-005 (240-7846-5)[4X], SO-17358-011812-DR-015 (240-7846-15)[4X], SO-17358-011812-DR-017 (240-7846-17)[2.5X] and SO-17358-011912-DR-019 (240-7846-19)[2.5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the SVOC analyses.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples SO-17358-011712-DR-001 (240-7846-1), SO-17358-011712-DR-002 (240-7846-2), SO-17358-011712-DR-003 (240-7846-3), SO-17358-011712-DR-004 (240-7846-4), SO-17358-011712-DR-005 (240-7846-5), SO-17358-011712-DR-006 (240-7846-6), SO-17358-011812-DR-007 (240-7846-7), SO-17358-011812-DR-008 (240-7846-8), SO-17358-011812-DR-009 (240-7846-9), SO-17358-011812-DR-010 (240-7846-10), SO-17358-011812-DR-011 (240-7846-11), SO-17358-011812-DR-012 (240-7846-12), SO-17358-011812-DR-013 (240-7846-13), SO-17358-011812-DR-014 (240-7846-14), SO-17358-011812-DR-015 (240-7846-15), SO-17358-011812-DR-016 (240-7846-16), SO-17358-011812-DR-017 (240-7846-17), SO-17358-011812-DR-018 (240-7846-18), SO-17358-011912-DR-019 (240-7846-19), SO-17358-011912-DR-020 (240-7846-20), SO-17358-011912-DR-021 (240-7846-21) and SO-17358-011912-DR-022 (240-7846-22) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared on 01/25/2012 and analyzed on 01/27/2012, 01/28/2012, 01/30/2012 and 01/31/2012.

All samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur.

No difficulties were encountered during the PCBs analyses.

All quality control parameters were within the acceptance limits.

TOTAL METALS (ICP)

Job ID: 240-7846-1 (Continued)

Laboratory: TestAmerica North Canton (Continued)

Samples SO-17358-011712-DR-001 (240-7846-1), SO-17358-011712-DR-002 (240-7846-2), SO-17358-011712-DR-003 (240-7846-3), SO-17358-011712-DR-004 (240-7846-4), SO-17358-011712-DR-005 (240-7846-5), SO-17358-011712-DR-006 (240-7846-6), SO-17358-011812-DR-007 (240-7846-7), SO-17358-011812-DR-008 (240-7846-8), SO-17358-011812-DR-009 (240-7846-9), SO-17358-011812-DR-010 (240-7846-10), SO-17358-011812-DR-011 (240-7846-11), SO-17358-011812-DR-012 (240-7846-12), SO-17358-011812-DR-013 (240-7846-13), SO-17358-011812-DR-014 (240-7846-14), SO-17358-011812-DR-015 (240-7846-15), SO-17358-011812-DR-016 (240-7846-16), SO-17358-011812-DR-017 (240-7846-17), SO-17358-011812-DR-018 (240-7846-18), SO-17358-011912-DR-019 (240-7846-19), SO-17358-011912-DR-020 (240-7846-20), SO-17358-011912-DR-021 (240-7846-21) and SO-17358-011912-DR-022 (240-7846-22) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 01/23/2012 and 01/24/2012 and analyzed on 01/25/2012 and 01/26/2012.

Several analytes were detected in method blank MB 240-31063/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged. Barium and Manganese were detected in method blank MB 240-31192/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged.

Calcium and Manganese failed the recovery criteria low for the MS of sample SO-17358-011812-DR-012MS (240-7846-12) in batch 240-31467. Aluminum failed the recovery criteria high.

For the MSD of sample SO-17358-011812-DR-012MSD (240-7846-12) in batch 240-31467, Iron failed the recovery criteria low. Aluminum and Manganese failed the recovery criteria high. Also, Manganese exceeded the rpd limit.

Aluminum, Iron and Manganese failed the recovery criteria high for the MS of sample SO-17358-011912-DR-019MS (240-7846-19) in batch 240-31467.

Aluminum and Iron failed the recovery criteria high for the MSD of sample SO-17358-011912-DR-019MSD (240-7846-19) in batch 240-31467. Iron and Manganese exceeded the rpd limit.

Sample SO-17358-011812-DR-011 (240-7846-11)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

TOTAL METALS (ICPMS)

Samples SO-17358-011712-DR-001 (240-7846-1), SO-17358-011712-DR-002 (240-7846-2), SO-17358-011712-DR-003 (240-7846-3), SO-17358-011712-DR-004 (240-7846-4), SO-17358-011712-DR-005 (240-7846-5), SO-17358-011712-DR-006 (240-7846-6), SO-17358-011812-DR-007 (240-7846-7), SO-17358-011812-DR-008 (240-7846-8), SO-17358-011812-DR-009 (240-7846-9), SO-17358-011812-DR-010 (240-7846-10), SO-17358-011812-DR-011 (240-7846-11), SO-17358-011812-DR-012 (240-7846-12), SO-17358-011812-DR-013 (240-7846-13), SO-17358-011812-DR-014 (240-7846-14), SO-17358-011812-DR-015 (240-7846-15), SO-17358-011812-DR-016 (240-7846-16), SO-17358-011812-DR-017 (240-7846-17), SO-17358-011812-DR-018 (240-7846-18), SO-17358-011912-DR-019 (240-7846-19), SO-17358-011912-DR-020 (240-7846-20), SO-17358-011912-DR-021 (240-7846-21) and SO-17358-011912-DR-022 (240-7846-22) were analyzed for total metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 01/23/2012 and 01/24/2012 and analyzed on 01/27/2012 and 01/30/2012.

Thallium and Zinc were detected in method blank MB 240-31063/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged. Zinc was detected in method blank MB 240-31192/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged.

Antimony failed the recovery criteria low for the MS/MSD of sample SO-17358-011812-DR-012 (240-7846-12) in batch 240-31861.

Antimony failed the recovery criteria low for the MS/MSD of sample SO-17358-011912-DR-019 (240-7846-19) in batch 240-31995.

Job ID: 240-7846-1 (Continued)

Laboratory: TestAmerica North Canton (Continued)

The reporting limit (RL) provided for thallium falls below the laboratory's verified standard quantitation limit. Results reported below the verified standard quantitation limit have less certainty (i.e., are estimated) and must be used at the client's discretion. The continuing calibration blanks and method blanks may not support the lower RL.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples SO-17358-011712-DR-001 (240-7846-1), SO-17358-011712-DR-002 (240-7846-2), SO-17358-011712-DR-003 (240-7846-3), SO-17358-011712-DR-004 (240-7846-4), SO-17358-011712-DR-005 (240-7846-5), SO-17358-011712-DR-006 (240-7846-6), SO-17358-011812-DR-007 (240-7846-7), SO-17358-011812-DR-008 (240-7846-8), SO-17358-011812-DR-009 (240-7846-9), SO-17358-011812-DR-010 (240-7846-10), SO-17358-011812-DR-011 (240-7846-11), SO-17358-011812-DR-012 (240-7846-12), SO-17358-011812-DR-013 (240-7846-13), SO-17358-011812-DR-014 (240-7846-14), SO-17358-011812-DR-015 (240-7846-15), SO-17358-011812-DR-016 (240-7846-16), SO-17358-011812-DR-017 (240-7846-17), SO-17358-011812-DR-018 (240-7846-18), SO-17358-011912-DR-019 (240-7846-19), SO-17358-011912-DR-020 (240-7846-20), SO-17358-011912-DR-021 (240-7846-21) and SO-17358-011912-DR-022 (240-7846-22) were analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 01/23/2012 and 01/24/2012 and analyzed on 01/23/2012 and 01/27/2012.

No difficulties were encountered during the mercury analyses.

All quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM

Samples SO-17358-011712-DR-001 (240-7846-1), SO-17358-011712-DR-002 (240-7846-2), SO-17358-011712-DR-003 (240-7846-3), SO-17358-011712-DR-004 (240-7846-4), SO-17358-011712-DR-005 (240-7846-5), SO-17358-011712-DR-006 (240-7846-6), SO-17358-011812-DR-007 (240-7846-7), SO-17358-011812-DR-008 (240-7846-8), SO-17358-011812-DR-009 (240-7846-9), SO-17358-011812-DR-010 (240-7846-10), SO-17358-011812-DR-011 (240-7846-11), SO-17358-011812-DR-015 (240-7846-15), SO-17358-011812-DR-016 (240-7846-16), SO-17358-011912-DR-021 (240-7846-21) and SO-17358-011912-DR-022 (240-7846-22) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 3060A/7196A. The samples were prepared on 01/26/2012 and 02/01/2012 and analyzed on 02/02/2012.

No difficulties were encountered during the hexavalent chromium analyses.

All quality control parameters were within the acceptance limits.

TRIVALENT CHROMIUM

Samples SO-17358-011712-DR-001 (240-7846-1), SO-17358-011712-DR-002 (240-7846-2), SO-17358-011712-DR-003 (240-7846-3), SO-17358-011712-DR-004 (240-7846-4), SO-17358-011712-DR-005 (240-7846-5), SO-17358-011712-DR-006 (240-7846-6), SO-17358-011812-DR-007 (240-7846-7), SO-17358-011812-DR-008 (240-7846-8), SO-17358-011812-DR-009 (240-7846-9), SO-17358-011812-DR-010 (240-7846-10), SO-17358-011812-DR-011 (240-7846-11), SO-17358-011812-DR-015 (240-7846-15), SO-17358-011812-DR-016 (240-7846-16), SO-17358-011912-DR-021 (240-7846-21) and SO-17358-011912-DR-022 (240-7846-22) were analyzed for trivalent chromium in accordance with SW-846 7196A_CR3. The samples were analyzed on 01/26/2012.

No difficulties were encountered during the trivalent chromium analyses.

All quality control parameters were within the acceptance limits.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
*	LCS or LCSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	RPD of the MS and MSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-7846-1	SO-17358-011712-DR-001	Solid	01/17/12 10:10	01/20/12 09:30
240-7846-2	SO-17358-011712-DR-002	Solid	01/17/12 10:20	01/20/12 09:30
240-7846-3	SO-17358-011712-DR-003	Solid	01/17/12 10:40	01/20/12 09:30
240-7846-4	SO-17358-011712-DR-004	Solid	01/17/12 10:45	01/20/12 09:30
240-7846-5	SO-17358-011712-DR-005	Solid	01/17/12 13:55	01/20/12 09:30
240-7846-6	SO-17358-011712-DR-006	Solid	01/17/12 14:00	01/20/12 09:30
240-7846-7	SO-17358-011812-DR-007	Solid	01/18/12 08:45	01/20/12 09:30
240-7846-8	SO-17358-011812-DR-008	Solid	01/18/12 08:50	01/20/12 09:30
240-7846-9	SO-17358-011812-DR-009	Solid	01/18/12 10:05	01/20/12 09:30
240-7846-10	SO-17358-011812-DR-010	Solid	01/18/12 10:10	01/20/12 09:30
240-7846-11	SO-17358-011812-DR-011	Solid	01/18/12 10:15	01/20/12 09:30
240-7846-12	SO-17358-011812-DR-012	Solid	01/18/12 11:20	01/20/12 09:30
240-7846-13	SO-17358-011812-DR-013	Solid	01/18/12 13:20	01/20/12 09:30
240-7846-14	SO-17358-011812-DR-014	Solid	01/18/12 13:25	01/20/12 09:30
240-7846-15	SO-17358-011812-DR-015	Solid	01/18/12 13:30	01/20/12 09:30
240-7846-16	SO-17358-011812-DR-016	Solid	01/18/12 13:35	01/20/12 09:30
240-7846-17	SO-17358-011812-DR-017	Solid	01/18/12 14:05	01/20/12 09:30
240-7846-18	SO-17358-011812-DR-018	Solid	01/18/12 14:10	01/20/12 09:30
240-7846-19	SO-17358-011912-DR-019	Solid	01/19/12 08:30	01/20/12 09:30
240-7846-20	SO-17358-011912-DR-020	Solid	01/19/12 08:35	01/20/12 09:30
240-7846-21	SO-17358-011912-DR-021	Solid	01/19/12 08:55	01/20/12 09:30
240-7846-22	SO-17358-011912-DR-022	Solid	01/19/12 09:00	01/20/12 09:30
240-7846-23	TB-17358-011712	Solid	01/17/12 00:00	01/20/12 09:30

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-001 — Lab Sample ID: 240-7846-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	16	J B	220	7.9	ug/Kg	1	☼	8260B	Total/NA
Methylcyclohexane	13	J B	1000	13	ug/Kg	1	☼	8260B	Total/NA
Bis(2-ethylhexyl) phthalate	34	J	280	20	ug/Kg	1	☼	8270C	Total/NA
Aluminum	1900		13	8.1	mg/Kg	1	☼	6010B	Total/NA
Barium	7.3	B	0.67	0.060	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.068		0.067	0.030	mg/Kg	1	☼	6010B	Total/NA
Cobalt	1.7		0.34	0.13	mg/Kg	1	☼	6010B	Total/NA
Chromium	4.2		0.67	0.17	mg/Kg	1	☼	6010B	Total/NA
Copper	5.8		0.67	0.62	mg/Kg	1	☼	6010B	Total/NA
Iron	5200		6.7	4.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	200		0.67	0.062	mg/Kg	1	☼	6010B	Total/NA
Nickel	5.0		0.67	0.23	mg/Kg	1	☼	6010B	Total/NA
Vanadium	6.8		0.67	0.10	mg/Kg	1	☼	6010B	Total/NA
Lead	2.4		0.20	0.16	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.039	J	0.13	0.020	mg/Kg	1	☼	6020	Total/NA
Arsenic	3.5		0.067	0.052	mg/Kg	1	☼	6020	Total/NA
Selenium	0.34		0.13	0.076	mg/Kg	1	☼	6020	Total/NA
Thallium	0.11	B	0.067	0.011	mg/Kg	1	☼	6020	Total/NA
Zinc	12	B	0.67	0.17	mg/Kg	1	☼	6020	Total/NA
Cr (III)	4.2		0.85	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011712-DR-002 — Lab Sample ID: 240-7846-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	41	J	280	20	ug/Kg	1	☼	8270C	Total/NA
Aluminum	3100		15	8.9	mg/Kg	1	☼	6010B	Total/NA
Barium	11	B	0.74	0.066	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.075		0.074	0.033	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.9		0.37	0.15	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.5		0.74	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	15		0.74	0.68	mg/Kg	1	☼	6010B	Total/NA
Iron	8100		7.4	4.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	210		0.74	0.068	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.74	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	9.8		0.74	0.11	mg/Kg	1	☼	6010B	Total/NA
Lead	4.5		0.22	0.18	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.084	J	0.15	0.022	mg/Kg	1	☼	6020	Total/NA
Arsenic	3.4		0.074	0.057	mg/Kg	1	☼	6020	Total/NA
Selenium	0.70		0.15	0.083	mg/Kg	1	☼	6020	Total/NA
Thallium	0.14	B	0.074	0.012	mg/Kg	1	☼	6020	Total/NA
Zinc	27	B	0.74	0.18	mg/Kg	1	☼	6020	Total/NA
Mercury	0.020	J	0.035	0.013	mg/Kg	1	☼	7471A	Total/NA
Cr (VI)	0.35	J	0.86	0.29	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	8.1		0.86	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011712-DR-003 — Lab Sample ID: 240-7846-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	41	J	290	21	ug/Kg	1	☼	8270C	Total/NA
Aluminum	4500		15	9.0	mg/Kg	1	☼	6010B	Total/NA
Barium	17	B	0.75	0.067	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.047	J	0.15	0.040	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.2		0.38	0.15	mg/Kg	1	☼	6010B	Total/NA
Chromium	10		0.75	0.19	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SO-17358-011712-DR-003 (Continued) — Lab Sample ID: 240-7846-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	8.8		0.75	0.69	mg/Kg	1	☼	6010B	Total/NA
Iron	9100		7.5	4.6	mg/Kg	1	☼	6010B	Total/NA
Manganese	66		0.75	0.069	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.0		0.75	0.25	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.75	0.11	mg/Kg	1	☼	6010B	Total/NA
Lead	4.1		0.23	0.18	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.038	J	0.15	0.023	mg/Kg	1	☼	6020	Total/NA
Arsenic	3.8		0.075	0.058	mg/Kg	1	☼	6020	Total/NA
Selenium	0.71		0.15	0.085	mg/Kg	1	☼	6020	Total/NA
Thallium	0.065	J B	0.075	0.012	mg/Kg	1	☼	6020	Total/NA
Zinc	19	B	0.75	0.19	mg/Kg	1	☼	6020	Total/NA
Mercury	0.027	J	0.034	0.013	mg/Kg	1	☼	7471A	Total/NA
Cr (VI)	0.74	J	0.87	0.29	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	9.5		0.87	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011712-DR-004 — Lab Sample ID: 240-7846-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	2100		17	10	mg/Kg	1	☼	6010B	Total/NA
Barium	8.1	B	0.86	0.076	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.4		0.43	0.17	mg/Kg	1	☼	6010B	Total/NA
Chromium	4.6		0.86	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	13		0.86	0.80	mg/Kg	1	☼	6010B	Total/NA
Iron	7500		8.6	5.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	170		0.86	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	6.6		0.86	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	12		0.86	0.13	mg/Kg	1	☼	6010B	Total/NA
Lead	3.1		0.26	0.20	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.056	J	0.17	0.026	mg/Kg	1	☼	6020	Total/NA
Arsenic	2.9		0.086	0.067	mg/Kg	1	☼	6020	Total/NA
Selenium	0.35		0.17	0.097	mg/Kg	1	☼	6020	Total/NA
Thallium	0.24	B	0.086	0.014	mg/Kg	1	☼	6020	Total/NA
Zinc	18	B	0.86	0.22	mg/Kg	1	☼	6020	Total/NA
Mercury	0.026	J	0.040	0.015	mg/Kg	1	☼	7471A	Total/NA
Cr (VI)	0.65	J	0.87	0.29	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	3.9		0.87	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011712-DR-005 — Lab Sample ID: 240-7846-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	2700		12	7.4	mg/Kg	1	☼	6010B	Total/NA
Barium	19	B	0.62	0.055	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.071	J	0.12	0.033	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.082		0.062	0.028	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.2		0.31	0.12	mg/Kg	1	☼	6010B	Total/NA
Chromium	6.3		0.62	0.15	mg/Kg	1	☼	6010B	Total/NA
Copper	8.8		0.62	0.57	mg/Kg	1	☼	6010B	Total/NA
Iron	7100		6.2	3.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	220		0.62	0.057	mg/Kg	1	☼	6010B	Total/NA
Nickel	6.5		0.62	0.21	mg/Kg	1	☼	6010B	Total/NA
Vanadium	9.0		0.62	0.093	mg/Kg	1	☼	6010B	Total/NA
Lead	6.1		0.19	0.15	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.18		0.12	0.019	mg/Kg	1	☼	6020	Total/NA
Arsenic	5.9		0.062	0.048	mg/Kg	1	☼	6020	Total/NA

Client Sample ID: SO-17358-011712-DR-005 (Continued)

Lab Sample ID: 240-7846-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	0.44		0.12	0.070	mg/Kg	1	☼	6020	Total/NA
Thallium	0.074	B	0.062	0.010	mg/Kg	1	☼	6020	Total/NA
Zinc	18	B	0.62	0.15	mg/Kg	1	☼	6020	Total/NA
Silver	0.022	J	0.062	0.012	mg/Kg	1	☼	6020	Total/NA
Mercury	0.026	J	0.034	0.013	mg/Kg	1	☼	7471A	Total/NA
Cr (VI)	0.76	J	0.86	0.29	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	5.5		0.86	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011712-DR-006

Lab Sample ID: 240-7846-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	4600		17	10	mg/Kg	1	☼	6010B	Total/NA
Barium	20	B	0.85	0.076	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.0		0.43	0.17	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.3		0.85	0.21	mg/Kg	1	☼	6010B	Total/NA
Copper	4.4		0.85	0.79	mg/Kg	1	☼	6010B	Total/NA
Iron	10000		8.5	5.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	95		0.85	0.079	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.5		0.85	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.85	0.13	mg/Kg	1	☼	6010B	Total/NA
Lead	5.8		0.26	0.20	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.031	J	0.17	0.026	mg/Kg	1	☼	6020	Total/NA
Arsenic	4.1		0.085	0.066	mg/Kg	1	☼	6020	Total/NA
Selenium	0.62		0.17	0.096	mg/Kg	1	☼	6020	Total/NA
Thallium	0.095	B	0.085	0.014	mg/Kg	1	☼	6020	Total/NA
Zinc	32	B	0.85	0.21	mg/Kg	1	☼	6020	Total/NA
Mercury	0.016	J	0.032	0.012	mg/Kg	1	☼	7471A	Total/NA
Cr (VI)	0.38	J	0.89	0.30	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	8.9		0.89	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011812-DR-007

Lab Sample ID: 240-7846-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	53	J	290	21	ug/Kg	1	☼	8270C	Total/NA
Aluminum	4900		15	9.1	mg/Kg	1	☼	6010B	Total/NA
Barium	41	B	0.76	0.068	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.13	J	0.15	0.041	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.11		0.076	0.034	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.6		0.38	0.15	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.2		0.76	0.19	mg/Kg	1	☼	6010B	Total/NA
Copper	8.0		0.76	0.70	mg/Kg	1	☼	6010B	Total/NA
Iron	11000		7.6	4.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	360		0.76	0.070	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.3		0.76	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	14		0.76	0.11	mg/Kg	1	☼	6010B	Total/NA
Lead	6.7		0.23	0.18	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.066	J	0.15	0.023	mg/Kg	1	☼	6020	Total/NA
Arsenic	6.2		0.076	0.059	mg/Kg	1	☼	6020	Total/NA
Selenium	0.71		0.15	0.086	mg/Kg	1	☼	6020	Total/NA
Thallium	0.082	B	0.076	0.012	mg/Kg	1	☼	6020	Total/NA
Zinc	27	B	0.76	0.19	mg/Kg	1	☼	6020	Total/NA
Silver	0.018	J	0.076	0.015	mg/Kg	1	☼	6020	Total/NA
Mercury	0.024	J	0.042	0.016	mg/Kg	1	☼	7471A	Total/NA
Cr (VI)	0.90		0.89	0.30	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011812-DR-007 (Continued)

Lab Sample ID: 240-7846-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cr (III)	8.3		0.89	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011812-DR-008

Lab Sample ID: 240-7846-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	29	J	300	21	ug/Kg	1	☼	8270C	Total/NA
Aluminum	2300		12	7.3	mg/Kg	1	☼	6010B	Total/NA
Barium	7.3	B	0.61	0.054	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.029	J	0.061	0.027	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.2		0.30	0.12	mg/Kg	1	☼	6010B	Total/NA
Chromium	6.2		0.61	0.15	mg/Kg	1	☼	6010B	Total/NA
Copper	9.1		0.61	0.56	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		6.1	3.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	110		0.61	0.056	mg/Kg	1	☼	6010B	Total/NA
Nickel	5.9		0.61	0.21	mg/Kg	1	☼	6010B	Total/NA
Vanadium	15		0.61	0.091	mg/Kg	1	☼	6010B	Total/NA
Lead	3.1		0.18	0.14	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.12		0.12	0.018	mg/Kg	1	☼	6020	Total/NA
Arsenic	6.8		0.061	0.047	mg/Kg	1	☼	6020	Total/NA
Selenium	0.44		0.12	0.068	mg/Kg	1	☼	6020	Total/NA
Thallium	0.040	J B	0.061	0.0099	mg/Kg	1	☼	6020	Total/NA
Zinc	17	B	0.61	0.15	mg/Kg	1	☼	6020	Total/NA
Cr (VI)	0.53	J	0.90	0.30	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	5.7		0.90	0.15	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011812-DR-009

Lab Sample ID: 240-7846-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	47	J	300	21	ug/Kg	1	☼	8270C	Total/NA
Aluminum	4400		18	11	mg/Kg	1	☼	6010B	Total/NA
Barium	17	B	0.89	0.079	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.12	J	0.18	0.048	mg/Kg	1	☼	6010B	Total/NA
Calcium	52000	B	440	18	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.049	J	0.089	0.040	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.8		0.44	0.18	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.7		0.89	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	9.6		0.89	0.82	mg/Kg	1	☼	6010B	Total/NA
Iron	9300		8.9	5.4	mg/Kg	1	☼	6010B	Total/NA
Potassium	430	J B	440	6.9	mg/Kg	1	☼	6010B	Total/NA
Magnesium	14000	B	89	5.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	230		0.89	0.082	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.4		0.89	0.30	mg/Kg	1	☼	6010B	Total/NA
Vanadium	12		0.89	0.13	mg/Kg	1	☼	6010B	Total/NA
Lead	5.1		0.27	0.21	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.057	J	0.18	0.027	mg/Kg	1	☼	6020	Total/NA
Arsenic	4.9		0.089	0.069	mg/Kg	1	☼	6020	Total/NA
Selenium	0.67		0.18	0.10	mg/Kg	1	☼	6020	Total/NA
Thallium	0.13	B	0.089	0.014	mg/Kg	1	☼	6020	Total/NA
Zinc	26	B	0.89	0.22	mg/Kg	1	☼	6020	Total/NA
Mercury	0.015	J	0.040	0.015	mg/Kg	1	☼	7471A	Total/NA
Cr (VI)	0.63	J	0.90	0.30	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	8.0		0.90	0.15	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011812-DR-010 — Lab Sample ID: 240-7846-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	52	J	290	21	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	8.3	J	290	3.7	ug/Kg	1	☼	8270C	Total/NA
Pyrene	7.7	J	290	3.7	ug/Kg	1	☼	8270C	Total/NA
Aluminum	4300		13	7.8	mg/Kg	1	☼	6010B	Total/NA
Barium	16	B	0.65	0.058	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.054	J	0.13	0.035	mg/Kg	1	☼	6010B	Total/NA
Calcium	38000	B	330	13	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.046	J	0.065	0.029	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.1		0.33	0.13	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.8		0.65	0.16	mg/Kg	1	☼	6010B	Total/NA
Copper	10		0.65	0.60	mg/Kg	1	☼	6010B	Total/NA
Iron	10000		6.5	4.0	mg/Kg	1	☼	6010B	Total/NA
Potassium	360	B	330	5.0	mg/Kg	1	☼	6010B	Total/NA
Magnesium	10000	B	65	4.2	mg/Kg	1	☼	6010B	Total/NA
Manganese	220		0.65	0.060	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.9		0.65	0.22	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.65	0.098	mg/Kg	1	☼	6010B	Total/NA
Lead	5.8		0.20	0.15	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.048	J	0.13	0.020	mg/Kg	1	☼	6020	Total/NA
Arsenic	5.3		0.065	0.050	mg/Kg	1	☼	6020	Total/NA
Selenium	0.59		0.13	0.073	mg/Kg	1	☼	6020	Total/NA
Thallium	0.11	B	0.065	0.011	mg/Kg	1	☼	6020	Total/NA
Zinc	24	B	0.65	0.16	mg/Kg	1	☼	6020	Total/NA
Cr (VI)	0.42	J	0.89	0.30	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	9.3		0.89	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011812-DR-011 — Lab Sample ID: 240-7846-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	39	J	290	21	ug/Kg	1	☼	8270C	Total/NA
Aluminum	2400		16	9.6	mg/Kg	1	☼	6010B	Total/NA
Barium	6.9	B	0.80	0.071	mg/Kg	1	☼	6010B	Total/NA
Calcium	95000	B	2000	80	mg/Kg	5	☼	6010B	Total/NA
Cadmium	0.042	J	0.080	0.036	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.3		0.40	0.16	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.2		0.80	0.20	mg/Kg	1	☼	6010B	Total/NA
Copper	8.0		0.80	0.74	mg/Kg	1	☼	6010B	Total/NA
Iron	6600		8.0	4.9	mg/Kg	1	☼	6010B	Total/NA
Potassium	350	J B	400	6.2	mg/Kg	1	☼	6010B	Total/NA
Magnesium	14000	B	80	5.1	mg/Kg	1	☼	6010B	Total/NA
Manganese	180		0.80	0.074	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.2		0.80	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	8.5		0.80	0.12	mg/Kg	1	☼	6010B	Total/NA
Lead	3.5		0.24	0.19	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.045	J	0.16	0.024	mg/Kg	1	☼	6020	Total/NA
Arsenic	3.4		0.080	0.062	mg/Kg	1	☼	6020	Total/NA
Selenium	0.37		0.16	0.090	mg/Kg	1	☼	6020	Total/NA
Thallium	0.079	J B	0.080	0.013	mg/Kg	1	☼	6020	Total/NA
Zinc	19	B	0.80	0.20	mg/Kg	1	☼	6020	Total/NA
Cr (III)	8.2		0.87	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011812-DR-012 — Lab Sample ID: 240-7846-12

Client Sample ID: SO-17358-011812-DR-012 (Continued)

Lab Sample ID: 240-7846-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	37	J	300	21	ug/Kg	1	☼	8270C	Total/NA
Aluminum	3300		17	10	mg/Kg	1	☼	6010B	Total/NA
Barium	13	B	0.87	0.077	mg/Kg	1	☼	6010B	Total/NA
Calcium	6900	B	430	17	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.084	J	0.087	0.039	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.9		0.43	0.17	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.9		0.87	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	6.8		0.87	0.80	mg/Kg	1	☼	6010B	Total/NA
Iron	9400		8.7	5.3	mg/Kg	1	☼	6010B	Total/NA
Potassium	260	J B	430	6.7	mg/Kg	1	☼	6010B	Total/NA
Magnesium	2200	B	87	5.5	mg/Kg	1	☼	6010B	Total/NA
Manganese	110		0.87	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.2		0.87	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.87	0.13	mg/Kg	1	☼	6010B	Total/NA
Lead	5.4		0.26	0.21	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.067	J	0.17	0.026	mg/Kg	1	☼	6020	Total/NA
Arsenic	4.2		0.087	0.067	mg/Kg	1	☼	6020	Total/NA
Selenium	0.52		0.17	0.098	mg/Kg	1	☼	6020	Total/NA
Thallium	0.12	B	0.087	0.014	mg/Kg	1	☼	6020	Total/NA
Zinc	22	B	0.87	0.22	mg/Kg	1	☼	6020	Total/NA

Client Sample ID: SO-17358-011812-DR-013

Lab Sample ID: 240-7846-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	21	J B	250	9.1	ug/Kg	1	☼	8260B	Total/NA
Bis(2-ethylhexyl) phthalate	25	J	300	22	ug/Kg	1	☼	8270C	Total/NA
Aluminum	6600		17	10	mg/Kg	1	☼	6010B	Total/NA
Barium	72	B	0.87	0.077	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.22		0.17	0.047	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.36		0.087	0.039	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.3		0.43	0.17	mg/Kg	1	☼	6010B	Total/NA
Chromium	12		0.87	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	7.8		0.87	0.80	mg/Kg	1	☼	6010B	Total/NA
Iron	15000		8.7	5.3	mg/Kg	1	☼	6010B	Total/NA
Manganese	600		0.87	0.080	mg/Kg	1	☼	6010B	Total/NA
Nickel	11		0.87	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	19		0.87	0.13	mg/Kg	1	☼	6010B	Total/NA
Lead	7.6		0.26	0.21	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.042	J	0.17	0.026	mg/Kg	1	☼	6020	Total/NA
Arsenic	6.8		0.087	0.067	mg/Kg	1	☼	6020	Total/NA
Selenium	1.1		0.17	0.098	mg/Kg	1	☼	6020	Total/NA
Thallium	0.10	B	0.087	0.014	mg/Kg	1	☼	6020	Total/NA
Zinc	32	B	0.87	0.22	mg/Kg	1	☼	6020	Total/NA
Silver	0.025	J	0.087	0.017	mg/Kg	1	☼	6020	Total/NA
Mercury	0.042		0.040	0.015	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17358-011812-DR-014

Lab Sample ID: 240-7846-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	32	J	290	21	ug/Kg	1	☼	8270C	Total/NA
Aluminum	2700		16	9.7	mg/Kg	1	☼	6010B	Total/NA
Barium	29	B	0.81	0.072	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.064	J	0.081	0.037	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.4		0.41	0.16	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SO-17358-011812-DR-014 (Continued) — Lab Sample ID: 240-7846-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	5.8		0.81	0.20	mg/Kg	1	☼	6010B	Total/NA
Copper	5.8		0.81	0.75	mg/Kg	1	☼	6010B	Total/NA
Iron	9900		8.1	5.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	440		0.81	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	10		0.81	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	8.8		0.81	0.12	mg/Kg	1	☼	6010B	Total/NA
Lead	2.7		0.24	0.19	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.046	J	0.16	0.024	mg/Kg	1	☼	6020	Total/NA
Arsenic	5.9		0.081	0.063	mg/Kg	1	☼	6020	Total/NA
Selenium	0.40		0.16	0.091	mg/Kg	1	☼	6020	Total/NA
Thallium	0.091	B	0.081	0.013	mg/Kg	1	☼	6020	Total/NA
Zinc	14	B	0.81	0.20	mg/Kg	1	☼	6020	Total/NA

Client Sample ID: SO-17358-011812-DR-015 — Lab Sample ID: 240-7846-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	38	J	1100	14	ug/Kg	4	☼	8270C	Total/NA
Benzo[a]pyrene	48	J	1100	14	ug/Kg	4	☼	8270C	Total/NA
Benzo[b]fluoranthene	68	J	1100	14	ug/Kg	4	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	96	J	1100	80	ug/Kg	4	☼	8270C	Total/NA
Chrysene	49	J	1100	4.7	ug/Kg	4	☼	8270C	Total/NA
Fluoranthene	61	J	1100	14	ug/Kg	4	☼	8270C	Total/NA
Pyrene	72	J	1100	14	ug/Kg	4	☼	8270C	Total/NA
Aluminum	4300		13	7.9	mg/Kg	1	☼	6010B	Total/NA
Barium	31	B	0.66	0.059	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.070	J	0.13	0.035	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.69		0.066	0.030	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.9		0.33	0.13	mg/Kg	1	☼	6010B	Total/NA
Chromium	14		0.66	0.17	mg/Kg	1	☼	6010B	Total/NA
Copper	26		0.66	0.61	mg/Kg	1	☼	6010B	Total/NA
Iron	13000		6.6	4.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	330		0.66	0.061	mg/Kg	1	☼	6010B	Total/NA
Nickel	13		0.66	0.22	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.66	0.099	mg/Kg	1	☼	6010B	Total/NA
Lead	26		0.20	0.16	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.21		0.13	0.020	mg/Kg	1	☼	6020	Total/NA
Arsenic	4.5		0.066	0.051	mg/Kg	1	☼	6020	Total/NA
Selenium	0.47		0.13	0.074	mg/Kg	1	☼	6020	Total/NA
Thallium	0.10	B	0.066	0.011	mg/Kg	1	☼	6020	Total/NA
Zinc	47	B	0.66	0.17	mg/Kg	1	☼	6020	Total/NA
Silver	0.022	J	0.066	0.013	mg/Kg	1	☼	6020	Total/NA
Mercury	0.027	J	0.041	0.015	mg/Kg	1	☼	7471A	Total/NA
Cr (VI)	1.9		0.85	0.29	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	13		0.85	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011812-DR-016 — Lab Sample ID: 240-7846-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	31	J	290	21	ug/Kg	1	☼	8270C	Total/NA
Aluminum	3200		16	9.8	mg/Kg	1	☼	6010B	Total/NA
Barium	12	B	0.81	0.072	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.066	J	0.16	0.044	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.2		0.41	0.16	mg/Kg	1	☼	6010B	Total/NA
Chromium	8.6		0.81	0.20	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SO-17358-011812-DR-016 (Continued)

Lab Sample ID: 240-7846-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	9.3		0.81	0.75	mg/Kg	1	☼	6010B	Total/NA
Iron	14000		8.1	5.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	160		0.81	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.8		0.81	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.81	0.12	mg/Kg	1	☼	6010B	Total/NA
Lead	6.0		0.24	0.19	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.081	J	0.16	0.024	mg/Kg	1	☼	6020	Total/NA
Arsenic	8.7		0.081	0.063	mg/Kg	1	☼	6020	Total/NA
Selenium	0.54		0.16	0.091	mg/Kg	1	☼	6020	Total/NA
Thallium	0.070	J B	0.081	0.013	mg/Kg	1	☼	6020	Total/NA
Zinc	27	B	0.81	0.20	mg/Kg	1	☼	6020	Total/NA
Cr (VI)	0.75	J	0.87	0.29	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	7.9		0.87	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011812-DR-017

Lab Sample ID: 240-7846-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	89	J	1100	28	ug/Kg	1	☼	8260B	Total/NA
2-Methylnaphthalene	42	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Acenaphthene	43	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Anthracene	130	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[a]anthracene	390	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[a]pyrene	400	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[b]fluoranthene	500	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[g,h,i]perylene	370	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Benzo[k]fluoranthene	230	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Bis(2-ethylhexyl) phthalate	86	J	740	53	ug/Kg	2.5	☼	8270C	Total/NA
Carbazole	83	J	740	75	ug/Kg	2.5	☼	8270C	Total/NA
Chrysene	400	J	740	3.1	ug/Kg	2.5	☼	8270C	Total/NA
Dibenz(a,h)anthracene	54	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Dibenzofuran	31	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Fluoranthene	890		740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Fluorene	40	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	260	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Naphthalene	33	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Phenanthrene	520	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Pyrene	670	J	740	9.2	ug/Kg	2.5	☼	8270C	Total/NA
Aroclor-1260	79		37	19	ug/Kg	1	☼	8082	Total/NA
Aluminum	3400		16	9.5	mg/Kg	1	☼	6010B	Total/NA
Barium	31	B	0.80	0.071	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.10		0.080	0.036	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.3		0.40	0.16	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.6		0.80	0.20	mg/Kg	1	☼	6010B	Total/NA
Copper	18		0.80	0.74	mg/Kg	1	☼	6010B	Total/NA
Iron	7700		8.0	4.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	190		0.80	0.074	mg/Kg	1	☼	6010B	Total/NA
Nickel	8.2		0.80	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	9.7		0.80	0.12	mg/Kg	1	☼	6010B	Total/NA
Lead	14		0.24	0.19	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.070	J	0.16	0.024	mg/Kg	1	☼	6020	Total/NA
Arsenic	3.7		0.080	0.062	mg/Kg	1	☼	6020	Total/NA
Selenium	0.48		0.16	0.089	mg/Kg	1	☼	6020	Total/NA
Thallium	0.088	B	0.080	0.013	mg/Kg	1	☼	6020	Total/NA
Zinc	26	B	0.80	0.20	mg/Kg	1	☼	6020	Total/NA

Client Sample ID: SO-17358-011812-DR-017 (Continued) — Lab Sample ID: 240-7846-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	0.033	J	0.080	0.016	mg/Kg	1	☼	6020	Total/NA
Mercury	0.026	J	0.035	0.013	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: SO-17358-011812-DR-018 — Lab Sample ID: 240-7846-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	38	J	280	20	ug/Kg	1	☼	8270C	Total/NA
Aluminum	2900		16	9.3	mg/Kg	1	☼	6010B	Total/NA
Barium	47	B	0.78	0.069	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.070	J	0.16	0.042	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.15		0.078	0.035	mg/Kg	1	☼	6010B	Total/NA
Cobalt	6.3		0.39	0.16	mg/Kg	1	☼	6010B	Total/NA
Chromium	6.6		0.78	0.19	mg/Kg	1	☼	6010B	Total/NA
Copper	7.7		0.78	0.72	mg/Kg	1	☼	6010B	Total/NA
Iron	12000		7.8	4.8	mg/Kg	1	☼	6010B	Total/NA
Manganese	710		0.78	0.072	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.7		0.78	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	17		0.78	0.12	mg/Kg	1	☼	6010B	Total/NA
Lead	4.9		0.23	0.18	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.071	J	0.16	0.023	mg/Kg	1	☼	6020	Total/NA
Arsenic	7.7		0.078	0.060	mg/Kg	1	☼	6020	Total/NA
Selenium	0.73		0.16	0.087	mg/Kg	1	☼	6020	Total/NA
Thallium	0.075	J B	0.078	0.013	mg/Kg	1	☼	6020	Total/NA
Zinc	19	B	0.78	0.19	mg/Kg	1	☼	6020	Total/NA

Client Sample ID: SO-17358-011912-DR-019 — Lab Sample ID: 240-7846-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	25	J	730	9.1	ug/Kg	2.5	☼	8270C	Total/NA
Fluoranthene	10	J	730	9.1	ug/Kg	2.5	☼	8270C	Total/NA
Pyrene	9.4	J	730	9.1	ug/Kg	2.5	☼	8270C	Total/NA
Aluminum	3900		17	10	mg/Kg	1	☼	6010B	Total/NA
Barium	19	B	0.87	0.078	mg/Kg	1	☼	6010B	Total/NA
Cobalt	1.6		0.44	0.17	mg/Kg	1	☼	6010B	Total/NA
Chromium	6.5		0.87	0.22	mg/Kg	1	☼	6010B	Total/NA
Copper	2.8		0.87	0.81	mg/Kg	1	☼	6010B	Total/NA
Iron	7000		8.7	5.4	mg/Kg	1	☼	6010B	Total/NA
Manganese	54	B	0.87	0.081	mg/Kg	1	☼	6010B	Total/NA
Nickel	4.2		0.87	0.29	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.87	0.13	mg/Kg	1	☼	6010B	Total/NA
Lead	4.5		0.26	0.21	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.042	J	0.17	0.026	mg/Kg	1	☼	6020	Total/NA
Arsenic	3.1		0.087	0.068	mg/Kg	1	☼	6020	Total/NA
Selenium	0.36		0.17	0.098	mg/Kg	1	☼	6020	Total/NA
Thallium	0.11		0.087	0.014	mg/Kg	1	☼	6020	Total/NA
Zinc	12	B	0.87	0.22	mg/Kg	1	☼	6020	Total/NA

Client Sample ID: SO-17358-011912-DR-020 — Lab Sample ID: 240-7846-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	4100		16	9.8	mg/Kg	1	☼	6010B	Total/NA
Barium	16	B	0.82	0.072	mg/Kg	1	☼	6010B	Total/NA
Cobalt	2.7		0.41	0.16	mg/Kg	1	☼	6010B	Total/NA
Chromium	9.7		0.82	0.20	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SO-17358-011912-DR-020 (Continued) — Lab Sample ID: 240-7846-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	3.3		0.82	0.75	mg/Kg	1	☼	6010B	Total/NA
Iron	8600		8.2	5.0	mg/Kg	1	☼	6010B	Total/NA
Manganese	59	B	0.82	0.075	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.0		0.82	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	13		0.82	0.12	mg/Kg	1	☼	6010B	Total/NA
Lead	4.7		0.24	0.19	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.037	J	0.16	0.024	mg/Kg	1	☼	6020	Total/NA
Arsenic	3.0		0.082	0.063	mg/Kg	1	☼	6020	Total/NA
Selenium	0.44		0.16	0.092	mg/Kg	1	☼	6020	Total/NA
Thallium	0.13		0.082	0.013	mg/Kg	1	☼	6020	Total/NA
Zinc	18	B	0.82	0.20	mg/Kg	1	☼	6020	Total/NA

Client Sample ID: SO-17358-011912-DR-021 — Lab Sample ID: 240-7846-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	14	J	240	8.7	ug/Kg	1	☼	8260B	Total/NA
Benzo[a]anthracene	24	J	290	3.6	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	25	J	290	3.6	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	46	J	290	3.6	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	24	J	290	3.6	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	15	J	290	3.6	ug/Kg	1	☼	8270C	Total/NA
Chrysene	28	J	290	1.2	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	28	J	290	3.6	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	19	J	290	3.6	ug/Kg	1	☼	8270C	Total/NA
Pyrene	29	J	290	3.6	ug/Kg	1	☼	8270C	Total/NA
Aluminum	3500		15	9.1	mg/Kg	1	☼	6010B	Total/NA
Barium	19	B	0.76	0.067	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.075	J	0.076	0.034	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.0		0.38	0.15	mg/Kg	1	☼	6010B	Total/NA
Chromium	7.7		0.76	0.19	mg/Kg	1	☼	6010B	Total/NA
Copper	7.1		0.76	0.70	mg/Kg	1	☼	6010B	Total/NA
Iron	7600		7.6	4.7	mg/Kg	1	☼	6010B	Total/NA
Manganese	180	B	0.76	0.070	mg/Kg	1	☼	6010B	Total/NA
Nickel	7.6		0.76	0.26	mg/Kg	1	☼	6010B	Total/NA
Vanadium	11		0.76	0.11	mg/Kg	1	☼	6010B	Total/NA
Lead	5.5		0.23	0.18	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.063	J	0.15	0.023	mg/Kg	1	☼	6020	Total/NA
Arsenic	3.7		0.076	0.059	mg/Kg	1	☼	6020	Total/NA
Selenium	0.48		0.15	0.086	mg/Kg	1	☼	6020	Total/NA
Thallium	0.11		0.076	0.012	mg/Kg	1	☼	6020	Total/NA
Zinc	19	B	0.76	0.19	mg/Kg	1	☼	6020	Total/NA
Cr (VI)	0.45	J	0.87	0.29	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	7.3		0.87	0.14	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: SO-17358-011912-DR-022 — Lab Sample ID: 240-7846-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	420	J	1000	27	ug/Kg	1	☼	8260B	Total/NA
Benzo[b]fluoranthene	8.5	J	310	3.8	ug/Kg	1	☼	8270C	Total/NA
Aluminum	5300		16	9.5	mg/Kg	1	☼	6010B	Total/NA
Barium	80	B	0.79	0.070	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.083	J	0.16	0.043	mg/Kg	1	☼	6010B	Total/NA
Cobalt	3.8		0.40	0.16	mg/Kg	1	☼	6010B	Total/NA
Chromium	11		0.79	0.20	mg/Kg	1	☼	6010B	Total/NA

Client Sample ID: SO-17358-011912-DR-022 (Continued)

Lab Sample ID: 240-7846-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	5.6		0.79	0.73	mg/Kg	1	☼	6010B	Total/NA
Iron	16000		7.9	4.9	mg/Kg	1	☼	6010B	Total/NA
Manganese	300	B	0.79	0.073	mg/Kg	1	☼	6010B	Total/NA
Nickel	9.4		0.79	0.27	mg/Kg	1	☼	6010B	Total/NA
Vanadium	18		0.79	0.12	mg/Kg	1	☼	6010B	Total/NA
Lead	5.5		0.24	0.19	mg/Kg	1	☼	6010B	Total/NA
Antimony	0.049	J	0.16	0.024	mg/Kg	1	☼	6020	Total/NA
Arsenic	7.5		0.079	0.061	mg/Kg	1	☼	6020	Total/NA
Selenium	0.63		0.16	0.089	mg/Kg	1	☼	6020	Total/NA
Thallium	0.083		0.079	0.013	mg/Kg	1	☼	6020	Total/NA
Zinc	32	B	0.79	0.20	mg/Kg	1	☼	6020	Total/NA
Silver	0.025	J	0.079	0.016	mg/Kg	1	☼	6020	Total/NA
Mercury	0.027	J	0.036	0.013	mg/Kg	1	☼	7471A	Total/NA
Cr (VI)	0.85	J	0.93	0.31	mg/Kg	1	☼	7196A	Total/NA
Cr (III)	10		0.93	0.15	mg/Kg	1	☼	7196A	Total/NA

Client Sample ID: TB-17358-011712

Lab Sample ID: 240-7846-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	360	J	600	170	ug/Kg	1		8260B	Total/NA
Methyl acetate	610	J	960	25	ug/Kg	1		8260B	Total/NA

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NC
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL NC
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NC
6010B	Metals (ICP)	SW846	TAL NC
6020	Metals (ICP/MS)	SW846	TAL NC
7471A	Mercury (CVAA)	SW846	TAL NC
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL NC
7196A	Chromium, Hexavalent	SW846	TAL NC
Moisture	Percent Moisture	EPA	TAL NC

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NC = TestAmerica North Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-001
Date Collected: 01/17/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-1
Matrix: Solid
Percent Solids: 94.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	650	U	650	180	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Benzene	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Bromodichloromethane	87	U	87	11	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Bromoform	87	U	87	21	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Bromomethane	220	U *	220	31	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
2-Butanone (MEK)	650	U	650	47	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Carbon disulfide	220	U	220	13	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Carbon tetrachloride	43	U	43	6.9	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Chlorobenzene	43	U	43	6.9	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Chloroethane	220	U *	220	66	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Chloroform	43	U	43	9.5	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Chloromethane	220	U	220	15	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,1-Dichloroethane	43	U	43	18	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,2-Dichloroethane	43	U	43	11	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,1-Dichloroethene	43	U	43	20	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,2-Dichloropropane	43	U	43	8.9	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
cis-1,3-Dichloropropene	43	U	43	8.6	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
trans-1,3-Dichloropropene	43	U	43	22	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Ethylbenzene	43	U	43	5.9	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
2-Hexanone	2200	U	2200	22	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Methylene Chloride	220	U	220	83	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	52	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Styrene	43	U	43	6.1	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,1,2,2-Tetrachloroethane	43	U	43	9.6	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Tetrachloroethene	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Toluene	87	U	87	18	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Trichloroethene	43	U	43	11	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Vinyl chloride	35	U	35	20	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Xylenes, Total	130	U	130	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,1,1-Trichloroethane	43	U	43	23	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,1,2-Trichloroethane	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Cyclohexane	1000	U	1000	43	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,2-Dibromo-3-Chloropropane	220	U	220	54	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,2-Dibromoethane	220	U	220	11	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Dichlorodifluoromethane	87	U	87	17	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
cis-1,2-Dichloroethene	43	U	43	7.5	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
trans-1,2-Dichloroethene	43	U	43	10	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Isopropylbenzene	220	U	220	7.0	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Methyl acetate	1000	U	1000	27	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Methyl tert-butyl ether	220	U	220	7.7	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	42	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,2,4-Trichlorobenzene	**16**	**J B**	220	7.9	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,2-Dichlorobenzene	87	U	87	9.3	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,3-Dichlorobenzene	87	U	87	5.2	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
1,4-Dichlorobenzene	87	U	87	8.7	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Trichlorofluoromethane	87	U	87	17	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Dibromochloromethane	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1
Methylcyclohexane	**13**	**J B**	1000	13	ug/Kg	☼	01/23/12 21:31	01/27/12 01:46	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-001
Date Collected: 01/17/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-1
Matrix: Solid
Percent Solids: 94.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		39 - 128	01/23/12 21:31	01/27/12 01:46	1
4-Bromofluorobenzene (Surr)	76		26 - 141	01/23/12 21:31	01/27/12 01:46	1
Toluene-d8 (Surr)	83		33 - 134	01/23/12 21:31	01/27/12 01:46	1
Dibromofluoromethane (Surr)	71		30 - 122	01/23/12 21:31	01/27/12 01:46	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-001
Date Collected: 01/17/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-1
Matrix: Solid
Percent Solids: 94.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2,2'-oxybis[1-chloropropane]	280	U	280	10	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2,4,5-Trichlorophenol	280	U	280	27	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2,4,6-Trichlorophenol	280	U	280	85	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2,4-Dichlorophenol	280	U	280	21	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2,4-Dimethylphenol	280	U	280	21	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2,4-Dinitrophenol	160	U	160	85	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2,4-Dinitrotoluene	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2,6-Dinitrotoluene	280	U	280	22	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2-Chloronaphthalene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2-Chlorophenol	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2-Methylnaphthalene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2-Methylphenol	280	U	280	85	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2-Nitroaniline	210	U	210	9.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
2-Nitrophenol	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
3,3'-Dichlorobenzidine	1700	U	1700	19	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
3-Nitroaniline	210	U	210	17	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
4,6-Dinitro-2-methylphenol	160	U	160	85	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
4-Bromophenyl phenyl ether	280	U	280	14	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
4-Chloro-3-methylphenol	280	U	280	22	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
4-Chloroaniline	210	U	210	18	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
4-Chlorophenyl phenyl ether	280	U	280	14	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
4-Nitroaniline	210	U	210	28	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
4-Nitrophenol	350	U	350	85	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Acenaphthene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Acenaphthylene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Acetophenone	280	U	280	9.8	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Anthracene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Atrazine	43	U	43	9.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Benzaldehyde	280	U	280	13	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Benzo[a]anthracene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Benzo[a]pyrene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Benzo[b]fluoranthene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Benzo[g,h,i]perylene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Benzo[k]fluoranthene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Bis(2-chloroethoxy)methane	280	U	280	23	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Bis(2-chloroethyl)ether	85	U	85	2.1	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Bis(2-ethylhexyl) phthalate	**34**	**J**	280	20	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Butyl benzyl phthalate	280	U	280	11	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Caprolactam	280	U	280	39	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Carbazole	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Chrysene	280	U	280	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Dibenz(a,h)anthracene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Dibenzofuran	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Diethyl phthalate	280	U	280	17	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Dimethyl phthalate	280	U	280	18	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Di-n-butyl phthalate	280	U	280	16	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Di-n-octyl phthalate	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Fluoranthene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Fluorene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-001
Date Collected: 01/17/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-1
Matrix: Solid
Percent Solids: 94.5

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	280	U	280	2.2	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Hexachlorobutadiene	43	U	43	29	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Hexachlorocyclopentadiene	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Hexachloroethane	280	U	280	9.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Indeno[1,2,3-cd]pyrene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Isophorone	280	U	280	14	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Naphthalene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Nitrobenzene	280	U	280	2.3	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
N-Nitrosodi-n-propylamine	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
N-Nitrosodiphenylamine	280	U	280	22	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Pentachlorophenol	160	U	160	85	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Phenol	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Phenanthrene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
Pyrene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1
3 & 4 Methylphenol	280	U	280	21	ug/Kg	☼	01/25/12 08:48	01/27/12 12:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*34 - 110*	*01/25/12 08:48*	*01/27/12 12:04*	*1*
2-Fluorophenol (Surr)	*76*		*26 - 110*	*01/25/12 08:48*	*01/27/12 12:04*	*1*
2,4,6-Tribromophenol (Surr)	*44*		*10 - 118*	*01/25/12 08:48*	*01/27/12 12:04*	*1*
Nitrobenzene-d5 (Surr)	*76*		*24 - 112*	*01/25/12 08:48*	*01/27/12 12:04*	*1*
Phenol-d5 (Surr)	*76*		*28 - 110*	*01/25/12 08:48*	*01/27/12 12:04*	*1*
Terphenyl-d14 (Surr)	*81*		*41 - 119*	*01/25/12 08:48*	*01/27/12 12:04*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-001
Date Collected: 01/17/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-1
Matrix: Solid
Percent Solids: 94.5

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	35	U	35	22	ug/Kg	☼	01/25/12 08:39	01/27/12 17:46	1
Aroclor-1221	35	U	35	17	ug/Kg	☼	01/25/12 08:39	01/27/12 17:46	1
Aroclor-1232	35	U	35	15	ug/Kg	☼	01/25/12 08:39	01/27/12 17:46	1
Aroclor-1242	35	U	35	14	ug/Kg	☼	01/25/12 08:39	01/27/12 17:46	1
Aroclor-1248	35	U	35	18	ug/Kg	☼	01/25/12 08:39	01/27/12 17:46	1
Aroclor-1254	35	U	35	18	ug/Kg	☼	01/25/12 08:39	01/27/12 17:46	1
Aroclor-1260	35	U	35	18	ug/Kg	☼	01/25/12 08:39	01/27/12 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*29 - 151*	*01/25/12 08:39*	*01/27/12 17:46*	*1*
DCB Decachlorobiphenyl	*77*		*14 - 163*	*01/25/12 08:39*	*01/27/12 17:46*	*1*

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-001
Date Collected: 01/17/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-1
Matrix: Solid
Percent Solids: 94.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	1900		13	8.1	mg/Kg	☼	01/23/12 09:37	01/25/12 14:05	1
Barium	7.3	B	0.67	0.060	mg/Kg	☼	01/23/12 09:37	01/25/12 14:05	1
Beryllium	0.13	U	0.13	0.036	mg/Kg	☼	01/23/12 09:37	01/25/12 14:05	1
Cadmium	0.068		0.067	0.030	mg/Kg	☼	01/23/12 09:37	01/25/12 14:05	1
Cobalt	1.7		0.34	0.13	mg/Kg	☼	01/23/12 09:37	01/25/12 14:05	1
Chromium	4.2		0.67	0.17	mg/Kg	☼	01/23/12 09:37	01/25/12 14:05	1
Copper	5.8		0.67	0.62	mg/Kg	☼	01/23/12 09:37	01/25/12 14:05	1
Iron	5200		6.7	4.1	mg/Kg	☼	01/23/12 09:37	01/25/12 14:05	1
Manganese	200		0.67	0.062	mg/Kg	☼	01/23/12 09:37	01/25/12 14:05	1
Nickel	5.0		0.67	0.23	mg/Kg	☼	01/23/12 09:37	01/25/12 14:05	1
Vanadium	6.8		0.67	0.10	mg/Kg	☼	01/23/12 09:37	01/25/12 14:05	1
Lead	2.4		0.20	0.16	mg/Kg	☼	01/23/12 09:37	01/25/12 14:05	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-001
Date Collected: 01/17/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-1
Matrix: Solid
Percent Solids: 94.5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.039	J	0.13	0.020	mg/Kg	☼	01/23/12 09:37	01/27/12 17:18	1
Arsenic	3.5		0.067	0.052	mg/Kg	☼	01/23/12 09:37	01/27/12 17:18	1
Selenium	0.34		0.13	0.076	mg/Kg	☼	01/23/12 09:37	01/27/12 17:18	1
Thallium	0.11	B	0.067	0.011	mg/Kg	☼	01/23/12 09:37	01/27/12 17:18	1
Zinc	12	B	0.67	0.17	mg/Kg	☼	01/23/12 09:37	01/27/12 17:18	1
Silver	0.067	U	0.067	0.013	mg/Kg	☼	01/23/12 09:37	01/27/12 17:18	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-001
Date Collected: 01/17/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-1
Matrix: Solid
Percent Solids: 94.5

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	U	0.040	0.015	mg/Kg	☼	01/23/12 13:15	01/23/12 14:37	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-001
Date Collected: 01/17/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-1
Matrix: Solid
Percent Solids: 94.5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.85	U	0.85	0.29	mg/Kg	☼	01/26/12 11:07	02/02/12 14:51	1
Cr (III)	**4.2**		0.85	0.14	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-002
Date Collected: 01/17/12 10:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-2
Matrix: Solid
Percent Solids: 93.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	640	U	640	180	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Benzene	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Bromodichloromethane	86	U	86	11	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Bromoform	86	U	86	20	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Bromomethane	210	U *	210	31	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
2-Butanone (MEK)	640	U	640	46	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Carbon disulfide	210	U	210	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Carbon tetrachloride	43	U	43	6.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Chlorobenzene	43	U	43	6.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Chloroethane	210	U *	210	65	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Chloroform	43	U	43	9.4	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Chloromethane	210	U	210	15	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,1-Dichloroethane	43	U	43	18	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,2-Dichloroethane	43	U	43	11	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,1-Dichloroethene	43	U	43	19	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,2-Dichloropropane	43	U	43	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
cis-1,3-Dichloropropene	43	U	43	8.5	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
trans-1,3-Dichloropropene	43	U	43	21	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Ethylbenzene	43	U	43	5.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
2-Hexanone	2100	U	2100	21	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Methylene Chloride	210	U	210	82	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
4-Methyl-2-pentanone (MIBK)	2100	U	2100	51	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Styrene	43	U	43	6.0	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,1,2,2-Tetrachloroethane	43	U	43	9.5	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Tetrachloroethene	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Toluene	86	U	86	18	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Trichloroethene	43	U	43	10	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Vinyl chloride	34	U	34	19	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Xylenes, Total	130	U	130	8.7	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,1,1-Trichloroethane	43	U	43	22	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,1,2-Trichloroethane	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Cyclohexane	1000	U	1000	43	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,2-Dibromo-3-Chloropropane	210	U	210	54	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,2-Dibromoethane	210	U	210	11	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Dichlorodifluoromethane	86	U	86	17	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
cis-1,2-Dichloroethene	43	U	43	7.4	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
trans-1,2-Dichloroethene	43	U	43	9.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Isopropylbenzene	210	U	210	7.0	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Methyl acetate	1000	U	1000	27	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Methyl tert-butyl ether	210	U	210	7.6	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	210	U	210	42	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,2,4-Trichlorobenzene	210	U	210	7.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,2-Dichlorobenzene	86	U	86	9.2	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,3-Dichlorobenzene	86	U	86	5.1	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
1,4-Dichlorobenzene	86	U	86	8.6	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Trichlorofluoromethane	86	U	86	17	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Dibromochloromethane	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1
Methylcyclohexane	1000	U	1000	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:10	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-002
Date Collected: 01/17/12 10:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-2
Matrix: Solid
Percent Solids: 93.2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	75		39 - 128	01/23/12 21:31	01/27/12 02:10	1
4-Bromofluorobenzene (Surr)	75		26 - 141	01/23/12 21:31	01/27/12 02:10	1
Toluene-d8 (Surr)	79		33 - 134	01/23/12 21:31	01/27/12 02:10	1
Dibromofluoromethane (Surr)	71		30 - 122	01/23/12 21:31	01/27/12 02:10	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-002
Date Collected: 01/17/12 10:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-2
Matrix: Solid
Percent Solids: 93.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2,2'-oxybis[1-chloropropane]	280	U	280	10	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2,4,5-Trichlorophenol	280	U	280	27	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2,4,6-Trichlorophenol	280	U	280	85	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2,4-Dichlorophenol	280	U	280	21	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2,4-Dimethylphenol	280	U	280	21	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2,4-Dinitrophenol	160	U	160	85	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2,4-Dinitrotoluene	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2,6-Dinitrotoluene	280	U	280	22	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2-Chloronaphthalene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2-Chlorophenol	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2-Methylnaphthalene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2-Methylphenol	280	U	280	85	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2-Nitroaniline	210	U	210	9.7	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
2-Nitrophenol	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
3,3'-Dichlorobenzidine	1700	U	1700	19	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
3-Nitroaniline	210	U	210	17	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
4,6-Dinitro-2-methylphenol	160	U	160	85	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
4-Bromophenyl phenyl ether	280	U	280	14	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
4-Chloro-3-methylphenol	280	U	280	22	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
4-Chloroaniline	210	U	210	18	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
4-Chlorophenyl phenyl ether	280	U	280	14	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
4-Nitroaniline	210	U	210	28	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
4-Nitrophenol	350	U	350	85	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Acenaphthene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Acenaphthylene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Acetophenone	280	U	280	9.8	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Anthracene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Atrazine	43	U	43	9.7	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Benzaldehyde	280	U	280	13	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Benzo[a]anthracene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Benzo[a]pyrene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Benzo[b]fluoranthene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Benzo[g,h,i]perylene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Benzo[k]fluoranthene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Bis(2-chloroethoxy)methane	280	U	280	24	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Bis(2-chloroethyl)ether	85	U	85	2.1	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Bis(2-ethylhexyl) phthalate	**41**	**J**	280	20	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Butyl benzyl phthalate	280	U	280	11	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Caprolactam	280	U	280	40	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Carbazole	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Chrysene	280	U	280	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Dibenz(a,h)anthracene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Dibenzofuran	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Diethyl phthalate	280	U	280	17	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Dimethyl phthalate	280	U	280	18	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Di-n-butyl phthalate	280	U	280	16	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Di-n-octyl phthalate	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Fluoranthene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Fluorene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-002
Date Collected: 01/17/12 10:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-2
Matrix: Solid
Percent Solids: 93.2

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	280	U	280	2.2	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Hexachlorobutadiene	43	U	43	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Hexachlorocyclopentadiene	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Hexachloroethane	280	U	280	9.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Indeno[1,2,3-cd]pyrene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Isophorone	280	U	280	14	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Naphthalene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Nitrobenzene	280	U	280	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
N-Nitrosodi-n-propylamine	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
N-Nitrosodiphenylamine	280	U	280	22	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Pentachlorophenol	160	U	160	85	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Phenol	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Phenanthrene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
Pyrene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1
3 & 4 Methylphenol	280	U	280	21	ug/Kg	☼	01/25/12 08:48	01/27/12 14:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*64*		*34 - 110*	*01/25/12 08:48*	*01/27/12 14:38*	*1*
2-Fluorophenol (Surr)	*76*		*26 - 110*	*01/25/12 08:48*	*01/27/12 14:38*	*1*
2,4,6-Tribromophenol (Surr)	*38*		*10 - 118*	*01/25/12 08:48*	*01/27/12 14:38*	*1*
Nitrobenzene-d5 (Surr)	*73*		*24 - 112*	*01/25/12 08:48*	*01/27/12 14:38*	*1*
Phenol-d5 (Surr)	*75*		*28 - 110*	*01/25/12 08:48*	*01/27/12 14:38*	*1*
Terphenyl-d14 (Surr)	*78*		*41 - 119*	*01/25/12 08:48*	*01/27/12 14:38*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-002
Date Collected: 01/17/12 10:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-2
Matrix: Solid
Percent Solids: 93.2

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	35	U	35	22	ug/Kg	☼	01/25/12 08:39	01/27/12 18:01	1
Aroclor-1221	35	U	35	17	ug/Kg	☼	01/25/12 08:39	01/27/12 18:01	1
Aroclor-1232	35	U	35	15	ug/Kg	☼	01/25/12 08:39	01/27/12 18:01	1
Aroclor-1242	35	U	35	14	ug/Kg	☼	01/25/12 08:39	01/27/12 18:01	1
Aroclor-1248	35	U	35	18	ug/Kg	☼	01/25/12 08:39	01/27/12 18:01	1
Aroclor-1254	35	U	35	18	ug/Kg	☼	01/25/12 08:39	01/27/12 18:01	1
Aroclor-1260	35	U	35	18	ug/Kg	☼	01/25/12 08:39	01/27/12 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*29 - 151*	*01/25/12 08:39*	*01/27/12 18:01*	*1*
DCB Decachlorobiphenyl	*74*		*14 - 163*	*01/25/12 08:39*	*01/27/12 18:01*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-002
Date Collected: 01/17/12 10:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-2
Matrix: Solid
Percent Solids: 93.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	3100		15	8.9	mg/Kg	☼	01/23/12 09:37	01/25/12 14:11	1
Barium	11	B	0.74	0.066	mg/Kg	☼	01/23/12 09:37	01/25/12 14:11	1
Beryllium	0.15	U	0.15	0.040	mg/Kg	☼	01/23/12 09:37	01/25/12 14:11	1
Cadmium	0.075		0.074	0.033	mg/Kg	☼	01/23/12 09:37	01/25/12 14:11	1
Cobalt	3.9		0.37	0.15	mg/Kg	☼	01/23/12 09:37	01/25/12 14:11	1
Chromium	8.5		0.74	0.18	mg/Kg	☼	01/23/12 09:37	01/25/12 14:11	1
Copper	15		0.74	0.68	mg/Kg	☼	01/23/12 09:37	01/25/12 14:11	1
Iron	8100		7.4	4.5	mg/Kg	☼	01/23/12 09:37	01/25/12 14:11	1
Manganese	210		0.74	0.068	mg/Kg	☼	01/23/12 09:37	01/25/12 14:11	1
Nickel	13		0.74	0.25	mg/Kg	☼	01/23/12 09:37	01/25/12 14:11	1
Vanadium	9.8		0.74	0.11	mg/Kg	☼	01/23/12 09:37	01/25/12 14:11	1
Lead	4.5		0.22	0.18	mg/Kg	☼	01/23/12 09:37	01/25/12 14:11	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-002
Date Collected: 01/17/12 10:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-2
Matrix: Solid
Percent Solids: 93.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.084	J	0.15	0.022	mg/Kg	☼	01/23/12 09:37	01/27/12 17:23	1
Arsenic	3.4		0.074	0.057	mg/Kg	☼	01/23/12 09:37	01/27/12 17:23	1
Selenium	0.70		0.15	0.083	mg/Kg	☼	01/23/12 09:37	01/27/12 17:23	1
Thallium	0.14	B	0.074	0.012	mg/Kg	☼	01/23/12 09:37	01/27/12 17:23	1
Zinc	27	B	0.74	0.18	mg/Kg	☼	01/23/12 09:37	01/27/12 17:23	1
Silver	0.074	U	0.074	0.015	mg/Kg	☼	01/23/12 09:37	01/27/12 17:23	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-002
Date Collected: 01/17/12 10:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-2
Matrix: Solid
Percent Solids: 93.2

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.020	J	0.035	0.013	mg/Kg	☼	01/23/12 13:15	01/23/12 14:38	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-002
Date Collected: 01/17/12 10:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-2
Matrix: Solid
Percent Solids: 93.2

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.35	J	0.86	0.29	mg/Kg	☼	01/26/12 11:07	02/02/12 14:52	1
Cr (III)	8.1		0.86	0.14	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-003
Date Collected: 01/17/12 10:40
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-3
Matrix: Solid
Percent Solids: 91.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	610	U	610	170	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Benzene	41	U	41	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Bromodichloromethane	81	U	81	10	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Bromoform	81	U	81	19	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Bromomethane	200	U *	200	29	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
2-Butanone (MEK)	610	U	610	44	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Carbon disulfide	200	U	200	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Carbon tetrachloride	41	U	41	6.5	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Chlorobenzene	41	U	41	6.5	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Chloroethane	200	U *	200	62	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Chloroform	41	U	41	8.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Chloromethane	200	U	200	14	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,1-Dichloroethane	41	U	41	17	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,2-Dichloroethane	41	U	41	10	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,1-Dichloroethene	41	U	41	18	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,2-Dichloropropane	41	U	41	8.3	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
cis-1,3-Dichloropropene	41	U	41	8.0	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
trans-1,3-Dichloropropene	41	U	41	20	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Ethylbenzene	41	U	41	5.5	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
2-Hexanone	2000	U	2000	20	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Methylene Chloride	200	U	200	78	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	49	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Styrene	41	U	41	5.7	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,1,2,2-Tetrachloroethane	41	U	41	9.0	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Tetrachloroethene	41	U	41	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Toluene	81	U	81	17	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Trichloroethene	41	U	41	9.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Vinyl chloride	32	U	32	18	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Xylenes, Total	120	U	120	8.2	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,1,1-Trichloroethane	41	U	41	21	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,1,2-Trichloroethane	41	U	41	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Cyclohexane	970	U	970	41	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,2-Dibromo-3-Chloropropane	200	U	200	51	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,2-Dibromoethane	200	U	200	10	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Dichlorodifluoromethane	81	U	81	16	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
cis-1,2-Dichloroethene	41	U	41	7.0	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
trans-1,2-Dichloroethene	41	U	41	9.3	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Isopropylbenzene	200	U	200	6.6	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Methyl acetate	970	U	970	25	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Methyl tert-butyl ether	200	U	200	7.2	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	40	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,2,4-Trichlorobenzene	200	U	200	7.4	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,2-Dichlorobenzene	81	U	81	8.7	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,3-Dichlorobenzene	81	U	81	4.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
1,4-Dichlorobenzene	81	U	81	8.1	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Trichlorofluoromethane	81	U	81	16	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Dibromochloromethane	41	U	41	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1
Methylcyclohexane	970	U	970	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:34	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-003
Date Collected: 01/17/12 10:40
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-3
Matrix: Solid
Percent Solids: 91.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		39 - 128	01/23/12 21:31	01/27/12 02:34	1
4-Bromofluorobenzene (Surr)	78		26 - 141	01/23/12 21:31	01/27/12 02:34	1
Toluene-d8 (Surr)	84		33 - 134	01/23/12 21:31	01/27/12 02:34	1
Dibromofluoromethane (Surr)	74		30 - 122	01/23/12 21:31	01/27/12 02:34	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-003
Date Collected: 01/17/12 10:40
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-3
Matrix: Solid
Percent Solids: 91.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2,2'-oxybis[1-chloropropane]	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2,4,5-Trichlorophenol	290	U	290	27	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2,4,6-Trichlorophenol	290	U	290	87	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2,4-Dichlorophenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2,4-Dimethylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2,4-Dinitrophenol	160	U	160	87	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2,4-Dinitrotoluene	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2,6-Dinitrotoluene	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2-Chloronaphthalene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2-Chlorophenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2-Methylnaphthalene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2-Methylphenol	290	U	290	87	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2-Nitroaniline	220	U	220	10	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
2-Nitrophenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
3,3'-Dichlorobenzidine	1700	U	1700	20	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
3-Nitroaniline	220	U	220	17	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
4,6-Dinitro-2-methylphenol	160	U	160	87	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
4-Bromophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
4-Chloro-3-methylphenol	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
4-Chloroaniline	220	U	220	19	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
4-Chlorophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
4-Nitroaniline	220	U	220	28	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
4-Nitrophenol	360	U	360	87	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Acenaphthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Acenaphthylene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Acetophenone	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Anthracene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Atrazine	44	U	44	10	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Benzaldehyde	290	U	290	13	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Benzo[a]anthracene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Benzo[a]pyrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Benzo[b]fluoranthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Benzo[g,h,i]perylene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Benzo[k]fluoranthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Bis(2-chloroethoxy)methane	290	U	290	24	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Bis(2-chloroethyl)ether	87	U	87	2.2	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Bis(2-ethylhexyl) phthalate	**41**	**J**	290	21	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Butyl benzyl phthalate	290	U	290	11	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Caprolactam	290	U	290	40	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Carbazole	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Chrysene	290	U	290	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Dibenz(a,h)anthracene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Dibenzofuran	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Diethyl phthalate	290	U	290	17	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Dimethyl phthalate	290	U	290	19	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Di-n-butyl phthalate	290	U	290	16	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Di-n-octyl phthalate	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Fluoranthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Fluorene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-003
Date Collected: 01/17/12 10:40
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-3
Matrix: Solid
Percent Solids: 91.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	290	U	290	2.3	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Hexachlorobutadiene	44	U	44	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Hexachlorocyclopentadiene	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Hexachloroethane	290	U	290	9.8	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Indeno[1,2,3-cd]pyrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Isophorone	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Naphthalene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Nitrobenzene	290	U	290	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
N-Nitrosodi-n-propylamine	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
N-Nitrosodiphenylamine	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Pentachlorophenol	160	U	160	87	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Phenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Phenanthrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
Pyrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1
3 & 4 Methylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 12:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*34 - 110*	*01/25/12 08:48*	*01/27/12 12:23*	*1*
2-Fluorophenol (Surr)	*78*		*26 - 110*	*01/25/12 08:48*	*01/27/12 12:23*	*1*
2,4,6-Tribromophenol (Surr)	*53*		*10 - 118*	*01/25/12 08:48*	*01/27/12 12:23*	*1*
Nitrobenzene-d5 (Surr)	*75*		*24 - 112*	*01/25/12 08:48*	*01/27/12 12:23*	*1*
Phenol-d5 (Surr)	*77*		*28 - 110*	*01/25/12 08:48*	*01/27/12 12:23*	*1*
Terphenyl-d14 (Surr)	*77*		*41 - 119*	*01/25/12 08:48*	*01/27/12 12:23*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-003
Date Collected: 01/17/12 10:40
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-3
Matrix: Solid
Percent Solids: 91.8

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	36	U	36	23	ug/Kg	☼	01/25/12 08:39	01/27/12 18:16	1
Aroclor-1221	36	U	36	17	ug/Kg	☼	01/25/12 08:39	01/27/12 18:16	1
Aroclor-1232	36	U	36	15	ug/Kg	☼	01/25/12 08:39	01/27/12 18:16	1
Aroclor-1242	36	U	36	14	ug/Kg	☼	01/25/12 08:39	01/27/12 18:16	1
Aroclor-1248	36	U	36	19	ug/Kg	☼	01/25/12 08:39	01/27/12 18:16	1
Aroclor-1254	36	U	36	19	ug/Kg	☼	01/25/12 08:39	01/27/12 18:16	1
Aroclor-1260	36	U	36	19	ug/Kg	☼	01/25/12 08:39	01/27/12 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*29 - 151*	*01/25/12 08:39*	*01/27/12 18:16*	*1*
DCB Decachlorobiphenyl	*82*		*14 - 163*	*01/25/12 08:39*	*01/27/12 18:16*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-003
Date Collected: 01/17/12 10:40
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-3
Matrix: Solid
Percent Solids: 91.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4500		15	9.0	mg/Kg	☼	01/23/12 09:37	01/25/12 14:17	1
Barium	17	B	0.75	0.067	mg/Kg	☼	01/23/12 09:37	01/25/12 14:17	1
Beryllium	0.047	J	0.15	0.040	mg/Kg	☼	01/23/12 09:37	01/25/12 14:17	1
Cadmium	0.075	U	0.075	0.034	mg/Kg	☼	01/23/12 09:37	01/25/12 14:17	1
Cobalt	3.2		0.38	0.15	mg/Kg	☼	01/23/12 09:37	01/25/12 14:17	1
Chromium	10		0.75	0.19	mg/Kg	☼	01/23/12 09:37	01/25/12 14:17	1
Copper	8.8		0.75	0.69	mg/Kg	☼	01/23/12 09:37	01/25/12 14:17	1
Iron	9100		7.5	4.6	mg/Kg	☼	01/23/12 09:37	01/25/12 14:17	1
Manganese	66		0.75	0.069	mg/Kg	☼	01/23/12 09:37	01/25/12 14:17	1
Nickel	9.0		0.75	0.25	mg/Kg	☼	01/23/12 09:37	01/25/12 14:17	1
Vanadium	13		0.75	0.11	mg/Kg	☼	01/23/12 09:37	01/25/12 14:17	1
Lead	4.1		0.23	0.18	mg/Kg	☼	01/23/12 09:37	01/25/12 14:17	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-003
Date Collected: 01/17/12 10:40
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-3
Matrix: Solid
Percent Solids: 91.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.038**	**J**	0.15	0.023	mg/Kg	☼	01/23/12 09:37	01/27/12 17:29	1
Arsenic	**3.8**		0.075	0.058	mg/Kg	☼	01/23/12 09:37	01/27/12 17:29	1
Selenium	**0.71**		0.15	0.085	mg/Kg	☼	01/23/12 09:37	01/27/12 17:29	1
Thallium	**0.065**	**J B**	0.075	0.012	mg/Kg	☼	01/23/12 09:37	01/27/12 17:29	1
Zinc	**19**	**B**	0.75	0.19	mg/Kg	☼	01/23/12 09:37	01/27/12 17:29	1
Silver	0.075	U	0.075	0.015	mg/Kg	☼	01/23/12 09:37	01/27/12 17:29	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-003
Date Collected: 01/17/12 10:40
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-3
Matrix: Solid
Percent Solids: 91.8

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	J	0.034	0.013	mg/Kg	☼	01/23/12 13:15	01/23/12 14:39	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-003
Date Collected: 01/17/12 10:40
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-3
Matrix: Solid
Percent Solids: 91.8

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.74	J	0.87	0.29	mg/Kg	☼	01/26/12 11:07	02/02/12 14:52	1
Cr (III)	9.5		0.87	0.14	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-004
Date Collected: 01/17/12 10:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-4
Matrix: Solid
Percent Solids: 92.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	620	U	620	170	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Benzene	41	U	41	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Bromodichloromethane	82	U	82	10	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Bromoform	82	U	82	20	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Bromomethane	210	U *	210	30	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
2-Butanone (MEK)	620	U	620	44	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Carbon disulfide	210	U	210	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Carbon tetrachloride	41	U	41	6.6	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Chlorobenzene	41	U	41	6.6	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Chloroethane	210	U *	210	63	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Chloroform	41	U	41	9.1	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Chloromethane	210	U	210	14	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,1-Dichloroethane	41	U	41	17	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,2-Dichloroethane	41	U	41	10	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,1-Dichloroethene	41	U	41	19	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,2-Dichloropropane	41	U	41	8.4	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
cis-1,3-Dichloropropene	41	U	41	8.1	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
trans-1,3-Dichloropropene	41	U	41	21	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Ethylbenzene	41	U	41	5.6	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
2-Hexanone	2100	U	2100	21	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Methylene Chloride	210	U	210	79	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
4-Methyl-2-pentanone (MIBK)	2100	U	2100	49	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Styrene	41	U	41	5.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,1,2,2-Tetrachloroethane	41	U	41	9.2	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Tetrachloroethene	41	U	41	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Toluene	82	U	82	17	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Trichloroethene	41	U	41	10	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Vinyl chloride	33	U	33	19	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Xylenes, Total	120	U	120	8.3	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,1,1-Trichloroethane	41	U	41	22	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,1,2-Trichloroethane	41	U	41	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Cyclohexane	990	U	990	41	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,2-Dibromo-3-Chloropropane	210	U	210	51	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,2-Dibromoethane	210	U	210	10	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Dichlorodifluoromethane	82	U	82	16	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
cis-1,2-Dichloroethene	41	U	41	7.1	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
trans-1,2-Dichloroethene	41	U	41	9.5	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Isopropylbenzene	210	U	210	6.7	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Methyl acetate	990	U	990	26	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Methyl tert-butyl ether	210	U	210	7.3	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	210	U	210	40	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,2,4-Trichlorobenzene	210	U	210	7.5	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,2-Dichlorobenzene	82	U	82	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,3-Dichlorobenzene	82	U	82	4.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
1,4-Dichlorobenzene	82	U	82	8.2	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Trichlorofluoromethane	82	U	82	16	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Dibromochloromethane	41	U	41	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1
Methylcyclohexane	990	U	990	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:58	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-004
Date Collected: 01/17/12 10:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-4
Matrix: Solid
Percent Solids: 92.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	68		39 - 128	01/23/12 21:31	01/27/12 02:58	1
4-Bromofluorobenzene (Surr)	69		26 - 141	01/23/12 21:31	01/27/12 02:58	1
Toluene-d8 (Surr)	74		33 - 134	01/23/12 21:31	01/27/12 02:58	1
Dibromofluoromethane (Surr)	65		30 - 122	01/23/12 21:31	01/27/12 02:58	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-004
Date Collected: 01/17/12 10:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-4
Matrix: Solid
Percent Solids: 92.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2,2'-oxybis[1-chloropropane]	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2,4,5-Trichlorophenol	290	U	290	27	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2,4,6-Trichlorophenol	290	U	290	87	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2,4-Dichlorophenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2,4-Dimethylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2,4-Dinitrophenol	160	U	160	87	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2,4-Dinitrotoluene	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2,6-Dinitrotoluene	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2-Chloronaphthalene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2-Chlorophenol	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2-Methylnaphthalene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2-Methylphenol	290	U	290	87	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2-Nitroaniline	220	U	220	9.9	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
2-Nitrophenol	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
3,3'-Dichlorobenzidine	1700	U	1700	20	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
3-Nitroaniline	220	U	220	17	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
4,6-Dinitro-2-methylphenol	160	U	160	87	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
4-Bromophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
4-Chloro-3-methylphenol	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
4-Chloroaniline	220	U	220	19	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
4-Chlorophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
4-Nitroaniline	220	U	220	28	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
4-Nitrophenol	360	U	360	87	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Acenaphthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Acenaphthylene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Acetophenone	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Anthracene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Atrazine	44	U	44	9.9	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Benzaldehyde	290	U	290	13	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Benzo[a]anthracene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Benzo[a]pyrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Benzo[b]fluoranthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Benzo[g,h,i]perylene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Benzo[k]fluoranthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Bis(2-chloroethoxy)methane	290	U	290	24	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Bis(2-chloroethyl)ether	87	U	87	2.2	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Bis(2-ethylhexyl) phthalate	290	U	290	21	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Butyl benzyl phthalate	290	U	290	11	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Caprolactam	290	U	290	40	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Carbazole	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Chrysene	290	U	290	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Dibenz(a,h)anthracene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Dibenzofuran	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Diethyl phthalate	290	U	290	17	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Dimethyl phthalate	290	U	290	19	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Di-n-butyl phthalate	290	U	290	16	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Di-n-octyl phthalate	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Fluoranthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Fluorene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-004
Date Collected: 01/17/12 10:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-4
Matrix: Solid
Percent Solids: 92.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	290	U	290	2.3	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Hexachlorobutadiene	44	U	44	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Hexachlorocyclopentadiene	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Hexachloroethane	290	U	290	9.8	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Indeno[1,2,3-cd]pyrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Isophorone	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Naphthalene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Nitrobenzene	290	U	290	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
N-Nitrosodi-n-propylamine	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
N-Nitrosodiphenylamine	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Pentachlorophenol	160	U	160	87	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Phenol	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Phenanthrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
Pyrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1
3 & 4 Methylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 14:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*34 - 110*	*01/25/12 08:48*	*01/27/12 14:00*	*1*
2-Fluorophenol (Surr)	*80*		*26 - 110*	*01/25/12 08:48*	*01/27/12 14:00*	*1*
2,4,6-Tribromophenol (Surr)	*42*		*10 - 118*	*01/25/12 08:48*	*01/27/12 14:00*	*1*
Nitrobenzene-d5 (Surr)	*77*		*24 - 112*	*01/25/12 08:48*	*01/27/12 14:00*	*1*
Phenol-d5 (Surr)	*77*		*28 - 110*	*01/25/12 08:48*	*01/27/12 14:00*	*1*
Terphenyl-d14 (Surr)	*82*		*41 - 119*	*01/25/12 08:48*	*01/27/12 14:00*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-004
Date Collected: 01/17/12 10:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-4
Matrix: Solid
Percent Solids: 92.0

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	36	U	36	23	ug/Kg	☼	01/25/12 08:39	01/27/12 18:31	1
Aroclor-1221	36	U	36	17	ug/Kg	☼	01/25/12 08:39	01/27/12 18:31	1
Aroclor-1232	36	U	36	15	ug/Kg	☼	01/25/12 08:39	01/27/12 18:31	1
Aroclor-1242	36	U	36	14	ug/Kg	☼	01/25/12 08:39	01/27/12 18:31	1
Aroclor-1248	36	U	36	18	ug/Kg	☼	01/25/12 08:39	01/27/12 18:31	1
Aroclor-1254	36	U	36	18	ug/Kg	☼	01/25/12 08:39	01/27/12 18:31	1
Aroclor-1260	36	U	36	18	ug/Kg	☼	01/25/12 08:39	01/27/12 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*29 - 151*	*01/25/12 08:39*	*01/27/12 18:31*	*1*
DCB Decachlorobiphenyl	*73*		*14 - 163*	*01/25/12 08:39*	*01/27/12 18:31*	*1*

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-004
Date Collected: 01/17/12 10:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-4
Matrix: Solid
Percent Solids: 92.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	2100		17	10	mg/Kg	☼	01/23/12 09:37	01/25/12 14:23	1
Barium	8.1	B	0.86	0.076	mg/Kg	☼	01/23/12 09:37	01/25/12 14:23	1
Beryllium	0.17	U	0.17	0.046	mg/Kg	☼	01/23/12 09:37	01/25/12 14:23	1
Cadmium	0.086	U	0.086	0.039	mg/Kg	☼	01/23/12 09:37	01/25/12 14:23	1
Cobalt	3.4		0.43	0.17	mg/Kg	☼	01/23/12 09:37	01/25/12 14:23	1
Chromium	4.6		0.86	0.22	mg/Kg	☼	01/23/12 09:37	01/25/12 14:23	1
Copper	13		0.86	0.80	mg/Kg	☼	01/23/12 09:37	01/25/12 14:23	1
Iron	7500		8.6	5.3	mg/Kg	☼	01/23/12 09:37	01/25/12 14:23	1
Manganese	170		0.86	0.080	mg/Kg	☼	01/23/12 09:37	01/25/12 14:23	1
Nickel	6.6		0.86	0.29	mg/Kg	☼	01/23/12 09:37	01/25/12 14:23	1
Vanadium	12		0.86	0.13	mg/Kg	☼	01/23/12 09:37	01/25/12 14:23	1
Lead	3.1		0.26	0.20	mg/Kg	☼	01/23/12 09:37	01/25/12 14:23	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-004
Date Collected: 01/17/12 10:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-4
Matrix: Solid
Percent Solids: 92.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.056	J	0.17	0.026	mg/Kg	☼	01/23/12 09:37	01/27/12 17:34	1
Arsenic	2.9		0.086	0.067	mg/Kg	☼	01/23/12 09:37	01/27/12 17:34	1
Selenium	0.35		0.17	0.097	mg/Kg	☼	01/23/12 09:37	01/27/12 17:34	1
Thallium	0.24	B	0.086	0.014	mg/Kg	☼	01/23/12 09:37	01/27/12 17:34	1
Zinc	18	B	0.86	0.22	mg/Kg	☼	01/23/12 09:37	01/27/12 17:34	1
Silver	0.086	U	0.086	0.017	mg/Kg	☼	01/23/12 09:37	01/27/12 17:34	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-004
Date Collected: 01/17/12 10:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-4
Matrix: Solid
Percent Solids: 92.0

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026	J	0.040	0.015	mg/Kg	☼	01/23/12 13:15	01/23/12 14:41	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-004
Date Collected: 01/17/12 10:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-4
Matrix: Solid
Percent Solids: 92.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.65	J	0.87	0.29	mg/Kg	☼	01/26/12 11:07	02/02/12 14:54	1
Cr (III)	3.9		0.87	0.14	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-005
Date Collected: 01/17/12 13:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-5
Matrix: Solid
Percent Solids: 92.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	650	U	650	180	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Benzene	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Bromodichloromethane	86	U	86	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Bromoform	86	U	86	20	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Bromomethane	220	U *	220	31	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
2-Butanone (MEK)	650	U	650	46	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Carbon disulfide	220	U	220	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Carbon tetrachloride	43	U	43	6.9	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Chlorobenzene	43	U	43	6.9	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Chloroethane	220	U *	220	66	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Chloroform	43	U	43	9.5	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Chloromethane	220	U	220	15	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,1-Dichloroethane	43	U	43	18	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,2-Dichloroethane	43	U	43	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,1-Dichloroethene	43	U	43	19	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,2-Dichloropropane	43	U	43	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
cis-1,3-Dichloropropene	43	U	43	8.5	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
trans-1,3-Dichloropropene	43	U	43	22	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Ethylbenzene	43	U	43	5.8	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
2-Hexanone	2200	U	2200	22	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Methylene Chloride	220	U	220	83	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	52	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Styrene	43	U	43	6.0	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,1,2,2-Tetrachloroethane	43	U	43	9.6	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Tetrachloroethene	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Toluene	86	U	86	18	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Trichloroethene	43	U	43	10	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Vinyl chloride	34	U	34	19	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Xylenes, Total	130	U	130	8.7	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,1,1-Trichloroethane	43	U	43	23	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,1,2-Trichloroethane	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Cyclohexane	1000	U	1000	43	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,2-Dibromo-3-Chloropropane	220	U	220	54	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,2-Dibromoethane	220	U	220	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Dichlorodifluoromethane	86	U	86	17	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
cis-1,2-Dichloroethene	43	U	43	7.4	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
trans-1,2-Dichloroethene	43	U	43	9.9	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Isopropylbenzene	220	U	220	7.0	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Methyl acetate	1000	U	1000	27	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Methyl tert-butyl ether	220	U	220	7.7	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	42	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,2,4-Trichlorobenzene	220	U	220	7.9	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,2-Dichlorobenzene	86	U	86	9.3	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,3-Dichlorobenzene	86	U	86	5.2	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
1,4-Dichlorobenzene	86	U	86	8.6	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Trichlorofluoromethane	86	U	86	17	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Dibromochloromethane	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1
Methylcyclohexane	1000	U	1000	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:22	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-005
Date Collected: 01/17/12 13:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-5
Matrix: Solid
Percent Solids: 92.9

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	75		39 - 128	01/23/12 21:31	01/27/12 03:22	1
4-Bromofluorobenzene (Surr)	74		26 - 141	01/23/12 21:31	01/27/12 03:22	1
Toluene-d8 (Surr)	81		33 - 134	01/23/12 21:31	01/27/12 03:22	1
Dibromofluoromethane (Surr)	69		30 - 122	01/23/12 21:31	01/27/12 03:22	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-005
Date Collected: 01/17/12 13:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-5
Matrix: Solid
Percent Solids: 92.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1100	U	1100	120	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2,2'-oxybis[1-chloropropane]	1100	U	1100	41	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2,4,5-Trichlorophenol	1100	U	1100	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2,4,6-Trichlorophenol	1100	U	1100	340	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2,4-Dichlorophenol	1100	U	1100	86	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2,4-Dimethylphenol	1100	U	1100	86	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2,4-Dinitrophenol	650	U	650	340	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2,4-Dinitrotoluene	1100	U	1100	120	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2,6-Dinitrotoluene	1100	U	1100	90	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2-Chloronaphthalene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2-Chlorophenol	1100	U	1100	120	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2-Methylnaphthalene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2-Methylphenol	1100	U	1100	340	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2-Nitroaniline	860	U	860	39	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
2-Nitrophenol	1100	U	1100	120	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
3,3'-Dichlorobenzidine	6900	U	6900	77	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
3-Nitroaniline	860	U	860	69	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
4,6-Dinitro-2-methylphenol	650	U	650	340	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
4-Bromophenyl phenyl ether	1100	U	1100	56	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
4-Chloro-3-methylphenol	1100	U	1100	90	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
4-Chloroaniline	860	U	860	73	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
4-Chlorophenyl phenyl ether	1100	U	1100	56	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
4-Nitroaniline	860	U	860	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
4-Nitrophenol	1400	U	1400	340	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Acenaphthene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Acenaphthylene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Acetophenone	1100	U	1100	40	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Anthracene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Atrazine	170	U	170	39	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Benzaldehyde	1100	U	1100	52	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Benzo[a]anthracene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Benzo[a]pyrene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Benzo[b]fluoranthene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Benzo[g,h,i]perylene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Benzo[k]fluoranthene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Bis(2-chloroethoxy)methane	1100	U	1100	95	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Bis(2-chloroethyl)ether	340	U	340	8.6	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Bis(2-ethylhexyl) phthalate	1100	U	1100	82	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Butyl benzyl phthalate	1100	U	1100	43	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Caprolactam	1100	U	1100	160	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Carbazole	1100	U	1100	120	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Chrysene	1100	U	1100	4.7	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Dibenz(a,h)anthracene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Dibenzofuran	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Diethyl phthalate	1100	U	1100	69	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Dimethyl phthalate	1100	U	1100	73	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Di-n-butyl phthalate	1100	U	1100	65	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Di-n-octyl phthalate	1100	U	1100	120	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Fluoranthene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Fluorene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-005
Date Collected: 01/17/12 13:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-5
Matrix: Solid
Percent Solids: 92.9

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	1100	U	1100	9.0	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Hexachlorobutadiene	170	U	170	120	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Hexachlorocyclopentadiene	1100	U	1100	120	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Hexachloroethane	1100	U	1100	39	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Indeno[1,2,3-cd]pyrene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Isophorone	1100	U	1100	56	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Naphthalene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Nitrobenzene	1100	U	1100	9.5	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
N-Nitrosodi-n-propylamine	1100	U	1100	120	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
N-Nitrosodiphenylamine	1100	U	1100	90	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Pentachlorophenol	650	U	650	340	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Phenol	1100	U	1100	120	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Phenanthrene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
Pyrene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4
3 & 4 Methylphenol	1100	U	1100	86	ug/Kg	☼	01/25/12 08:48	01/27/12 18:10	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*34 - 110*	*01/25/12 08:48*	*01/27/12 18:10*	*4*
2-Fluorophenol (Surr)	*70*		*26 - 110*	*01/25/12 08:48*	*01/27/12 18:10*	*4*
2,4,6-Tribromophenol (Surr)	*64*		*10 - 118*	*01/25/12 08:48*	*01/27/12 18:10*	*4*
Nitrobenzene-d5 (Surr)	*64*		*24 - 112*	*01/25/12 08:48*	*01/27/12 18:10*	*4*
Phenol-d5 (Surr)	*71*		*28 - 110*	*01/25/12 08:48*	*01/27/12 18:10*	*4*
Terphenyl-d14 (Surr)	*70*		*41 - 119*	*01/25/12 08:48*	*01/27/12 18:10*	*4*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-005
Date Collected: 01/17/12 13:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-5
Matrix: Solid
Percent Solids: 92.9

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	36	U	36	23	ug/Kg	☼	01/25/12 08:39	01/27/12 18:46	1
Aroclor-1221	36	U	36	17	ug/Kg	☼	01/25/12 08:39	01/27/12 18:46	1
Aroclor-1232	36	U	36	15	ug/Kg	☼	01/25/12 08:39	01/27/12 18:46	1
Aroclor-1242	36	U	36	14	ug/Kg	☼	01/25/12 08:39	01/27/12 18:46	1
Aroclor-1248	36	U	36	18	ug/Kg	☼	01/25/12 08:39	01/27/12 18:46	1
Aroclor-1254	36	U	36	18	ug/Kg	☼	01/25/12 08:39	01/27/12 18:46	1
Aroclor-1260	36	U	36	18	ug/Kg	☼	01/25/12 08:39	01/27/12 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*29 - 151*	*01/25/12 08:39*	*01/27/12 18:46*	*1*
DCB Decachlorobiphenyl	*45*		*14 - 163*	*01/25/12 08:39*	*01/27/12 18:46*	*1*

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-005
Date Collected: 01/17/12 13:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-5
Matrix: Solid
Percent Solids: 92.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	2700		12	7.4	mg/Kg	☼	01/23/12 09:37	01/25/12 14:30	1
Barium	19	B	0.62	0.055	mg/Kg	☼	01/23/12 09:37	01/25/12 14:30	1
Beryllium	0.071	J	0.12	0.033	mg/Kg	☼	01/23/12 09:37	01/25/12 14:30	1
Cadmium	0.082		0.062	0.028	mg/Kg	☼	01/23/12 09:37	01/25/12 14:30	1
Cobalt	2.2		0.31	0.12	mg/Kg	☼	01/23/12 09:37	01/25/12 14:30	1
Chromium	6.3		0.62	0.15	mg/Kg	☼	01/23/12 09:37	01/25/12 14:30	1
Copper	8.8		0.62	0.57	mg/Kg	☼	01/23/12 09:37	01/25/12 14:30	1
Iron	7100		6.2	3.8	mg/Kg	☼	01/23/12 09:37	01/25/12 14:30	1
Manganese	220		0.62	0.057	mg/Kg	☼	01/23/12 09:37	01/25/12 14:30	1
Nickel	6.5		0.62	0.21	mg/Kg	☼	01/23/12 09:37	01/25/12 14:30	1
Vanadium	9.0		0.62	0.093	mg/Kg	☼	01/23/12 09:37	01/25/12 14:30	1
Lead	6.1		0.19	0.15	mg/Kg	☼	01/23/12 09:37	01/25/12 14:30	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-005
Date Collected: 01/17/12 13:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-5
Matrix: Solid
Percent Solids: 92.9

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.18		0.12	0.019	mg/Kg	☼	01/23/12 09:37	01/27/12 17:40	1
Arsenic	5.9		0.062	0.048	mg/Kg	☼	01/23/12 09:37	01/27/12 17:40	1
Selenium	0.44		0.12	0.070	mg/Kg	☼	01/23/12 09:37	01/27/12 17:40	1
Thallium	0.074	B	0.062	0.010	mg/Kg	☼	01/23/12 09:37	01/27/12 17:40	1
Zinc	18	B	0.62	0.15	mg/Kg	☼	01/23/12 09:37	01/27/12 17:40	1
Silver	0.022	J	0.062	0.012	mg/Kg	☼	01/23/12 09:37	01/27/12 17:40	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-005
Date Collected: 01/17/12 13:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-5
Matrix: Solid
Percent Solids: 92.9

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026	J	0.034	0.013	mg/Kg	☼	01/23/12 13:15	01/23/12 14:42	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-005
Date Collected: 01/17/12 13:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-5
Matrix: Solid
Percent Solids: 92.9

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.76	J	0.86	0.29	mg/Kg	☼	01/26/12 11:07	02/02/12 14:55	1
Cr (III)	5.5		0.86	0.14	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-006
Date Collected: 01/17/12 14:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-6
Matrix: Solid
Percent Solids: 90.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	660	U	660	190	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Benzene	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Bromodichloromethane	88	U	88	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Bromoform	88	U	88	21	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Bromomethane	220	U *	220	32	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
2-Butanone (MEK)	660	U	660	48	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Carbon disulfide	220	U	220	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Carbon tetrachloride	44	U	44	7.1	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Chlorobenzene	44	U	44	7.1	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Chloroethane	220	U *	220	67	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Chloroform	44	U	44	9.7	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Chloromethane	220	U	220	15	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,1-Dichloroethane	44	U	44	19	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,2-Dichloroethane	44	U	44	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,1-Dichloroethene	44	U	44	20	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,2-Dichloropropane	44	U	44	9.1	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
cis-1,3-Dichloropropene	44	U	44	8.7	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
trans-1,3-Dichloropropene	44	U	44	22	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Ethylbenzene	44	U	44	6.0	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
2-Hexanone	2200	U	2200	22	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Methylene Chloride	220	U	220	85	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	53	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Styrene	44	U	44	6.2	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,1,2,2-Tetrachloroethane	44	U	44	9.8	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Tetrachloroethene	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Toluene	88	U	88	19	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Trichloroethene	44	U	44	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Vinyl chloride	35	U	35	20	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Xylenes, Total	130	U	130	8.9	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,1,1-Trichloroethane	44	U	44	23	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,1,2-Trichloroethane	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Cyclohexane	1100	U	1100	44	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,2-Dibromo-3-Chloropropane	220	U	220	55	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,2-Dibromoethane	220	U	220	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Dichlorodifluoromethane	88	U	88	18	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
cis-1,2-Dichloroethene	44	U	44	7.6	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
trans-1,2-Dichloroethene	44	U	44	10	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Isopropylbenzene	220	U	220	7.2	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Methyl acetate	1100	U	1100	28	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Methyl tert-butyl ether	220	U	220	7.8	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	43	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,2,4-Trichlorobenzene	220	U	220	8.1	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,2-Dichlorobenzene	88	U	88	9.5	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,3-Dichlorobenzene	88	U	88	5.3	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
1,4-Dichlorobenzene	88	U	88	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Trichlorofluoromethane	88	U	88	18	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Dibromochloromethane	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1
Methylcyclohexane	1100	U	1100	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:47	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-006
Date Collected: 01/17/12 14:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-6
Matrix: Solid
Percent Solids: 90.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	69		39 - 128	01/23/12 21:31	01/27/12 03:47	1
4-Bromofluorobenzene (Surr)	70		26 - 141	01/23/12 21:31	01/27/12 03:47	1
Toluene-d8 (Surr)	75		33 - 134	01/23/12 21:31	01/27/12 03:47	1
Dibromofluoromethane (Surr)	65		30 - 122	01/23/12 21:31	01/27/12 03:47	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-006
Date Collected: 01/17/12 14:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-6
Matrix: Solid
Percent Solids: 90.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2,2'-oxybis[1-chloropropane]	290	U	290	11	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2,4,5-Trichlorophenol	290	U	290	28	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2,4,6-Trichlorophenol	290	U	290	89	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2,4-Dichlorophenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2,4-Dimethylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2,4-Dinitrophenol	170	U	170	89	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2,4-Dinitrotoluene	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2,6-Dinitrotoluene	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2-Chloronaphthalene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2-Chlorophenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2-Methylnaphthalene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2-Methylphenol	290	U	290	89	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2-Nitroaniline	220	U	220	10	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
2-Nitrophenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
3,3'-Dichlorobenzidine	1800	U	1800	20	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
3-Nitroaniline	220	U	220	18	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
4,6-Dinitro-2-methylphenol	170	U	170	89	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
4-Bromophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
4-Chloro-3-methylphenol	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
4-Chloroaniline	220	U	220	19	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
4-Chlorophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
4-Nitroaniline	220	U	220	29	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
4-Nitrophenol	370	U	370	89	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Acenaphthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Acenaphthylene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Acetophenone	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Anthracene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Atrazine	44	U	44	10	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Benzaldehyde	290	U	290	13	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Benzo[a]anthracene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Benzo[a]pyrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Benzo[b]fluoranthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Benzo[g,h,i]perylene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Benzo[k]fluoranthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Bis(2-chloroethoxy)methane	290	U	290	24	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Bis(2-chloroethyl)ether	89	U	89	2.2	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Bis(2-ethylhexyl) phthalate	290	U	290	21	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Butyl benzyl phthalate	290	U	290	11	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Caprolactam	290	U	290	41	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Carbazole	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Chrysene	290	U	290	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Dibenz(a,h)anthracene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Dibenzofuran	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Diethyl phthalate	290	U	290	18	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Dimethyl phthalate	290	U	290	19	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Di-n-butyl phthalate	290	U	290	17	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Di-n-octyl phthalate	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Fluoranthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Fluorene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-006
Date Collected: 01/17/12 14:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-6
Matrix: Solid
Percent Solids: 90.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	290	U	290	2.3	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Hexachlorobutadiene	44	U	44	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Hexachlorocyclopentadiene	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Hexachloroethane	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Indeno[1,2,3-cd]pyrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Isophorone	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Naphthalene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Nitrobenzene	290	U	290	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
N-Nitrosodi-n-propylamine	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
N-Nitrosodiphenylamine	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Pentachlorophenol	170	U	170	89	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Phenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Phenanthrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
Pyrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1
3 & 4 Methylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 13:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*34 - 110*	*01/25/12 08:48*	*01/27/12 13:21*	*1*
2-Fluorophenol (Surr)	*77*		*26 - 110*	*01/25/12 08:48*	*01/27/12 13:21*	*1*
2,4,6-Tribromophenol (Surr)	*45*		*10 - 118*	*01/25/12 08:48*	*01/27/12 13:21*	*1*
Nitrobenzene-d5 (Surr)	*76*		*24 - 112*	*01/25/12 08:48*	*01/27/12 13:21*	*1*
Phenol-d5 (Surr)	*76*		*28 - 110*	*01/25/12 08:48*	*01/27/12 13:21*	*1*
Terphenyl-d14 (Surr)	*77*		*41 - 119*	*01/25/12 08:48*	*01/27/12 13:21*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-006
Date Collected: 01/17/12 14:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-6
Matrix: Solid
Percent Solids: 90.4

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	36	U	36	23	ug/Kg	☼	01/25/12 08:39	01/27/12 19:01	1
Aroclor-1221	36	U	36	18	ug/Kg	☼	01/25/12 08:39	01/27/12 19:01	1
Aroclor-1232	36	U	36	15	ug/Kg	☼	01/25/12 08:39	01/27/12 19:01	1
Aroclor-1242	36	U	36	14	ug/Kg	☼	01/25/12 08:39	01/27/12 19:01	1
Aroclor-1248	36	U	36	19	ug/Kg	☼	01/25/12 08:39	01/27/12 19:01	1
Aroclor-1254	36	U	36	19	ug/Kg	☼	01/25/12 08:39	01/27/12 19:01	1
Aroclor-1260	36	U	36	19	ug/Kg	☼	01/25/12 08:39	01/27/12 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*29 - 151*	*01/25/12 08:39*	*01/27/12 19:01*	*1*
DCB Decachlorobiphenyl	*57*		*14 - 163*	*01/25/12 08:39*	*01/27/12 19:01*	*1*

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-006
Date Collected: 01/17/12 14:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-6
Matrix: Solid
Percent Solids: 90.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4600		17	10	mg/Kg	☼	01/23/12 09:37	01/25/12 14:36	1
Barium	20	B	0.85	0.076	mg/Kg	☼	01/23/12 09:37	01/25/12 14:36	1
Beryllium	0.17	U	0.17	0.046	mg/Kg	☼	01/23/12 09:37	01/25/12 14:36	1
Cadmium	0.085	U	0.085	0.038	mg/Kg	☼	01/23/12 09:37	01/25/12 14:36	1
Cobalt	3.0		0.43	0.17	mg/Kg	☼	01/23/12 09:37	01/25/12 14:36	1
Chromium	9.3		0.85	0.21	mg/Kg	☼	01/23/12 09:37	01/25/12 14:36	1
Copper	4.4		0.85	0.79	mg/Kg	☼	01/23/12 09:37	01/25/12 14:36	1
Iron	10000		8.5	5.2	mg/Kg	☼	01/23/12 09:37	01/25/12 14:36	1
Manganese	95		0.85	0.079	mg/Kg	☼	01/23/12 09:37	01/25/12 14:36	1
Nickel	7.5		0.85	0.29	mg/Kg	☼	01/23/12 09:37	01/25/12 14:36	1
Vanadium	14		0.85	0.13	mg/Kg	☼	01/23/12 09:37	01/25/12 14:36	1
Lead	5.8		0.26	0.20	mg/Kg	☼	01/23/12 09:37	01/25/12 14:36	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-006
Date Collected: 01/17/12 14:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-6
Matrix: Solid
Percent Solids: 90.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.031	J	0.17	0.026	mg/Kg	☼	01/23/12 09:37	01/27/12 17:46	1
Arsenic	4.1		0.085	0.066	mg/Kg	☼	01/23/12 09:37	01/27/12 17:46	1
Selenium	0.62		0.17	0.096	mg/Kg	☼	01/23/12 09:37	01/27/12 17:46	1
Thallium	0.095	B	0.085	0.014	mg/Kg	☼	01/23/12 09:37	01/27/12 17:46	1
Zinc	32	B	0.85	0.21	mg/Kg	☼	01/23/12 09:37	01/27/12 17:46	1
Silver	0.085	U	0.085	0.017	mg/Kg	☼	01/23/12 09:37	01/27/12 17:46	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-006
Date Collected: 01/17/12 14:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-6
Matrix: Solid
Percent Solids: 90.4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.032	0.012	mg/Kg	☼	01/23/12 13:15	01/23/12 15:12	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011712-DR-006
Date Collected: 01/17/12 14:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-6
Matrix: Solid
Percent Solids: 90.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.38	J	0.89	0.30	mg/Kg	☼	01/26/12 11:07	02/02/12 14:56	1
Cr (III)	8.9		0.89	0.14	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-007
Date Collected: 01/18/12 08:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-7
Matrix: Solid
Percent Solids: 89.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	670	U	670	190	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Benzene	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Bromodichloromethane	89	U	89	11	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Bromoform	89	U	89	21	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Bromomethane	220	U *	220	32	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
2-Butanone (MEK)	670	U	670	48	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Carbon disulfide	220	U	220	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Carbon tetrachloride	45	U	45	7.2	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Chlorobenzene	45	U	45	7.2	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Chloroethane	220	U *	220	68	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Chloroform	45	U	45	9.8	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Chloromethane	220	U	220	16	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,1-Dichloroethane	45	U	45	19	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,2-Dichloroethane	45	U	45	11	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,1-Dichloroethene	45	U	45	20	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,2-Dichloropropane	45	U	45	9.2	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
cis-1,3-Dichloropropene	45	U	45	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
trans-1,3-Dichloropropene	45	U	45	22	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Ethylbenzene	45	U	45	6.0	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
2-Hexanone	2200	U	2200	22	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Methylene Chloride	220	U	220	86	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	54	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Styrene	45	U	45	6.3	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,1,2,2-Tetrachloroethane	45	U	45	9.9	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Tetrachloroethene	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Toluene	89	U	89	19	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Trichloroethene	45	U	45	11	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Vinyl chloride	36	U	36	20	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Xylenes, Total	130	U	130	9.0	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,1,1-Trichloroethane	45	U	45	23	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,1,2-Trichloroethane	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Cyclohexane	1100	U	1100	45	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,2-Dibromo-3-Chloropropane	220	U	220	56	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,2-Dibromoethane	220	U	220	11	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Dichlorodifluoromethane	89	U	89	18	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
cis-1,2-Dichloroethene	45	U	45	7.7	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
trans-1,2-Dichloroethene	45	U	45	10	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Isopropylbenzene	220	U	220	7.3	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Methyl acetate	1100	U	1100	28	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Methyl tert-butyl ether	220	U	220	7.9	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	44	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,2,4-Trichlorobenzene	220	U	220	8.2	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,2-Dichlorobenzene	89	U	89	9.6	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,3-Dichlorobenzene	89	U	89	5.4	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
1,4-Dichlorobenzene	89	U	89	8.9	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Trichlorofluoromethane	89	U	89	18	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Dibromochloromethane	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1
Methylcyclohexane	1100	U	1100	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:11	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-007
Date Collected: 01/18/12 08:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-7
Matrix: Solid
Percent Solids: 89.7

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	77		39 - 128	01/23/12 21:31	01/27/12 04:11	1
4-Bromofluorobenzene (Surr)	75		26 - 141	01/23/12 21:31	01/27/12 04:11	1
Toluene-d8 (Surr)	83		33 - 134	01/23/12 21:31	01/27/12 04:11	1
Dibromofluoromethane (Surr)	71		30 - 122	01/23/12 21:31	01/27/12 04:11	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-007
Date Collected: 01/18/12 08:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-7
Matrix: Solid
Percent Solids: 89.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2,2'-oxybis[1-chloropropane]	290	U	290	11	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2,4,5-Trichlorophenol	290	U	290	28	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2,4,6-Trichlorophenol	290	U	290	89	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2,4-Dichlorophenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2,4-Dimethylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2,4-Dinitrophenol	170	U	170	89	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2,4-Dinitrotoluene	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2,6-Dinitrotoluene	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2-Chloronaphthalene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2-Chlorophenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2-Methylnaphthalene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2-Methylphenol	290	U	290	89	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2-Nitroaniline	220	U	220	10	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
2-Nitrophenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
3,3'-Dichlorobenzidine	1800	U	1800	20	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
3-Nitroaniline	220	U	220	18	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
4,6-Dinitro-2-methylphenol	170	U	170	89	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
4-Bromophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
4-Chloro-3-methylphenol	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
4-Chloroaniline	220	U	220	19	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
4-Chlorophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
4-Nitroaniline	220	U	220	29	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
4-Nitrophenol	370	U	370	89	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Acenaphthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Acenaphthylene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Acetophenone	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Anthracene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Atrazine	45	U	45	10	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Benzaldehyde	290	U	290	13	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Benzo[a]anthracene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Benzo[a]pyrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Benzo[b]fluoranthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Benzo[g,h,i]perylene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Benzo[k]fluoranthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Bis(2-chloroethoxy)methane	290	U	290	25	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Bis(2-chloroethyl)ether	89	U	89	2.2	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Bis(2-ethylhexyl) phthalate	**53**	**J**	290	21	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Butyl benzyl phthalate	290	U	290	11	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Caprolactam	290	U	290	41	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Carbazole	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Chrysene	290	U	290	1.2	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Dibenz(a,h)anthracene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Dibenzofuran	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Diethyl phthalate	290	U	290	18	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Dimethyl phthalate	290	U	290	19	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Di-n-butyl phthalate	290	U	290	17	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Di-n-octyl phthalate	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Fluoranthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Fluorene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-007
Date Collected: 01/18/12 08:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-7
Matrix: Solid
Percent Solids: 89.7

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	290	U	290	2.3	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Hexachlorobutadiene	45	U	45	30	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Hexachlorocyclopentadiene	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Hexachloroethane	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Indeno[1,2,3-cd]pyrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Isophorone	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Naphthalene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Nitrobenzene	290	U	290	2.5	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
N-Nitrosodi-n-propylamine	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
N-Nitrosodiphenylamine	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Pentachlorophenol	170	U	170	89	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Phenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Phenanthrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
Pyrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1
3 & 4 Methylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/30/12 19:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*34 - 110*	*01/25/12 08:48*	*01/30/12 19:51*	*1*
2-Fluorophenol (Surr)	*81*		*26 - 110*	*01/25/12 08:48*	*01/30/12 19:51*	*1*
2,4,6-Tribromophenol (Surr)	*77*		*10 - 118*	*01/25/12 08:48*	*01/30/12 19:51*	*1*
Nitrobenzene-d5 (Surr)	*78*		*24 - 112*	*01/25/12 08:48*	*01/30/12 19:51*	*1*
Phenol-d5 (Surr)	*75*		*28 - 110*	*01/25/12 08:48*	*01/30/12 19:51*	*1*
Terphenyl-d14 (Surr)	*89*		*41 - 119*	*01/25/12 08:48*	*01/30/12 19:51*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-007
Date Collected: 01/18/12 08:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-7
Matrix: Solid
Percent Solids: 89.7

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	37	U	37	23	ug/Kg	☼	01/25/12 08:39	01/27/12 19:16	1
Aroclor-1221	37	U	37	18	ug/Kg	☼	01/25/12 08:39	01/27/12 19:16	1
Aroclor-1232	37	U	37	16	ug/Kg	☼	01/25/12 08:39	01/27/12 19:16	1
Aroclor-1242	37	U	37	14	ug/Kg	☼	01/25/12 08:39	01/27/12 19:16	1
Aroclor-1248	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/27/12 19:16	1
Aroclor-1254	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/27/12 19:16	1
Aroclor-1260	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/27/12 19:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*29 - 151*	*01/25/12 08:39*	*01/27/12 19:16*	*1*
DCB Decachlorobiphenyl	*57*		*14 - 163*	*01/25/12 08:39*	*01/27/12 19:16*	*1*

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-007
Date Collected: 01/18/12 08:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-7
Matrix: Solid
Percent Solids: 89.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4900		15	9.1	mg/Kg	☼	01/23/12 09:37	01/25/12 14:42	1
Barium	41	B	0.76	0.068	mg/Kg	☼	01/23/12 09:37	01/25/12 14:42	1
Beryllium	0.13	J	0.15	0.041	mg/Kg	☼	01/23/12 09:37	01/25/12 14:42	1
Cadmium	0.11		0.076	0.034	mg/Kg	☼	01/23/12 09:37	01/25/12 14:42	1
Cobalt	3.6		0.38	0.15	mg/Kg	☼	01/23/12 09:37	01/25/12 14:42	1
Chromium	9.2		0.76	0.19	mg/Kg	☼	01/23/12 09:37	01/25/12 14:42	1
Copper	8.0		0.76	0.70	mg/Kg	☼	01/23/12 09:37	01/25/12 14:42	1
Iron	11000		7.6	4.7	mg/Kg	☼	01/23/12 09:37	01/25/12 14:42	1
Manganese	360		0.76	0.070	mg/Kg	☼	01/23/12 09:37	01/25/12 14:42	1
Nickel	8.3		0.76	0.26	mg/Kg	☼	01/23/12 09:37	01/25/12 14:42	1
Vanadium	14		0.76	0.11	mg/Kg	☼	01/23/12 09:37	01/25/12 14:42	1
Lead	6.7		0.23	0.18	mg/Kg	☼	01/23/12 09:37	01/25/12 14:42	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-007
Date Collected: 01/18/12 08:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-7
Matrix: Solid
Percent Solids: 89.7

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.066	J	0.15	0.023	mg/Kg	☼	01/23/12 09:37	01/27/12 17:51	1
Arsenic	6.2		0.076	0.059	mg/Kg	☼	01/23/12 09:37	01/27/12 17:51	1
Selenium	0.71		0.15	0.086	mg/Kg	☼	01/23/12 09:37	01/27/12 17:51	1
Thallium	0.082	B	0.076	0.012	mg/Kg	☼	01/23/12 09:37	01/27/12 17:51	1
Zinc	27	B	0.76	0.19	mg/Kg	☼	01/23/12 09:37	01/27/12 17:51	1
Silver	0.018	J	0.076	0.015	mg/Kg	☼	01/23/12 09:37	01/27/12 17:51	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-007
Date Collected: 01/18/12 08:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-7
Matrix: Solid
Percent Solids: 89.7

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024	J	0.042	0.016	mg/Kg	☼	01/23/12 13:15	01/23/12 15:13	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-007
Date Collected: 01/18/12 08:45
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-7
Matrix: Solid
Percent Solids: 89.7

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.90		0.89	0.30	mg/Kg	☼	01/26/12 11:07	02/02/12 14:57	1
Cr (III)	8.3		0.89	0.14	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-008
Date Collected: 01/18/12 08:50
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-8
Matrix: Solid
Percent Solids: 88.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	640	U	640	180	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Benzene	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Bromodichloromethane	86	U	86	11	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Bromoform	86	U	86	20	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Bromomethane	210	U *	210	31	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
2-Butanone (MEK)	640	U	640	46	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Carbon disulfide	210	U	210	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Carbon tetrachloride	43	U	43	6.8	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Chlorobenzene	43	U	43	6.8	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Chloroethane	210	U *	210	65	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Chloroform	43	U	43	9.4	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Chloromethane	210	U	210	15	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,1-Dichloroethane	43	U	43	18	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,2-Dichloroethane	43	U	43	11	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,1-Dichloroethene	43	U	43	19	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,2-Dichloropropane	43	U	43	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
cis-1,3-Dichloropropene	43	U	43	8.4	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
trans-1,3-Dichloropropene	43	U	43	21	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Ethylbenzene	43	U	43	5.8	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
2-Hexanone	2100	U	2100	21	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Methylene Chloride	210	U	210	82	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
4-Methyl-2-pentanone (MIBK)	2100	U	2100	51	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Styrene	43	U	43	6.0	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,1,2,2-Tetrachloroethane	43	U	43	9.5	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Tetrachloroethene	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Toluene	86	U	86	18	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Trichloroethene	43	U	43	10	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Vinyl chloride	34	U	34	19	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Xylenes, Total	130	U	130	8.7	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,1,1-Trichloroethane	43	U	43	22	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,1,2-Trichloroethane	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Cyclohexane	1000	U	1000	43	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,2-Dibromo-3-Chloropropane	210	U	210	53	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,2-Dibromoethane	210	U	210	11	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Dichlorodifluoromethane	86	U	86	17	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
cis-1,2-Dichloroethene	43	U	43	7.4	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
trans-1,2-Dichloroethene	43	U	43	9.8	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Isopropylbenzene	210	U	210	6.9	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Methyl acetate	1000	U	1000	27	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Methyl tert-butyl ether	210	U	210	7.6	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	210	U	210	42	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,2,4-Trichlorobenzene	210	U	210	7.8	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,2-Dichlorobenzene	86	U	86	9.2	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,3-Dichlorobenzene	86	U	86	5.1	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
1,4-Dichlorobenzene	86	U	86	8.6	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Trichlorofluoromethane	86	U	86	17	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Dibromochloromethane	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1
Methylcyclohexane	1000	U	1000	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:35	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-008
Date Collected: 01/18/12 08:50
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-8
Matrix: Solid
Percent Solids: 88.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	72		39 - 128	01/23/12 21:31	01/27/12 04:35	1
4-Bromofluorobenzene (Surr)	70		26 - 141	01/23/12 21:31	01/27/12 04:35	1
Toluene-d8 (Surr)	78		33 - 134	01/23/12 21:31	01/27/12 04:35	1
Dibromofluoromethane (Surr)	66		30 - 122	01/23/12 21:31	01/27/12 04:35	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-008
Date Collected: 01/18/12 08:50
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-8
Matrix: Solid
Percent Solids: 88.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2,4,5-Trichlorophenol	300	U	300	28	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2,4,6-Trichlorophenol	300	U	300	90	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2,4-Dichlorophenol	300	U	300	22	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2,4-Dimethylphenol	300	U	300	22	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2,4-Dinitrophenol	170	U	170	90	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2,4-Dinitrotoluene	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2-Chloronaphthalene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2-Chlorophenol	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2-Methylnaphthalene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2-Methylphenol	300	U	300	90	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2-Nitroaniline	220	U	220	10	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
2-Nitrophenol	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
3,3'-Dichlorobenzidine	1800	U	1800	20	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
3-Nitroaniline	220	U	220	18	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
4,6-Dinitro-2-methylphenol	170	U	170	90	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
4-Bromophenyl phenyl ether	300	U	300	15	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
4-Chloroaniline	220	U	220	19	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
4-Chlorophenyl phenyl ether	300	U	300	15	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
4-Nitroaniline	220	U	220	29	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
4-Nitrophenol	370	U	370	90	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Acenaphthene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Acenaphthylene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Acetophenone	300	U	300	10	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Anthracene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Atrazine	45	U	45	10	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Benzaldehyde	300	U	300	13	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Benzo[a]anthracene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Benzo[a]pyrene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Benzo[b]fluoranthene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Benzo[g,h,i]perylene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Benzo[k]fluoranthene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Bis(2-chloroethyl)ether	90	U	90	2.2	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Bis(2-ethylhexyl) phthalate	**29**	**J**	300	21	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Butyl benzyl phthalate	300	U	300	11	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Caprolactam	300	U	300	42	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Carbazole	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Chrysene	300	U	300	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Dibenz(a,h)anthracene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Dibenzofuran	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Dimethyl phthalate	300	U	300	19	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Di-n-butyl phthalate	300	U	300	17	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Di-n-octyl phthalate	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Fluoranthene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Fluorene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-008
Date Collected: 01/18/12 08:50
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-8
Matrix: Solid
Percent Solids: 88.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Hexachlorobutadiene	45	U	45	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Hexachlorocyclopentadiene	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Indeno[1,2,3-cd]pyrene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Isophorone	300	U	300	15	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Naphthalene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
N-Nitrosodi-n-propylamine	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Pentachlorophenol	170	U	170	90	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Phenol	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Phenanthrene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
Pyrene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1
3 & 4 Methylphenol	300	U	300	22	ug/Kg	☼	01/25/12 08:48	01/27/12 12:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*34 - 110*	*01/25/12 08:48*	*01/27/12 12:43*	*1*
2-Fluorophenol (Surr)	*68*		*26 - 110*	*01/25/12 08:48*	*01/27/12 12:43*	*1*
2,4,6-Tribromophenol (Surr)	*51*		*10 - 118*	*01/25/12 08:48*	*01/27/12 12:43*	*1*
Nitrobenzene-d5 (Surr)	*65*		*24 - 112*	*01/25/12 08:48*	*01/27/12 12:43*	*1*
Phenol-d5 (Surr)	*66*		*28 - 110*	*01/25/12 08:48*	*01/27/12 12:43*	*1*
Terphenyl-d14 (Surr)	*74*		*41 - 119*	*01/25/12 08:48*	*01/27/12 12:43*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-008
Date Collected: 01/18/12 08:50
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-8
Matrix: Solid
Percent Solids: 88.8

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	37	U	37	24	ug/Kg	☼	01/25/12 08:39	01/27/12 19:31	1
Aroclor-1221	37	U	37	18	ug/Kg	☼	01/25/12 08:39	01/27/12 19:31	1
Aroclor-1232	37	U	37	16	ug/Kg	☼	01/25/12 08:39	01/27/12 19:31	1
Aroclor-1242	37	U	37	15	ug/Kg	☼	01/25/12 08:39	01/27/12 19:31	1
Aroclor-1248	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/27/12 19:31	1
Aroclor-1254	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/27/12 19:31	1
Aroclor-1260	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/27/12 19:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*29 - 151*	*01/25/12 08:39*	*01/27/12 19:31*	*1*
DCB Decachlorobiphenyl	*65*		*14 - 163*	*01/25/12 08:39*	*01/27/12 19:31*	*1*

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-008
Date Collected: 01/18/12 08:50
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-8
Matrix: Solid
Percent Solids: 88.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	2300		12	7.3	mg/Kg	☼	01/23/12 09:37	01/25/12 14:48	1
Barium	7.3	B	0.61	0.054	mg/Kg	☼	01/23/12 09:37	01/25/12 14:48	1
Beryllium	0.12	U	0.12	0.033	mg/Kg	☼	01/23/12 09:37	01/25/12 14:48	1
Cadmium	0.029	J	0.061	0.027	mg/Kg	☼	01/23/12 09:37	01/25/12 14:48	1
Cobalt	3.2		0.30	0.12	mg/Kg	☼	01/23/12 09:37	01/25/12 14:48	1
Chromium	6.2		0.61	0.15	mg/Kg	☼	01/23/12 09:37	01/25/12 14:48	1
Copper	9.1		0.61	0.56	mg/Kg	☼	01/23/12 09:37	01/25/12 14:48	1
Iron	12000		6.1	3.7	mg/Kg	☼	01/23/12 09:37	01/25/12 14:48	1
Manganese	110		0.61	0.056	mg/Kg	☼	01/23/12 09:37	01/25/12 14:48	1
Nickel	5.9		0.61	0.21	mg/Kg	☼	01/23/12 09:37	01/25/12 14:48	1
Vanadium	15		0.61	0.091	mg/Kg	☼	01/23/12 09:37	01/25/12 14:48	1
Lead	3.1		0.18	0.14	mg/Kg	☼	01/23/12 09:37	01/25/12 14:48	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-008
Date Collected: 01/18/12 08:50
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-8
Matrix: Solid
Percent Solids: 88.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.12**		0.12	0.018	mg/Kg	☼	01/23/12 09:37	01/27/12 17:57	1
Arsenic	**6.8**		0.061	0.047	mg/Kg	☼	01/23/12 09:37	01/27/12 17:57	1
Selenium	**0.44**		0.12	0.068	mg/Kg	☼	01/23/12 09:37	01/27/12 17:57	1
Thallium	**0.040**	**J B**	0.061	0.0099	mg/Kg	☼	01/23/12 09:37	01/27/12 17:57	1
Zinc	**17**	**B**	0.61	0.15	mg/Kg	☼	01/23/12 09:37	01/27/12 17:57	1
Silver	0.061	U	0.061	0.012	mg/Kg	☼	01/23/12 09:37	01/27/12 17:57	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-008
Date Collected: 01/18/12 08:50
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-8
Matrix: Solid
Percent Solids: 88.8

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.034	U	0.034	0.013	mg/Kg	☼	01/23/12 13:15	01/23/12 15:14	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-008
Date Collected: 01/18/12 08:50
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-8
Matrix: Solid
Percent Solids: 88.8

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.53	J	0.90	0.30	mg/Kg	☼	01/26/12 11:07	02/02/12 14:59	1
Cr (III)	5.7		0.90	0.15	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-009
Date Collected: 01/18/12 10:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-9
Matrix: Solid
Percent Solids: 89.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	670	U	670	190	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Benzene	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Bromodichloromethane	90	U	90	11	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Bromoform	90	U	90	21	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Bromomethane	220	U *	220	32	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
2-Butanone (MEK)	670	U	670	48	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Carbon disulfide	220	U	220	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Carbon tetrachloride	45	U	45	7.2	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Chlorobenzene	45	U	45	7.2	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Chloroethane	220	U *	220	68	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Chloroform	45	U	45	9.9	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Chloromethane	220	U	220	16	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,1-Dichloroethane	45	U	45	19	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,2-Dichloroethane	45	U	45	11	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,1-Dichloroethene	45	U	45	20	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,2-Dichloropropane	45	U	45	9.2	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
cis-1,3-Dichloropropene	45	U	45	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
trans-1,3-Dichloropropene	45	U	45	22	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Ethylbenzene	45	U	45	6.0	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
2-Hexanone	2200	U	2200	22	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Methylene Chloride	220	U	220	86	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	54	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Styrene	45	U	45	6.3	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,1,2,2-Tetrachloroethane	45	U	45	10	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Tetrachloroethene	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Toluene	90	U	90	19	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Trichloroethene	45	U	45	11	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Vinyl chloride	36	U	36	20	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Xylenes, Total	130	U	130	9.1	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,1,1-Trichloroethane	45	U	45	24	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,1,2-Trichloroethane	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Cyclohexane	1100	U	1100	45	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,2-Dibromo-3-Chloropropane	220	U	220	56	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,2-Dibromoethane	220	U	220	11	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Dichlorodifluoromethane	90	U	90	18	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
cis-1,2-Dichloroethene	45	U	45	7.7	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
trans-1,2-Dichloroethene	45	U	45	10	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Isopropylbenzene	220	U	220	7.3	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Methyl acetate	1100	U	1100	28	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Methyl tert-butyl ether	220	U	220	7.9	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	44	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,2,4-Trichlorobenzene	220	U	220	8.2	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,2-Dichlorobenzene	90	U	90	9.6	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,3-Dichlorobenzene	90	U	90	5.4	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
1,4-Dichlorobenzene	90	U	90	9.0	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Trichlorofluoromethane	90	U	90	18	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Dibromochloromethane	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1
Methylcyclohexane	1100	U	1100	13	ug/Kg	☼	01/23/12 21:31	01/27/12 04:59	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-009
Date Collected: 01/18/12 10:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-9
Matrix: Solid
Percent Solids: 89.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	75		39 - 128	01/23/12 21:31	01/27/12 04:59	1
4-Bromofluorobenzene (Surr)	75		26 - 141	01/23/12 21:31	01/27/12 04:59	1
Toluene-d8 (Surr)	84		33 - 134	01/23/12 21:31	01/27/12 04:59	1
Dibromofluoromethane (Surr)	67		30 - 122	01/23/12 21:31	01/27/12 04:59	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-009
Date Collected: 01/18/12 10:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-9
Matrix: Solid
Percent Solids: 89.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2,4,5-Trichlorophenol	300	U	300	28	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2,4,6-Trichlorophenol	300	U	300	90	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2,4-Dichlorophenol	300	U	300	22	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2,4-Dimethylphenol	300	U	300	22	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2,4-Dinitrophenol	170	U	170	90	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2,4-Dinitrotoluene	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2-Chloronaphthalene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2-Chlorophenol	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2-Methylnaphthalene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2-Methylphenol	300	U	300	90	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2-Nitroaniline	220	U	220	10	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
2-Nitrophenol	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
3,3'-Dichlorobenzidine	1800	U	1800	20	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
3-Nitroaniline	220	U	220	18	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
4,6-Dinitro-2-methylphenol	170	U	170	90	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
4-Bromophenyl phenyl ether	300	U	300	15	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
4-Chloroaniline	220	U	220	19	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
4-Chlorophenyl phenyl ether	300	U	300	15	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
4-Nitroaniline	220	U	220	29	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
4-Nitrophenol	370	U	370	90	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Acenaphthene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Acenaphthylene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Acetophenone	300	U	300	10	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Anthracene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Atrazine	45	U	45	10	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Benzaldehyde	300	U	300	13	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Benzo[a]anthracene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Benzo[a]pyrene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Benzo[b]fluoranthene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Benzo[g,h,i]perylene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Benzo[k]fluoranthene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Bis(2-chloroethyl)ether	90	U	90	2.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Bis(2-ethylhexyl) phthalate	**47**	**J**	300	21	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Butyl benzyl phthalate	300	U	300	11	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Caprolactam	300	U	300	41	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Carbazole	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Chrysene	300	U	300	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Dibenz(a,h)anthracene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Dibenzofuran	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Dimethyl phthalate	300	U	300	19	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Di-n-butyl phthalate	300	U	300	17	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Di-n-octyl phthalate	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Fluoranthene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Fluorene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-009
Date Collected: 01/18/12 10:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-9
Matrix: Solid
Percent Solids: 89.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Hexachlorobutadiene	45	U	45	30	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Hexachlorocyclopentadiene	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Indeno[1,2,3-cd]pyrene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Isophorone	300	U	300	15	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Naphthalene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
N-Nitrosodi-n-propylamine	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Pentachlorophenol	170	U	170	90	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Phenol	300	U	300	30	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Phenanthrene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
Pyrene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1
3 & 4 Methylphenol	300	U	300	22	ug/Kg	☼	01/25/12 08:48	01/27/12 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*34 - 110*	*01/25/12 08:48*	*01/27/12 17:12*	*1*
2-Fluorophenol (Surr)	*68*		*26 - 110*	*01/25/12 08:48*	*01/27/12 17:12*	*1*
2,4,6-Tribromophenol (Surr)	*40*		*10 - 118*	*01/25/12 08:48*	*01/27/12 17:12*	*1*
Nitrobenzene-d5 (Surr)	*64*		*24 - 112*	*01/25/12 08:48*	*01/27/12 17:12*	*1*
Phenol-d5 (Surr)	*69*		*28 - 110*	*01/25/12 08:48*	*01/27/12 17:12*	*1*
Terphenyl-d14 (Surr)	*74*		*41 - 119*	*01/25/12 08:48*	*01/27/12 17:12*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-009
Date Collected: 01/18/12 10:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-9
Matrix: Solid
Percent Solids: 89.0

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	37	U	37	24	ug/Kg	☼	01/25/12 08:39	01/27/12 19:45	1
Aroclor-1221	37	U	37	18	ug/Kg	☼	01/25/12 08:39	01/27/12 19:45	1
Aroclor-1232	37	U	37	16	ug/Kg	☼	01/25/12 08:39	01/27/12 19:45	1
Aroclor-1242	37	U	37	15	ug/Kg	☼	01/25/12 08:39	01/27/12 19:45	1
Aroclor-1248	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/27/12 19:45	1
Aroclor-1254	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/27/12 19:45	1
Aroclor-1260	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/27/12 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*29 - 151*	*01/25/12 08:39*	*01/27/12 19:45*	*1*
DCB Decachlorobiphenyl	*57*		*14 - 163*	*01/25/12 08:39*	*01/27/12 19:45*	*1*

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-009
Date Collected: 01/18/12 10:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-9
Matrix: Solid
Percent Solids: 89.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4400		18	11	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Barium	17	B	0.89	0.079	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Beryllium	0.12	J	0.18	0.048	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Calcium	52000	B	440	18	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Cadmium	0.049	J	0.089	0.040	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Cobalt	2.8		0.44	0.18	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Chromium	8.7		0.89	0.22	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Copper	9.6		0.89	0.82	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Iron	9300		8.9	5.4	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Potassium	430	J B	440	6.9	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Magnesium	14000	B	89	5.7	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Manganese	230		0.89	0.082	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Sodium	89	U	89	73	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Nickel	9.4		0.89	0.30	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Vanadium	12		0.89	0.13	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1
Lead	5.1		0.27	0.21	mg/Kg	☼	01/23/12 09:37	01/25/12 14:54	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-009
Date Collected: 01/18/12 10:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-9
Matrix: Solid
Percent Solids: 89.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.057	J	0.18	0.027	mg/Kg	☼	01/23/12 09:37	01/27/12 18:15	1
Arsenic	4.9		0.089	0.069	mg/Kg	☼	01/23/12 09:37	01/27/12 18:15	1
Selenium	0.67		0.18	0.10	mg/Kg	☼	01/23/12 09:37	01/27/12 18:15	1
Thallium	0.13	B	0.089	0.014	mg/Kg	☼	01/23/12 09:37	01/27/12 18:15	1
Zinc	26	B	0.89	0.22	mg/Kg	☼	01/23/12 09:37	01/27/12 18:15	1
Silver	0.089	U	0.089	0.018	mg/Kg	☼	01/23/12 09:37	01/27/12 18:15	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-009
Date Collected: 01/18/12 10:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-9
Matrix: Solid
Percent Solids: 89.0

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.015	J	0.040	0.015	mg/Kg	☼	01/23/12 13:15	01/23/12 15:16	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-009
Date Collected: 01/18/12 10:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-9
Matrix: Solid
Percent Solids: 89.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.63	J	0.90	0.30	mg/Kg	☼	01/26/12 11:07	02/02/12 15:00	1
Cr (III)	8.0		0.90	0.15	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-010
Date Collected: 01/18/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-10
Matrix: Solid
Percent Solids: 90.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	660	U	660	190	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Benzene	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Bromodichloromethane	88	U	88	11	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Bromoform	88	U	88	21	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Bromomethane	220	U *	220	32	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
2-Butanone (MEK)	660	U	660	47	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Carbon disulfide	220	U	220	13	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Carbon tetrachloride	44	U	44	7.1	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Chlorobenzene	44	U	44	7.1	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Chloroethane	220	U *	220	67	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Chloroform	44	U	44	9.7	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Chloromethane	220	U	220	15	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,1-Dichloroethane	44	U	44	19	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,2-Dichloroethane	44	U	44	11	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,1-Dichloroethene	44	U	44	20	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,2-Dichloropropane	44	U	44	9.0	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
cis-1,3-Dichloropropene	44	U	44	8.7	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
trans-1,3-Dichloropropene	44	U	44	22	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Ethylbenzene	44	U	44	6.0	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
2-Hexanone	2200	U	2200	22	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Methylene Chloride	220	U	220	85	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	53	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Styrene	44	U	44	6.2	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,1,2,2-Tetrachloroethane	44	U	44	9.8	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Tetrachloroethene	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Toluene	88	U	88	19	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Trichloroethene	44	U	44	11	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Vinyl chloride	35	U	35	20	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Xylenes, Total	130	U	130	8.9	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,1,1-Trichloroethane	44	U	44	23	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,1,2-Trichloroethane	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Cyclohexane	1100	U	1100	44	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,2-Dibromo-3-Chloropropane	220	U	220	55	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,2-Dibromoethane	220	U	220	11	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Dichlorodifluoromethane	88	U	88	18	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
cis-1,2-Dichloroethene	44	U	44	7.6	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
trans-1,2-Dichloroethene	44	U	44	10	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Isopropylbenzene	220	U	220	7.2	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Methyl acetate	1100	U	1100	28	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Methyl tert-butyl ether	220	U	220	7.8	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	43	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,2,4-Trichlorobenzene	220	U	220	8.0	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,2-Dichlorobenzene	88	U	88	9.5	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,3-Dichlorobenzene	88	U	88	5.3	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
1,4-Dichlorobenzene	88	U	88	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Trichlorofluoromethane	88	U	88	18	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Dibromochloromethane	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1
Methylcyclohexane	1100	U	1100	13	ug/Kg	☼	01/23/12 21:31	01/27/12 05:24	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-010
Date Collected: 01/18/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-10
Matrix: Solid
Percent Solids: 90.4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		39 - 128	01/23/12 21:31	01/27/12 05:24	1
4-Bromofluorobenzene (Surr)	76		26 - 141	01/23/12 21:31	01/27/12 05:24	1
Toluene-d8 (Surr)	82		33 - 134	01/23/12 21:31	01/27/12 05:24	1
Dibromofluoromethane (Surr)	70		30 - 122	01/23/12 21:31	01/27/12 05:24	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-010
Date Collected: 01/18/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-10
Matrix: Solid
Percent Solids: 90.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2,2'-oxybis[1-chloropropane]	290	U	290	11	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2,4,5-Trichlorophenol	290	U	290	28	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2,4,6-Trichlorophenol	290	U	290	89	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2,4-Dichlorophenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2,4-Dimethylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2,4-Dinitrophenol	170	U	170	89	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2,4-Dinitrotoluene	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2,6-Dinitrotoluene	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2-Chloronaphthalene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2-Chlorophenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2-Methylnaphthalene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2-Methylphenol	290	U	290	89	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2-Nitroaniline	220	U	220	10	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
2-Nitrophenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
3,3'-Dichlorobenzidine	1800	U	1800	20	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
3-Nitroaniline	220	U	220	18	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
4,6-Dinitro-2-methylphenol	170	U	170	89	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
4-Bromophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
4-Chloro-3-methylphenol	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
4-Chloroaniline	220	U	220	19	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
4-Chlorophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
4-Nitroaniline	220	U	220	29	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
4-Nitrophenol	370	U	370	89	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Acenaphthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Acenaphthylene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Acetophenone	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Anthracene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Atrazine	44	U	44	10	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Benzaldehyde	290	U	290	13	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Benzo[a]anthracene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Benzo[a]pyrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Benzo[b]fluoranthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Benzo[g,h,i]perylene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Benzo[k]fluoranthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Bis(2-chloroethoxy)methane	290	U	290	24	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Bis(2-chloroethyl)ether	89	U	89	2.2	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Bis(2-ethylhexyl) phthalate	**52**	**J**	290	21	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Butyl benzyl phthalate	290	U	290	11	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Caprolactam	290	U	290	41	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Carbazole	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Chrysene	290	U	290	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Dibenz(a,h)anthracene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Dibenzofuran	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Diethyl phthalate	290	U	290	18	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Dimethyl phthalate	290	U	290	19	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Di-n-butyl phthalate	290	U	290	17	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Di-n-octyl phthalate	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Fluoranthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Fluorene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-010
Date Collected: 01/18/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-10
Matrix: Solid
Percent Solids: 90.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	290	U	290	2.3	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Hexachlorobutadiene	44	U	44	30	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Hexachlorocyclopentadiene	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Hexachloroethane	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Indeno[1,2,3-cd]pyrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Isophorone	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Naphthalene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Nitrobenzene	290	U	290	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
N-Nitrosodi-n-propylamine	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
N-Nitrosodiphenylamine	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Pentachlorophenol	170	U	170	89	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Phenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Phenanthrene	**8.3**	**J**	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
Pyrene	**7.7**	**J**	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1
3 & 4 Methylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 16:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*34 - 110*	*01/25/12 08:48*	*01/27/12 16:53*	*1*
2-Fluorophenol (Surr)	*81*		*26 - 110*	*01/25/12 08:48*	*01/27/12 16:53*	*1*
2,4,6-Tribromophenol (Surr)	*45*		*10 - 118*	*01/25/12 08:48*	*01/27/12 16:53*	*1*
Nitrobenzene-d5 (Surr)	*75*		*24 - 112*	*01/25/12 08:48*	*01/27/12 16:53*	*1*
Phenol-d5 (Surr)	*79*		*28 - 110*	*01/25/12 08:48*	*01/27/12 16:53*	*1*
Terphenyl-d14 (Surr)	*76*		*41 - 119*	*01/25/12 08:48*	*01/27/12 16:53*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-010
Date Collected: 01/18/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-10
Matrix: Solid
Percent Solids: 90.4

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	37	U	37	23	ug/Kg	☼	01/25/12 08:39	01/27/12 20:00	1
Aroclor-1221	37	U	37	18	ug/Kg	☼	01/25/12 08:39	01/27/12 20:00	1
Aroclor-1232	37	U	37	16	ug/Kg	☼	01/25/12 08:39	01/27/12 20:00	1
Aroclor-1242	37	U	37	14	ug/Kg	☼	01/25/12 08:39	01/27/12 20:00	1
Aroclor-1248	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/27/12 20:00	1
Aroclor-1254	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/27/12 20:00	1
Aroclor-1260	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/27/12 20:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*29 - 151*	*01/25/12 08:39*	*01/27/12 20:00*	*1*
DCB Decachlorobiphenyl	*53*		*14 - 163*	*01/25/12 08:39*	*01/27/12 20:00*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-010
Date Collected: 01/18/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-10
Matrix: Solid
Percent Solids: 90.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4300		13	7.8	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Barium	16	B	0.65	0.058	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Beryllium	0.054	J	0.13	0.035	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Calcium	38000	B	330	13	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Cadmium	0.046	J	0.065	0.029	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Cobalt	3.1		0.33	0.13	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Chromium	9.8		0.65	0.16	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Copper	10		0.65	0.60	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Iron	10000		6.5	4.0	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Potassium	360	B	330	5.0	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Magnesium	10000	B	65	4.2	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Manganese	220		0.65	0.060	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Sodium	65	U	65	54	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Nickel	9.9		0.65	0.22	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Vanadium	13		0.65	0.098	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1
Lead	5.8		0.20	0.15	mg/Kg	☼	01/23/12 09:37	01/25/12 15:13	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-010
Date Collected: 01/18/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-10
Matrix: Solid
Percent Solids: 90.4

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.048	J	0.13	0.020	mg/Kg	☼	01/23/12 09:37	01/27/12 18:20	1
Arsenic	5.3		0.065	0.050	mg/Kg	☼	01/23/12 09:37	01/27/12 18:20	1
Selenium	0.59		0.13	0.073	mg/Kg	☼	01/23/12 09:37	01/27/12 18:20	1
Thallium	0.11	B	0.065	0.011	mg/Kg	☼	01/23/12 09:37	01/27/12 18:20	1
Zinc	24	B	0.65	0.16	mg/Kg	☼	01/23/12 09:37	01/27/12 18:20	1
Silver	0.065	U	0.065	0.013	mg/Kg	☼	01/23/12 09:37	01/27/12 18:20	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-010
Date Collected: 01/18/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-10
Matrix: Solid
Percent Solids: 90.4

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044	U	0.044	0.017	mg/Kg	☼	01/23/12 13:15	01/23/12 15:17	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-010
Date Collected: 01/18/12 10:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-10
Matrix: Solid
Percent Solids: 90.4

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.42	J	0.89	0.30	mg/Kg	☼	01/26/12 11:07	02/02/12 15:02	1
Cr (III)	9.3		0.89	0.14	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-011
Date Collected: 01/18/12 10:15
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-11
Matrix: Solid
Percent Solids: 91.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	650	U	650	190	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Benzene	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Bromodichloromethane	87	U	87	11	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Bromoform	87	U	87	21	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Bromomethane	220	U *	220	32	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
2-Butanone (MEK)	650	U	650	47	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Carbon disulfide	220	U	220	13	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Carbon tetrachloride	44	U	44	7.0	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Chlorobenzene	44	U	44	7.0	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Chloroethane	220	U *	220	66	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Chloroform	44	U	44	9.6	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Chloromethane	220	U	220	15	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,1-Dichloroethane	44	U	44	19	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,2-Dichloroethane	44	U	44	11	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,1-Dichloroethene	44	U	44	20	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,2-Dichloropropane	44	U	44	8.9	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
cis-1,3-Dichloropropene	44	U	44	8.6	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
trans-1,3-Dichloropropene	44	U	44	22	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Ethylbenzene	44	U	44	5.9	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
2-Hexanone	2200	U	2200	22	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Methylene Chloride	220	U	220	84	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	52	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Styrene	44	U	44	6.1	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,1,2,2-Tetrachloroethane	44	U	44	9.7	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Tetrachloroethene	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Toluene	87	U	87	19	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Trichloroethene	44	U	44	11	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Vinyl chloride	35	U	35	20	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Xylenes, Total	130	U	130	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,1,1-Trichloroethane	44	U	44	23	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,1,2-Trichloroethane	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Cyclohexane	1000	U	1000	44	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,2-Dibromo-3-Chloropropane	220	U	220	55	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,2-Dibromoethane	220	U	220	11	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Dichlorodifluoromethane	87	U	87	17	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
cis-1,2-Dichloroethene	44	U	44	7.5	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
trans-1,2-Dichloroethene	44	U	44	10	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Isopropylbenzene	220	U	220	7.1	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Methyl acetate	1000	U	1000	27	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Methyl tert-butyl ether	220	U	220	7.7	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	43	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,2,4-Trichlorobenzene	220	U	220	8.0	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,2-Dichlorobenzene	87	U	87	9.4	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,3-Dichlorobenzene	87	U	87	5.2	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
1,4-Dichlorobenzene	87	U	87	8.7	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Trichlorofluoromethane	87	U	87	17	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Dibromochloromethane	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1
Methylcyclohexane	1000	U	1000	13	ug/Kg	☼	01/23/12 21:31	01/27/12 05:48	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-011
Date Collected: 01/18/12 10:15
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-11
Matrix: Solid
Percent Solids: 91.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	72		39 - 128	01/23/12 21:31	01/27/12 05:48	1
4-Bromofluorobenzene (Surr)	71		26 - 141	01/23/12 21:31	01/27/12 05:48	1
Toluene-d8 (Surr)	79		33 - 134	01/23/12 21:31	01/27/12 05:48	1
Dibromofluoromethane (Surr)	65		30 - 122	01/23/12 21:31	01/27/12 05:48	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-011
Date Collected: 01/18/12 10:15
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-11
Matrix: Solid
Percent Solids: 91.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2,2'-oxybis[1-chloropropane]	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2,4,5-Trichlorophenol	290	U	290	27	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2,4,6-Trichlorophenol	290	U	290	87	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2,4-Dichlorophenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2,4-Dimethylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2,4-Dinitrophenol	160	U	160	87	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2,4-Dinitrotoluene	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2,6-Dinitrotoluene	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2-Chloronaphthalene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2-Chlorophenol	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2-Methylnaphthalene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2-Methylphenol	290	U	290	87	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2-Nitroaniline	220	U	220	9.9	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
2-Nitrophenol	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
3,3'-Dichlorobenzidine	1700	U	1700	20	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
3-Nitroaniline	220	U	220	17	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
4,6-Dinitro-2-methylphenol	160	U	160	87	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
4-Bromophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
4-Chloro-3-methylphenol	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
4-Chloroaniline	220	U	220	18	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
4-Chlorophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
4-Nitroaniline	220	U	220	28	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
4-Nitrophenol	360	U	360	87	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Acenaphthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Acenaphthylene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Acetophenone	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Anthracene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Atrazine	43	U	43	9.9	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Benzaldehyde	290	U	290	13	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Benzo[a]anthracene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Benzo[a]pyrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Benzo[b]fluoranthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Benzo[g,h,i]perylene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Benzo[k]fluoranthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Bis(2-chloroethoxy)methane	290	U	290	24	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Bis(2-chloroethyl)ether	87	U	87	2.2	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Bis(2-ethylhexyl) phthalate	**39**	**J**	290	21	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Butyl benzyl phthalate	290	U	290	11	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Caprolactam	290	U	290	40	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Carbazole	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Chrysene	290	U	290	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Dibenz(a,h)anthracene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Dibenzofuran	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Diethyl phthalate	290	U	290	17	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Dimethyl phthalate	290	U	290	18	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Di-n-butyl phthalate	290	U	290	16	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Di-n-octyl phthalate	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Fluoranthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Fluorene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-011
Date Collected: 01/18/12 10:15
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-11
Matrix: Solid
Percent Solids: 91.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	290	U	290	2.3	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Hexachlorobutadiene	43	U	43	29	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Hexachlorocyclopentadiene	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Hexachloroethane	290	U	290	9.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Indeno[1,2,3-cd]pyrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Isophorone	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Naphthalene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Nitrobenzene	290	U	290	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
N-Nitrosodi-n-propylamine	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
N-Nitrosodiphenylamine	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Pentachlorophenol	160	U	160	87	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Phenol	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Phenanthrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
Pyrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1
3 & 4 Methylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*34 - 110*	*01/25/12 08:48*	*01/27/12 15:36*	*1*
2-Fluorophenol (Surr)	*69*		*26 - 110*	*01/25/12 08:48*	*01/27/12 15:36*	*1*
2,4,6-Tribromophenol (Surr)	*43*		*10 - 118*	*01/25/12 08:48*	*01/27/12 15:36*	*1*
Nitrobenzene-d5 (Surr)	*68*		*24 - 112*	*01/25/12 08:48*	*01/27/12 15:36*	*1*
Phenol-d5 (Surr)	*69*		*28 - 110*	*01/25/12 08:48*	*01/27/12 15:36*	*1*
Terphenyl-d14 (Surr)	*75*		*41 - 119*	*01/25/12 08:48*	*01/27/12 15:36*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-011
Date Collected: 01/18/12 10:15
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-11
Matrix: Solid
Percent Solids: 91.8

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	36	U	36	23	ug/Kg	☼	01/25/12 08:39	01/30/12 10:14	1
Aroclor-1221	36	U	36	17	ug/Kg	☼	01/25/12 08:39	01/30/12 10:14	1
Aroclor-1232	36	U	36	15	ug/Kg	☼	01/25/12 08:39	01/30/12 10:14	1
Aroclor-1242	36	U	36	14	ug/Kg	☼	01/25/12 08:39	01/30/12 10:14	1
Aroclor-1248	36	U	36	19	ug/Kg	☼	01/25/12 08:39	01/30/12 10:14	1
Aroclor-1254	36	U	36	19	ug/Kg	☼	01/25/12 08:39	01/30/12 10:14	1
Aroclor-1260	36	U	36	19	ug/Kg	☼	01/25/12 08:39	01/30/12 10:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*29 - 151*	*01/25/12 08:39*	*01/30/12 10:14*	*1*
DCB Decachlorobiphenyl	*65*		*14 - 163*	*01/25/12 08:39*	*01/30/12 10:14*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-011
Date Collected: 01/18/12 10:15
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-11
Matrix: Solid
Percent Solids: 91.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	2400		16	9.6	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Barium	6.9	B	0.80	0.071	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Beryllium	0.16	U	0.16	0.043	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Calcium	95000	B	2000	80	mg/Kg	☼	01/23/12 09:37	01/26/12 06:13	5
Cadmium	0.042	J	0.080	0.036	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Cobalt	2.3		0.40	0.16	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Chromium	8.2		0.80	0.20	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Copper	8.0		0.80	0.74	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Iron	6600		8.0	4.9	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Potassium	350	J B	400	6.2	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Magnesium	14000	B	80	5.1	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Manganese	180		0.80	0.074	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Sodium	80	U	80	66	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Nickel	7.2		0.80	0.27	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Vanadium	8.5		0.80	0.12	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1
Lead	3.5		0.24	0.19	mg/Kg	☼	01/23/12 09:37	01/25/12 15:19	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-011
Date Collected: 01/18/12 10:15
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-11
Matrix: Solid
Percent Solids: 91.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.045	J	0.16	0.024	mg/Kg	☼	01/23/12 09:37	01/27/12 18:26	1
Arsenic	3.4		0.080	0.062	mg/Kg	☼	01/23/12 09:37	01/27/12 18:26	1
Selenium	0.37		0.16	0.090	mg/Kg	☼	01/23/12 09:37	01/27/12 18:26	1
Thallium	0.079	J B	0.080	0.013	mg/Kg	☼	01/23/12 09:37	01/27/12 18:26	1
Zinc	19	B	0.80	0.20	mg/Kg	☼	01/23/12 09:37	01/27/12 18:26	1
Silver	0.080	U	0.080	0.016	mg/Kg	☼	01/23/12 09:37	01/27/12 18:26	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-011
Date Collected: 01/18/12 10:15
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-11
Matrix: Solid
Percent Solids: 91.8

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.039	U	0.039	0.015	mg/Kg	☼	01/23/12 13:15	01/23/12 15:18	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-011
Date Collected: 01/18/12 10:15
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-11
Matrix: Solid
Percent Solids: 91.8

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.87	U	0.87	0.29	mg/Kg	☼	01/26/12 11:07	02/02/12 15:03	1
Cr (III)	**8.2**		0.87	0.14	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-012
Date Collected: 01/18/12 11:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-12
Matrix: Solid
Percent Solids: 88.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	740	U	740	210	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Benzene	49	U	49	15	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Bromodichloromethane	98	U	98	12	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Bromoform	98	U	98	23	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Bromomethane	250	U *	250	36	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
2-Butanone (MEK)	740	U	740	53	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Carbon disulfide	250	U	250	15	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Carbon tetrachloride	49	U	49	7.9	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Chlorobenzene	49	U	49	7.9	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Chloroethane	250	U *	250	75	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Chloroform	49	U	49	11	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Chloromethane	250	U	250	17	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,1-Dichloroethane	49	U	49	21	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,2-Dichloroethane	49	U	49	12	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,1-Dichloroethene	49	U	49	22	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,2-Dichloropropane	49	U	49	10	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
cis-1,3-Dichloropropene	49	U	49	9.7	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
trans-1,3-Dichloropropene	49	U	49	25	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Ethylbenzene	49	U	49	6.6	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
2-Hexanone	2500	U	2500	25	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Methylene Chloride	250	U	250	95	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	59	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Styrene	49	U	49	6.9	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,1,2,2-Tetrachloroethane	49	U	49	11	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Tetrachloroethene	49	U	49	15	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Toluene	98	U	98	21	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Trichloroethene	49	U	49	12	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Vinyl chloride	39	U	39	22	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Xylenes, Total	150	U	150	10	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,1,1-Trichloroethane	49	U	49	26	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,1,2-Trichloroethane	49	U	49	15	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Cyclohexane	1200	U	1200	49	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,2-Dibromo-3-Chloropropane	250	U	250	61	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,2-Dibromoethane	250	U	250	12	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Dichlorodifluoromethane	98	U	98	20	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
cis-1,2-Dichloroethene	49	U	49	8.5	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
trans-1,2-Dichloroethene	49	U	49	11	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Isopropylbenzene	250	U	250	8.0	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Methyl acetate	1200	U	1200	31	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Methyl tert-butyl ether	250	U	250	8.7	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	48	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,2,4-Trichlorobenzene	250	U	250	9.0	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,2-Dichlorobenzene	98	U	98	11	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,3-Dichlorobenzene	98	U	98	5.9	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
1,4-Dichlorobenzene	98	U	98	9.8	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Trichlorofluoromethane	98	U	98	20	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Dibromochloromethane	49	U	49	15	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1
Methylcyclohexane	1200	U	1200	15	ug/Kg	☼	01/23/12 21:31	01/27/12 06:12	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-012
Date Collected: 01/18/12 11:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-12
Matrix: Solid
Percent Solids: 88.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	75		39 - 128	01/23/12 21:31	01/27/12 06:12	1
4-Bromofluorobenzene (Surr)	73		26 - 141	01/23/12 21:31	01/27/12 06:12	1
Toluene-d8 (Surr)	80		33 - 134	01/23/12 21:31	01/27/12 06:12	1
Dibromofluoromethane (Surr)	68		30 - 122	01/23/12 21:31	01/27/12 06:12	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-012
Date Collected: 01/18/12 11:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-12
Matrix: Solid
Percent Solids: 88.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2,4,5-Trichlorophenol	300	U	300	28	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2,4,6-Trichlorophenol	300	U	300	90	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2,4-Dichlorophenol	300	U	300	23	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2,4-Dimethylphenol	300	U	300	23	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2,4-Dinitrophenol	170	U	170	90	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2,4-Dinitrotoluene	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2-Chloronaphthalene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2-Chlorophenol	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2-Methylnaphthalene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2-Methylphenol	300	U	300	90	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2-Nitroaniline	230	U	230	10	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
2-Nitrophenol	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
3,3'-Dichlorobenzidine	1800	U	1800	20	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
3-Nitroaniline	230	U	230	18	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
4,6-Dinitro-2-methylphenol	170	U	170	90	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
4-Bromophenyl phenyl ether	300	U	300	15	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
4-Chloroaniline	230	U	230	19	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
4-Chlorophenyl phenyl ether	300	U	300	15	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
4-Nitroaniline	230	U	230	29	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
4-Nitrophenol	370	U	370	90	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Acenaphthene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Acenaphthylene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Acetophenone	300	U	300	10	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Anthracene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Atrazine	45	U	45	10	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Benzaldehyde	300	U	300	14	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Benzo[a]anthracene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Benzo[a]pyrene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Benzo[b]fluoranthene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Benzo[g,h,i]perylene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Benzo[k]fluoranthene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Bis(2-chloroethyl)ether	90	U	90	2.3	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Bis(2-ethylhexyl) phthalate	**37**	**J**	300	21	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Butyl benzyl phthalate	300	U	300	11	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Caprolactam	300	U	300	42	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Carbazole	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Chrysene	300	U	300	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Dibenz(a,h)anthracene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Dibenzofuran	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Dimethyl phthalate	300	U	300	19	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Di-n-butyl phthalate	300	U	300	17	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Di-n-octyl phthalate	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Fluoranthene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Fluorene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-012
Date Collected: 01/18/12 11:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-12
Matrix: Solid
Percent Solids: 88.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Hexachlorobutadiene	45	U	45	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Hexachlorocyclopentadiene	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Indeno[1,2,3-cd]pyrene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Isophorone	300	U	300	15	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Naphthalene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
N-Nitrosodi-n-propylamine	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Pentachlorophenol	170	U	170	90	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Phenol	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Phenanthrene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
Pyrene	300	U	300	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1
3 & 4 Methylphenol	300	U	300	23	ug/Kg	☼	01/25/12 08:48	01/27/12 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*55*		*34 - 110*	*01/25/12 08:48*	*01/27/12 15:55*	*1*
2-Fluorophenol (Surr)	*67*		*26 - 110*	*01/25/12 08:48*	*01/27/12 15:55*	*1*
2,4,6-Tribromophenol (Surr)	*47*		*10 - 118*	*01/25/12 08:48*	*01/27/12 15:55*	*1*
Nitrobenzene-d5 (Surr)	*62*		*24 - 112*	*01/25/12 08:48*	*01/27/12 15:55*	*1*
Phenol-d5 (Surr)	*67*		*28 - 110*	*01/25/12 08:48*	*01/27/12 15:55*	*1*
Terphenyl-d14 (Surr)	*73*		*41 - 119*	*01/25/12 08:48*	*01/27/12 15:55*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-012
Date Collected: 01/18/12 11:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-12
Matrix: Solid
Percent Solids: 88.6

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	37	U	37	24	ug/Kg	☼	01/25/12 08:39	01/30/12 10:29	1
Aroclor-1221	37	U	37	18	ug/Kg	☼	01/25/12 08:39	01/30/12 10:29	1
Aroclor-1232	37	U	37	16	ug/Kg	☼	01/25/12 08:39	01/30/12 10:29	1
Aroclor-1242	37	U	37	15	ug/Kg	☼	01/25/12 08:39	01/30/12 10:29	1
Aroclor-1248	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/30/12 10:29	1
Aroclor-1254	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/30/12 10:29	1
Aroclor-1260	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/30/12 10:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*29 - 151*	*01/25/12 08:39*	*01/30/12 10:29*	*1*
DCB Decachlorobiphenyl	*57*		*14 - 163*	*01/25/12 08:39*	*01/30/12 10:29*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-012
Date Collected: 01/18/12 11:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-12
Matrix: Solid
Percent Solids: 88.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	3300		17	10	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Barium	13	B	0.87	0.077	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Beryllium	0.17	U	0.17	0.047	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Calcium	6900	B	430	17	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Cadmium	0.084	J	0.087	0.039	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Cobalt	2.9		0.43	0.17	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Chromium	7.9		0.87	0.22	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Copper	6.8		0.87	0.80	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Iron	9400		8.7	5.3	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Potassium	260	J B	430	6.7	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Magnesium	2200	B	87	5.5	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Manganese	110		0.87	0.080	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Sodium	87	U	87	72	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Nickel	8.2		0.87	0.29	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Vanadium	13		0.87	0.13	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1
Lead	5.4		0.26	0.21	mg/Kg	☼	01/23/12 09:37	01/25/12 13:28	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-012
Date Collected: 01/18/12 11:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-12
Matrix: Solid
Percent Solids: 88.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.067	J	0.17	0.026	mg/Kg	☼	01/23/12 09:37	01/27/12 16:41	1
Arsenic	4.2		0.087	0.067	mg/Kg	☼	01/23/12 09:37	01/27/12 16:41	1
Selenium	0.52		0.17	0.098	mg/Kg	☼	01/23/12 09:37	01/27/12 16:41	1
Thallium	0.12	B	0.087	0.014	mg/Kg	☼	01/23/12 09:37	01/27/12 16:41	1
Zinc	22	B	0.87	0.22	mg/Kg	☼	01/23/12 09:37	01/27/12 16:41	1
Silver	0.087	U	0.087	0.017	mg/Kg	☼	01/23/12 09:37	01/27/12 16:41	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-012
Date Collected: 01/18/12 11:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-12
Matrix: Solid
Percent Solids: 88.6

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044	U	0.044	0.016	mg/Kg	☼	01/23/12 13:15	01/23/12 14:33	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-013
Date Collected: 01/18/12 13:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-13
Matrix: Solid
Percent Solids: 87.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	750	U	750	210	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Benzene	50	U	50	15	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Bromodichloromethane	100	U	100	12	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Bromoform	100	U	100	24	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Bromomethane	250	U *	250	36	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
2-Butanone (MEK)	750	U	750	54	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Carbon disulfide	250	U	250	15	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Carbon tetrachloride	50	U	50	8.0	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Chlorobenzene	50	U	50	8.0	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Chloroethane	250	U *	250	76	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Chloroform	50	U	50	11	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Chloromethane	250	U	250	17	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,1-Dichloroethane	50	U	50	21	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,2-Dichloroethane	50	U	50	12	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,1-Dichloroethene	50	U	50	22	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,2-Dichloropropane	50	U	50	10	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
cis-1,3-Dichloropropene	50	U	50	9.8	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
trans-1,3-Dichloropropene	50	U	50	25	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Ethylbenzene	50	U	50	6.7	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
2-Hexanone	2500	U	2500	25	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Methylene Chloride	250	U	250	96	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
4-Methyl-2-pentanone (MIBK)	2500	U	2500	60	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Styrene	50	U	50	7.0	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,1,2,2-Tetrachloroethane	50	U	50	11	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Tetrachloroethene	50	U	50	15	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Toluene	100	U	100	21	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Trichloroethene	50	U	50	12	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Vinyl chloride	40	U	40	22	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Xylenes, Total	150	U	150	10	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,1,1-Trichloroethane	50	U	50	26	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,1,2-Trichloroethane	50	U	50	15	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Cyclohexane	1200	U	1200	50	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,2-Dibromo-3-Chloropropane	250	U	250	62	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,2-Dibromoethane	250	U	250	12	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Dichlorodifluoromethane	100	U	100	20	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
cis-1,2-Dichloroethene	50	U	50	8.6	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
trans-1,2-Dichloroethene	50	U	50	11	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Isopropylbenzene	250	U	250	8.1	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Methyl acetate	1200	U	1200	31	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Methyl tert-butyl ether	250	U	250	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	49	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,2,4-Trichlorobenzene	**21**	**J B**	250	9.1	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,2-Dichlorobenzene	100	U	100	11	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,3-Dichlorobenzene	100	U	100	6.0	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
1,4-Dichlorobenzene	100	U	100	10	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Trichlorofluoromethane	100	U	100	20	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Dibromochloromethane	50	U	50	15	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1
Methylcyclohexane	1200	U	1200	15	ug/Kg	☼	01/23/12 21:31	01/27/12 07:25	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-013
Date Collected: 01/18/12 13:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-13
Matrix: Solid
Percent Solids: 87.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	74		39 - 128	01/23/12 21:31	01/27/12 07:25	1
4-Bromofluorobenzene (Surr)	75		26 - 141	01/23/12 21:31	01/27/12 07:25	1
Toluene-d8 (Surr)	82		33 - 134	01/23/12 21:31	01/27/12 07:25	1
Dibromofluoromethane (Surr)	71		30 - 122	01/23/12 21:31	01/27/12 07:25	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-013
Date Collected: 01/18/12 13:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-13
Matrix: Solid
Percent Solids: 87.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2,2'-oxybis[1-chloropropane]	300	U	300	11	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2,4,5-Trichlorophenol	300	U	300	29	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2,4,6-Trichlorophenol	300	U	300	92	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2,4-Dichlorophenol	300	U	300	23	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2,4-Dimethylphenol	300	U	300	23	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2,4-Dinitrophenol	170	U	170	92	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2,4-Dinitrotoluene	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2,6-Dinitrotoluene	300	U	300	24	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2-Chloronaphthalene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2-Chlorophenol	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2-Methylnaphthalene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2-Methylphenol	300	U	300	92	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2-Nitroaniline	230	U	230	10	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
2-Nitrophenol	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
3,3'-Dichlorobenzidine	1800	U	1800	21	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
3-Nitroaniline	230	U	230	18	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
4,6-Dinitro-2-methylphenol	170	U	170	92	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
4-Bromophenyl phenyl ether	300	U	300	15	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
4-Chloro-3-methylphenol	300	U	300	24	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
4-Chloroaniline	230	U	230	19	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
4-Chlorophenyl phenyl ether	300	U	300	15	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
4-Nitroaniline	230	U	230	30	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
4-Nitrophenol	380	U	380	92	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Acenaphthene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Acenaphthylene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Acetophenone	300	U	300	11	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Anthracene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Atrazine	46	U	46	10	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Benzaldehyde	300	U	300	14	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Benzo[a]anthracene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Benzo[a]pyrene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Benzo[b]fluoranthene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Benzo[g,h,i]perylene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Benzo[k]fluoranthene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Bis(2-chloroethoxy)methane	300	U	300	25	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Bis(2-chloroethyl)ether	92	U	92	2.3	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Bis(2-ethylhexyl) phthalate	**25**	**J**	300	22	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Butyl benzyl phthalate	300	U	300	11	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Caprolactam	300	U	300	42	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Carbazole	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Chrysene	300	U	300	1.3	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Dibenz(a,h)anthracene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Dibenzofuran	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Diethyl phthalate	300	U	300	18	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Dimethyl phthalate	300	U	300	19	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Di-n-butyl phthalate	300	U	300	17	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Di-n-octyl phthalate	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Fluoranthene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Fluorene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-013
Date Collected: 01/18/12 13:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-13
Matrix: Solid
Percent Solids: 87.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	300	U	300	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Hexachlorobutadiene	46	U	46	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Hexachlorocyclopentadiene	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Hexachloroethane	300	U	300	10	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Indeno[1,2,3-cd]pyrene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Isophorone	300	U	300	15	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Naphthalene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Nitrobenzene	300	U	300	2.5	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
N-Nitrosodi-n-propylamine	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
N-Nitrosodiphenylamine	300	U	300	24	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Pentachlorophenol	170	U	170	92	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Phenol	300	U	300	31	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Phenanthrene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
Pyrene	300	U	300	3.8	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1
3 & 4 Methylphenol	300	U	300	23	ug/Kg	☼	01/25/12 08:48	01/27/12 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*34 - 110*	*01/25/12 08:48*	*01/27/12 15:17*	*1*
2-Fluorophenol (Surr)	*72*		*26 - 110*	*01/25/12 08:48*	*01/27/12 15:17*	*1*
2,4,6-Tribromophenol (Surr)	*41*		*10 - 118*	*01/25/12 08:48*	*01/27/12 15:17*	*1*
Nitrobenzene-d5 (Surr)	*66*		*24 - 112*	*01/25/12 08:48*	*01/27/12 15:17*	*1*
Phenol-d5 (Surr)	*72*		*28 - 110*	*01/25/12 08:48*	*01/27/12 15:17*	*1*
Terphenyl-d14 (Surr)	*75*		*41 - 119*	*01/25/12 08:48*	*01/27/12 15:17*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-013
Date Collected: 01/18/12 13:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-13
Matrix: Solid
Percent Solids: 87.8

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	38	U	38	24	ug/Kg	☼	01/25/12 08:39	01/30/12 11:14	1
Aroclor-1221	38	U	38	18	ug/Kg	☼	01/25/12 08:39	01/30/12 11:14	1
Aroclor-1232	38	U	38	16	ug/Kg	☼	01/25/12 08:39	01/30/12 11:14	1
Aroclor-1242	38	U	38	15	ug/Kg	☼	01/25/12 08:39	01/30/12 11:14	1
Aroclor-1248	38	U	38	19	ug/Kg	☼	01/25/12 08:39	01/30/12 11:14	1
Aroclor-1254	38	U	38	19	ug/Kg	☼	01/25/12 08:39	01/30/12 11:14	1
Aroclor-1260	38	U	38	19	ug/Kg	☼	01/25/12 08:39	01/30/12 11:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*29 - 151*	*01/25/12 08:39*	*01/30/12 11:14*	*1*
DCB Decachlorobiphenyl	*62*		*14 - 163*	*01/25/12 08:39*	*01/30/12 11:14*	*1*

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-013
Date Collected: 01/18/12 13:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-13
Matrix: Solid
Percent Solids: 87.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6600		17	10	mg/Kg	☼	01/23/12 09:37	01/25/12 15:25	1
Barium	72	B	0.87	0.077	mg/Kg	☼	01/23/12 09:37	01/25/12 15:25	1
Beryllium	0.22		0.17	0.047	mg/Kg	☼	01/23/12 09:37	01/25/12 15:25	1
Cadmium	0.36		0.087	0.039	mg/Kg	☼	01/23/12 09:37	01/25/12 15:25	1
Cobalt	6.3		0.43	0.17	mg/Kg	☼	01/23/12 09:37	01/25/12 15:25	1
Chromium	12		0.87	0.22	mg/Kg	☼	01/23/12 09:37	01/25/12 15:25	1
Copper	7.8		0.87	0.80	mg/Kg	☼	01/23/12 09:37	01/25/12 15:25	1
Iron	15000		8.7	5.3	mg/Kg	☼	01/23/12 09:37	01/25/12 15:25	1
Manganese	600		0.87	0.080	mg/Kg	☼	01/23/12 09:37	01/25/12 15:25	1
Nickel	11		0.87	0.29	mg/Kg	☼	01/23/12 09:37	01/25/12 15:25	1
Vanadium	19		0.87	0.13	mg/Kg	☼	01/23/12 09:37	01/25/12 15:25	1
Lead	7.6		0.26	0.21	mg/Kg	☼	01/23/12 09:37	01/25/12 15:25	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-013
Date Collected: 01/18/12 13:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-13
Matrix: Solid
Percent Solids: 87.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.042	J	0.17	0.026	mg/Kg	☼	01/23/12 09:37	01/27/12 18:31	1
Arsenic	6.8		0.087	0.067	mg/Kg	☼	01/23/12 09:37	01/27/12 18:31	1
Selenium	1.1		0.17	0.098	mg/Kg	☼	01/23/12 09:37	01/27/12 18:31	1
Thallium	0.10	B	0.087	0.014	mg/Kg	☼	01/23/12 09:37	01/27/12 18:31	1
Zinc	32	B	0.87	0.22	mg/Kg	☼	01/23/12 09:37	01/27/12 18:31	1
Silver	0.025	J	0.087	0.017	mg/Kg	☼	01/23/12 09:37	01/27/12 18:31	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-013
Date Collected: 01/18/12 13:20
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-13
Matrix: Solid
Percent Solids: 87.8

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.040	0.015	mg/Kg	☼	01/23/12 13:15	01/23/12 15:19	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-014
Date Collected: 01/18/12 13:25
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-14
Matrix: Solid
Percent Solids: 89.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	650	U	650	190	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Benzene	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Bromodichloromethane	87	U	87	11	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Bromoform	87	U	87	21	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Bromomethane	220	U *	220	32	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
2-Butanone (MEK)	650	U	650	47	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Carbon disulfide	220	U	220	13	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Carbon tetrachloride	44	U	44	7.0	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Chlorobenzene	44	U	44	7.0	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Chloroethane	220	U *	220	66	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Chloroform	44	U	44	9.6	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Chloromethane	220	U	220	15	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,1-Dichloroethane	44	U	44	19	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,2-Dichloroethane	44	U	44	11	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,1-Dichloroethene	44	U	44	20	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,2-Dichloropropane	44	U	44	8.9	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
cis-1,3-Dichloropropene	44	U	44	8.6	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
trans-1,3-Dichloropropene	44	U	44	22	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Ethylbenzene	44	U	44	5.9	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
2-Hexanone	2200	U	2200	22	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Methylene Chloride	220	U	220	84	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	52	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Styrene	44	U	44	6.1	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,1,2,2-Tetrachloroethane	44	U	44	9.7	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Tetrachloroethene	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Toluene	87	U	87	19	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Trichloroethene	44	U	44	11	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Vinyl chloride	35	U	35	20	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Xylenes, Total	130	U	130	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,1,1-Trichloroethane	44	U	44	23	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,1,2-Trichloroethane	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Cyclohexane	1000	U	1000	44	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,2-Dibromo-3-Chloropropane	220	U	220	54	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,2-Dibromoethane	220	U	220	11	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Dichlorodifluoromethane	87	U	87	17	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
cis-1,2-Dichloroethene	44	U	44	7.5	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
trans-1,2-Dichloroethene	44	U	44	10	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Isopropylbenzene	220	U	220	7.1	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Methyl acetate	1000	U	1000	27	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Methyl tert-butyl ether	220	U	220	7.7	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	42	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,2,4-Trichlorobenzene	220	U	220	7.9	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,2-Dichlorobenzene	87	U	87	9.4	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,3-Dichlorobenzene	87	U	87	5.2	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
1,4-Dichlorobenzene	87	U	87	8.7	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Trichlorofluoromethane	87	U	87	17	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Dibromochloromethane	44	U	44	13	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1
Methylcyclohexane	1000	U	1000	13	ug/Kg	☼	01/23/12 21:31	01/27/12 23:04	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-014
Date Collected: 01/18/12 13:25
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-14
Matrix: Solid
Percent Solids: 89.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		39 - 128	01/23/12 21:31	01/27/12 23:04	1
4-Bromofluorobenzene (Surr)	69		26 - 141	01/23/12 21:31	01/27/12 23:04	1
Toluene-d8 (Surr)	78		33 - 134	01/23/12 21:31	01/27/12 23:04	1
Dibromofluoromethane (Surr)	72		30 - 122	01/23/12 21:31	01/27/12 23:04	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-014
Date Collected: 01/18/12 13:25
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-14
Matrix: Solid
Percent Solids: 89.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2,2'-oxybis[1-chloropropane]	290	U	290	11	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2,4,5-Trichlorophenol	290	U	290	28	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2,4,6-Trichlorophenol	290	U	290	89	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2,4-Dichlorophenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2,4-Dimethylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2,4-Dinitrophenol	170	U	170	89	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2,4-Dinitrotoluene	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2,6-Dinitrotoluene	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2-Chloronaphthalene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2-Chlorophenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2-Methylnaphthalene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2-Methylphenol	290	U	290	89	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2-Nitroaniline	220	U	220	10	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
2-Nitrophenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
3,3'-Dichlorobenzidine	1800	U	1800	20	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
3-Nitroaniline	220	U	220	18	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
4,6-Dinitro-2-methylphenol	170	U	170	89	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
4-Bromophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
4-Chloro-3-methylphenol	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
4-Chloroaniline	220	U	220	19	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
4-Chlorophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
4-Nitroaniline	220	U	220	29	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
4-Nitrophenol	370	U	370	89	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Acenaphthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Acenaphthylene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Acetophenone	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Anthracene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Atrazine	45	U	45	10	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Benzaldehyde	290	U	290	13	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Benzo[a]anthracene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Benzo[a]pyrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Benzo[b]fluoranthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Benzo[g,h,i]perylene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Benzo[k]fluoranthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Bis(2-chloroethoxy)methane	290	U	290	24	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Bis(2-chloroethyl)ether	89	U	89	2.2	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Bis(2-ethylhexyl) phthalate	**32**	**J**	290	21	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Butyl benzyl phthalate	290	U	290	11	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Caprolactam	290	U	290	41	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Carbazole	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Chrysene	290	U	290	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Dibenz(a,h)anthracene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Dibenzofuran	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Diethyl phthalate	290	U	290	18	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Dimethyl phthalate	290	U	290	19	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Di-n-butyl phthalate	290	U	290	17	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Di-n-octyl phthalate	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Fluoranthene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Fluorene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-014
Date Collected: 01/18/12 13:25
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-14
Matrix: Solid
Percent Solids: 89.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	290	U	290	2.3	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Hexachlorobutadiene	45	U	45	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Hexachlorocyclopentadiene	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Hexachloroethane	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Indeno[1,2,3-cd]pyrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Isophorone	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Naphthalene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Nitrobenzene	290	U	290	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
N-Nitrosodi-n-propylamine	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
N-Nitrosodiphenylamine	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Pentachlorophenol	170	U	170	89	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Phenol	290	U	290	30	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Phenanthrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
Pyrene	290	U	290	3.7	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1
3 & 4 Methylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*34 - 110*	*01/25/12 08:48*	*01/27/12 13:02*	*1*
2-Fluorophenol (Surr)	*68*		*26 - 110*	*01/25/12 08:48*	*01/27/12 13:02*	*1*
2,4,6-Tribromophenol (Surr)	*41*		*10 - 118*	*01/25/12 08:48*	*01/27/12 13:02*	*1*
Nitrobenzene-d5 (Surr)	*64*		*24 - 112*	*01/25/12 08:48*	*01/27/12 13:02*	*1*
Phenol-d5 (Surr)	*67*		*28 - 110*	*01/25/12 08:48*	*01/27/12 13:02*	*1*
Terphenyl-d14 (Surr)	*73*		*41 - 119*	*01/25/12 08:48*	*01/27/12 13:02*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-014
Date Collected: 01/18/12 13:25
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-14
Matrix: Solid
Percent Solids: 89.6

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	37	U	37	23	ug/Kg	☼	01/25/12 08:39	01/30/12 11:29	1
Aroclor-1221	37	U	37	18	ug/Kg	☼	01/25/12 08:39	01/30/12 11:29	1
Aroclor-1232	37	U	37	16	ug/Kg	☼	01/25/12 08:39	01/30/12 11:29	1
Aroclor-1242	37	U	37	15	ug/Kg	☼	01/25/12 08:39	01/30/12 11:29	1
Aroclor-1248	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/30/12 11:29	1
Aroclor-1254	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/30/12 11:29	1
Aroclor-1260	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/30/12 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*29 - 151*	*01/25/12 08:39*	*01/30/12 11:29*	*1*
DCB Decachlorobiphenyl	*64*		*14 - 163*	*01/25/12 08:39*	*01/30/12 11:29*	*1*

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-014
Date Collected: 01/18/12 13:25
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-14
Matrix: Solid
Percent Solids: 89.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	2700		16	9.7	mg/Kg	☼	01/23/12 09:37	01/25/12 15:31	1
Barium	29	B	0.81	0.072	mg/Kg	☼	01/23/12 09:37	01/25/12 15:31	1
Beryllium	0.16	U	0.16	0.044	mg/Kg	☼	01/23/12 09:37	01/25/12 15:31	1
Cadmium	0.064	J	0.081	0.037	mg/Kg	☼	01/23/12 09:37	01/25/12 15:31	1
Cobalt	2.4		0.41	0.16	mg/Kg	☼	01/23/12 09:37	01/25/12 15:31	1
Chromium	5.8		0.81	0.20	mg/Kg	☼	01/23/12 09:37	01/25/12 15:31	1
Copper	5.8		0.81	0.75	mg/Kg	☼	01/23/12 09:37	01/25/12 15:31	1
Iron	9900		8.1	5.0	mg/Kg	☼	01/23/12 09:37	01/25/12 15:31	1
Manganese	440		0.81	0.075	mg/Kg	☼	01/23/12 09:37	01/25/12 15:31	1
Nickel	10		0.81	0.27	mg/Kg	☼	01/23/12 09:37	01/25/12 15:31	1
Vanadium	8.8		0.81	0.12	mg/Kg	☼	01/23/12 09:37	01/25/12 15:31	1
Lead	2.7		0.24	0.19	mg/Kg	☼	01/23/12 09:37	01/25/12 15:31	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-014
Date Collected: 01/18/12 13:25
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-14
Matrix: Solid
Percent Solids: 89.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.046	J	0.16	0.024	mg/Kg	☼	01/23/12 09:37	01/27/12 18:37	1
Arsenic	5.9		0.081	0.063	mg/Kg	☼	01/23/12 09:37	01/27/12 18:37	1
Selenium	0.40		0.16	0.091	mg/Kg	☼	01/23/12 09:37	01/27/12 18:37	1
Thallium	0.091	B	0.081	0.013	mg/Kg	☼	01/23/12 09:37	01/27/12 18:37	1
Zinc	14	B	0.81	0.20	mg/Kg	☼	01/23/12 09:37	01/27/12 18:37	1
Silver	0.081	U	0.081	0.016	mg/Kg	☼	01/23/12 09:37	01/27/12 18:37	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-014
Date Collected: 01/18/12 13:25
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-14
Matrix: Solid
Percent Solids: 89.6

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	U	0.040	0.015	mg/Kg	☼	01/23/12 13:15	01/23/12 15:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-015
Date Collected: 01/18/12 13:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-15
Matrix: Solid
Percent Solids: 94.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	630	U	630	180	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Benzene	42	U	42	13	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Bromodichloromethane	84	U	84	10	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Bromoform	84	U	84	20	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Bromomethane	210	U *	210	31	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
2-Butanone (MEK)	630	U	630	45	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Carbon disulfide	210	U	210	13	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Carbon tetrachloride	42	U	42	6.7	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Chlorobenzene	42	U	42	6.7	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Chloroethane	210	U *	210	64	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Chloroform	42	U	42	9.3	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Chloromethane	210	U	210	15	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,1-Dichloroethane	42	U	42	18	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,2-Dichloroethane	42	U	42	11	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,1-Dichloroethene	42	U	42	19	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,2-Dichloropropane	42	U	42	8.6	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
cis-1,3-Dichloropropene	42	U	42	8.3	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
trans-1,3-Dichloropropene	42	U	42	21	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Ethylbenzene	42	U	42	5.7	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
2-Hexanone	2100	U	2100	21	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Methylene Chloride	210	U	210	81	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
4-Methyl-2-pentanone (MIBK)	2100	U	2100	51	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Styrene	42	U	42	5.9	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,1,2,2-Tetrachloroethane	42	U	42	9.4	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Tetrachloroethene	42	U	42	13	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Toluene	84	U	84	18	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Trichloroethene	42	U	42	10	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Vinyl chloride	34	U	34	19	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Xylenes, Total	130	U	130	8.5	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,1,1-Trichloroethane	42	U	42	22	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,1,2-Trichloroethane	42	U	42	13	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Cyclohexane	1000	U	1000	42	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,2-Dibromo-3-Chloropropane	210	U	210	53	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,2-Dibromoethane	210	U	210	11	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Dichlorodifluoromethane	84	U	84	17	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
cis-1,2-Dichloroethene	42	U	42	7.3	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
trans-1,2-Dichloroethene	42	U	42	9.7	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Isopropylbenzene	210	U	210	6.8	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Methyl acetate	1000	U	1000	26	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Methyl tert-butyl ether	210	U	210	7.5	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	210	U	210	41	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,2,4-Trichlorobenzene	210	U	210	7.7	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,2-Dichlorobenzene	84	U	84	9.1	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,3-Dichlorobenzene	84	U	84	5.1	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
1,4-Dichlorobenzene	84	U	84	8.4	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Trichlorofluoromethane	84	U	84	17	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Dibromochloromethane	42	U	42	13	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1
Methylcyclohexane	1000	U	1000	13	ug/Kg	☼	01/23/12 21:31	01/27/12 01:37	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-015
Date Collected: 01/18/12 13:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-15
Matrix: Solid
Percent Solids: 94.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	73		39 - 128	01/23/12 21:31	01/27/12 01:37	1
4-Bromofluorobenzene (Surr)	70		26 - 141	01/23/12 21:31	01/27/12 01:37	1
Toluene-d8 (Surr)	79		33 - 134	01/23/12 21:31	01/27/12 01:37	1
Dibromofluoromethane (Surr)	73		30 - 122	01/23/12 21:31	01/27/12 01:37	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-015
Date Collected: 01/18/12 13:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-15
Matrix: Solid
Percent Solids: 94.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	1100	U	1100	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2,2'-oxybis[1-chloropropane]	1100	U	1100	40	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2,4,5-Trichlorophenol	1100	U	1100	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2,4,6-Trichlorophenol	1100	U	1100	340	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2,4-Dichlorophenol	1100	U	1100	85	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2,4-Dimethylphenol	1100	U	1100	85	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2,4-Dinitrophenol	630	U	630	340	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2,4-Dinitrotoluene	1100	U	1100	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2,6-Dinitrotoluene	1100	U	1100	89	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2-Chloronaphthalene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2-Chlorophenol	1100	U	1100	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2-Methylnaphthalene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2-Methylphenol	1100	U	1100	340	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2-Nitroaniline	850	U	850	38	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
2-Nitrophenol	1100	U	1100	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
3,3'-Dichlorobenzidine	6800	U	6800	76	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
3-Nitroaniline	850	U	850	68	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
4,6-Dinitro-2-methylphenol	630	U	630	340	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
4-Bromophenyl phenyl ether	1100	U	1100	55	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
4-Chloro-3-methylphenol	1100	U	1100	89	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
4-Chloroaniline	850	U	850	72	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
4-Chlorophenyl phenyl ether	1100	U	1100	55	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
4-Nitroaniline	850	U	850	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
4-Nitrophenol	1400	U	1400	340	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Acenaphthene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Acenaphthylene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Acetophenone	1100	U	1100	39	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Anthracene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Atrazine	170	U	170	38	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Benzaldehyde	1100	U	1100	51	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Benzo[a]anthracene	**38**	**J**	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Benzo[a]pyrene	**48**	**J**	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Benzo[b]fluoranthene	**68**	**J**	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Benzo[g,h,i]perylene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Benzo[k]fluoranthene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Bis(2-chloroethoxy)methane	1100	U	1100	93	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Bis(2-chloroethyl)ether	340	U	340	8.5	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Bis(2-ethylhexyl) phthalate	**96**	**J**	1100	80	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Butyl benzyl phthalate	1100	U	1100	42	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Caprolactam	1100	U	1100	160	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Carbazole	1100	U	1100	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Chrysene	**49**	**J**	1100	4.7	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Dibenz(a,h)anthracene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Dibenzofuran	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Diethyl phthalate	1100	U	1100	68	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Dimethyl phthalate	1100	U	1100	72	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Di-n-butyl phthalate	1100	U	1100	63	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Di-n-octyl phthalate	1100	U	1100	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Fluoranthene	**61**	**J**	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Fluorene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-015
Date Collected: 01/18/12 13:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-15
Matrix: Solid
Percent Solids: 94.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	1100	U	1100	8.9	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Hexachlorobutadiene	170	U	170	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Hexachlorocyclopentadiene	1100	U	1100	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Hexachloroethane	1100	U	1100	38	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Indeno[1,2,3-cd]pyrene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Isophorone	1100	U	1100	55	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Naphthalene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Nitrobenzene	1100	U	1100	9.3	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
N-Nitrosodi-n-propylamine	1100	U	1100	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
N-Nitrosodiphenylamine	1100	U	1100	89	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Pentachlorophenol	630	U	630	340	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Phenol	1100	U	1100	110	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Phenanthrene	1100	U	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
Pyrene	**72**	**J**	1100	14	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4
3 & 4 Methylphenol	1100	U	1100	85	ug/Kg	☼	01/25/12 08:48	01/27/12 18:29	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*34 - 110*	*01/25/12 08:48*	*01/27/12 18:29*	*4*
2-Fluorophenol (Surr)	*67*		*26 - 110*	*01/25/12 08:48*	*01/27/12 18:29*	*4*
2,4,6-Tribromophenol (Surr)	*57*		*10 - 118*	*01/25/12 08:48*	*01/27/12 18:29*	*4*
Nitrobenzene-d5 (Surr)	*63*		*24 - 112*	*01/25/12 08:48*	*01/27/12 18:29*	*4*
Phenol-d5 (Surr)	*74*		*28 - 110*	*01/25/12 08:48*	*01/27/12 18:29*	*4*
Terphenyl-d14 (Surr)	*66*		*41 - 119*	*01/25/12 08:48*	*01/27/12 18:29*	*4*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-015
Date Collected: 01/18/12 13:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-15
Matrix: Solid
Percent Solids: 94.6

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	35	U	35	22	ug/Kg	☼	01/25/12 08:39	01/30/12 11:43	1
Aroclor-1221	35	U	35	17	ug/Kg	☼	01/25/12 08:39	01/30/12 11:43	1
Aroclor-1232	35	U	35	15	ug/Kg	☼	01/25/12 08:39	01/30/12 11:43	1
Aroclor-1242	35	U	35	14	ug/Kg	☼	01/25/12 08:39	01/30/12 11:43	1
Aroclor-1248	35	U	35	18	ug/Kg	☼	01/25/12 08:39	01/30/12 11:43	1
Aroclor-1254	35	U	35	18	ug/Kg	☼	01/25/12 08:39	01/30/12 11:43	1
Aroclor-1260	35	U	35	18	ug/Kg	☼	01/25/12 08:39	01/30/12 11:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*29 - 151*	*01/25/12 08:39*	*01/30/12 11:43*	*1*
DCB Decachlorobiphenyl	*49*		*14 - 163*	*01/25/12 08:39*	*01/30/12 11:43*	*1*

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-015
Date Collected: 01/18/12 13:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-15
Matrix: Solid
Percent Solids: 94.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4300		13	7.9	mg/Kg	☼	01/23/12 09:37	01/25/12 15:37	1
Barium	31	B	0.66	0.059	mg/Kg	☼	01/23/12 09:37	01/25/12 15:37	1
Beryllium	0.070	J	0.13	0.035	mg/Kg	☼	01/23/12 09:37	01/25/12 15:37	1
Cadmium	0.69		0.066	0.030	mg/Kg	☼	01/23/12 09:37	01/25/12 15:37	1
Cobalt	3.9		0.33	0.13	mg/Kg	☼	01/23/12 09:37	01/25/12 15:37	1
Chromium	14		0.66	0.17	mg/Kg	☼	01/23/12 09:37	01/25/12 15:37	1
Copper	26		0.66	0.61	mg/Kg	☼	01/23/12 09:37	01/25/12 15:37	1
Iron	13000		6.6	4.0	mg/Kg	☼	01/23/12 09:37	01/25/12 15:37	1
Manganese	330		0.66	0.061	mg/Kg	☼	01/23/12 09:37	01/25/12 15:37	1
Nickel	13		0.66	0.22	mg/Kg	☼	01/23/12 09:37	01/25/12 15:37	1
Vanadium	13		0.66	0.099	mg/Kg	☼	01/23/12 09:37	01/25/12 15:37	1
Lead	26		0.20	0.16	mg/Kg	☼	01/23/12 09:37	01/25/12 15:37	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-015
Date Collected: 01/18/12 13:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-15
Matrix: Solid
Percent Solids: 94.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.21		0.13	0.020	mg/Kg	☼	01/23/12 09:37	01/27/12 18:42	1
Arsenic	4.5		0.066	0.051	mg/Kg	☼	01/23/12 09:37	01/27/12 18:42	1
Selenium	0.47		0.13	0.074	mg/Kg	☼	01/23/12 09:37	01/27/12 18:42	1
Thallium	0.10	B	0.066	0.011	mg/Kg	☼	01/23/12 09:37	01/27/12 18:42	1
Zinc	47	B	0.66	0.17	mg/Kg	☼	01/23/12 09:37	01/27/12 18:42	1
Silver	0.022	J	0.066	0.013	mg/Kg	☼	01/23/12 09:37	01/27/12 18:42	1

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-015
Date Collected: 01/18/12 13:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-15
Matrix: Solid
Percent Solids: 94.6

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	J	0.041	0.015	mg/Kg	☼	01/23/12 13:15	01/23/12 15:22	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-015
Date Collected: 01/18/12 13:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-15
Matrix: Solid
Percent Solids: 94.6

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	1.9		0.85	0.29	mg/Kg	☼	01/26/12 11:07	02/02/12 15:07	1
Cr (III)	13		0.85	0.14	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-016
Date Collected: 01/18/12 13:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-16
Matrix: Solid
Percent Solids: 92.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	640	U	640	180	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Benzene	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Bromodichloromethane	86	U	86	11	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Bromoform	86	U	86	20	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Bromomethane	210	U *	210	31	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
2-Butanone (MEK)	640	U	640	46	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Carbon disulfide	210	U	210	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Carbon tetrachloride	43	U	43	6.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Chlorobenzene	43	U	43	6.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Chloroethane	210	U *	210	65	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Chloroform	43	U	43	9.4	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Chloromethane	210	U	210	15	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,1-Dichloroethane	43	U	43	18	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,2-Dichloroethane	43	U	43	11	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,1-Dichloroethene	43	U	43	19	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,2-Dichloropropane	43	U	43	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
cis-1,3-Dichloropropene	43	U	43	8.5	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
trans-1,3-Dichloropropene	43	U	43	21	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Ethylbenzene	43	U	43	5.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
2-Hexanone	2100	U	2100	21	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Methylene Chloride	210	U	210	83	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
4-Methyl-2-pentanone (MIBK)	2100	U	2100	52	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Styrene	43	U	43	6.0	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,1,2,2-Tetrachloroethane	43	U	43	9.6	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Tetrachloroethene	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Toluene	86	U	86	18	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Trichloroethene	43	U	43	10	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Vinyl chloride	34	U	34	19	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Xylenes, Total	130	U	130	8.7	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,1,1-Trichloroethane	43	U	43	23	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,1,2-Trichloroethane	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Cyclohexane	1000	U	1000	43	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,2-Dibromo-3-Chloropropane	210	U	210	54	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,2-Dibromoethane	210	U	210	11	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Dichlorodifluoromethane	86	U	86	17	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
cis-1,2-Dichloroethene	43	U	43	7.4	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
trans-1,2-Dichloroethene	43	U	43	9.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Isopropylbenzene	210	U	210	7.0	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Methyl acetate	1000	U	1000	27	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Methyl tert-butyl ether	210	U	210	7.6	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	210	U	210	42	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,2,4-Trichlorobenzene	210	U	210	7.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,2-Dichlorobenzene	86	U	86	9.2	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,3-Dichlorobenzene	86	U	86	5.2	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
1,4-Dichlorobenzene	86	U	86	8.6	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Trichlorofluoromethane	86	U	86	17	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Dibromochloromethane	43	U	43	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1
Methylcyclohexane	1000	U	1000	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:01	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-016
Date Collected: 01/18/12 13:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-16
Matrix: Solid
Percent Solids: 92.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	70		39 - 128	01/23/12 21:31	01/27/12 02:01	1
4-Bromofluorobenzene (Surr)	66		26 - 141	01/23/12 21:31	01/27/12 02:01	1
Toluene-d8 (Surr)	75		33 - 134	01/23/12 21:31	01/27/12 02:01	1
Dibromofluoromethane (Surr)	66		30 - 122	01/23/12 21:31	01/27/12 02:01	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-016
Date Collected: 01/18/12 13:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-16
Matrix: Solid
Percent Solids: 92.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2,2'-oxybis[1-chloropropane]	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2,4,5-Trichlorophenol	290	U	290	27	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2,4,6-Trichlorophenol	290	U	290	87	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2,4-Dichlorophenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2,4-Dimethylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2,4-Dinitrophenol	160	U	160	87	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2,4-Dinitrotoluene	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2,6-Dinitrotoluene	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2-Chloronaphthalene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2-Chlorophenol	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2-Methylnaphthalene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2-Methylphenol	290	U	290	87	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2-Nitroaniline	220	U	220	9.9	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
2-Nitrophenol	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
3,3'-Dichlorobenzidine	1700	U	1700	20	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
3-Nitroaniline	220	U	220	17	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
4,6-Dinitro-2-methylphenol	160	U	160	87	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
4-Bromophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
4-Chloro-3-methylphenol	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
4-Chloroaniline	220	U	220	19	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
4-Chlorophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
4-Nitroaniline	220	U	220	28	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
4-Nitrophenol	360	U	360	87	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Acenaphthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Acenaphthylene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Acetophenone	290	U	290	10	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Anthracene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Atrazine	44	U	44	9.9	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Benzaldehyde	290	U	290	13	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Benzo[a]anthracene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Benzo[a]pyrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Benzo[b]fluoranthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Benzo[g,h,i]perylene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Benzo[k]fluoranthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Bis(2-chloroethoxy)methane	290	U	290	24	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Bis(2-chloroethyl)ether	87	U	87	2.2	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Bis(2-ethylhexyl) phthalate	**31**	**J**	290	21	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Butyl benzyl phthalate	290	U	290	11	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Caprolactam	290	U	290	40	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Carbazole	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Chrysene	290	U	290	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Dibenz(a,h)anthracene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Dibenzofuran	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Diethyl phthalate	290	U	290	17	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Dimethyl phthalate	290	U	290	19	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Di-n-butyl phthalate	290	U	290	16	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Di-n-octyl phthalate	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Fluoranthene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Fluorene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-016
Date Collected: 01/18/12 13:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-16
Matrix: Solid
Percent Solids: 92.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	290	U	290	2.3	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Hexachlorobutadiene	44	U	44	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Hexachlorocyclopentadiene	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Hexachloroethane	290	U	290	9.8	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Indeno[1,2,3-cd]pyrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Isophorone	290	U	290	14	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Naphthalene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Nitrobenzene	290	U	290	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
N-Nitrosodi-n-propylamine	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
N-Nitrosodiphenylamine	290	U	290	23	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Pentachlorophenol	160	U	160	87	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Phenol	290	U	290	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Phenanthrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
Pyrene	290	U	290	3.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1
3 & 4 Methylphenol	290	U	290	22	ug/Kg	☼	01/25/12 08:48	01/27/12 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*54*		*34 - 110*	*01/25/12 08:48*	*01/27/12 14:19*	*1*
2-Fluorophenol (Surr)	*67*		*26 - 110*	*01/25/12 08:48*	*01/27/12 14:19*	*1*
2,4,6-Tribromophenol (Surr)	*42*		*10 - 118*	*01/25/12 08:48*	*01/27/12 14:19*	*1*
Nitrobenzene-d5 (Surr)	*65*		*24 - 112*	*01/25/12 08:48*	*01/27/12 14:19*	*1*
Phenol-d5 (Surr)	*67*		*28 - 110*	*01/25/12 08:48*	*01/27/12 14:19*	*1*
Terphenyl-d14 (Surr)	*74*		*41 - 119*	*01/25/12 08:48*	*01/27/12 14:19*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-016
Date Collected: 01/18/12 13:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-16
Matrix: Solid
Percent Solids: 92.0

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	36	U	36	23	ug/Kg	☼	01/25/12 08:39	01/30/12 11:58	1
Aroclor-1221	36	U	36	17	ug/Kg	☼	01/25/12 08:39	01/30/12 11:58	1
Aroclor-1232	36	U	36	15	ug/Kg	☼	01/25/12 08:39	01/30/12 11:58	1
Aroclor-1242	36	U	36	14	ug/Kg	☼	01/25/12 08:39	01/30/12 11:58	1
Aroclor-1248	36	U	36	18	ug/Kg	☼	01/25/12 08:39	01/30/12 11:58	1
Aroclor-1254	36	U	36	18	ug/Kg	☼	01/25/12 08:39	01/30/12 11:58	1
Aroclor-1260	36	U	36	18	ug/Kg	☼	01/25/12 08:39	01/30/12 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*29 - 151*	*01/25/12 08:39*	*01/30/12 11:58*	*1*
DCB Decachlorobiphenyl	*61*		*14 - 163*	*01/25/12 08:39*	*01/30/12 11:58*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-016
Date Collected: 01/18/12 13:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-16
Matrix: Solid
Percent Solids: 92.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	3200		16	9.8	mg/Kg	☼	01/23/12 09:37	01/25/12 15:43	1
Barium	12	B	0.81	0.072	mg/Kg	☼	01/23/12 09:37	01/25/12 15:43	1
Beryllium	0.066	J	0.16	0.044	mg/Kg	☼	01/23/12 09:37	01/25/12 15:43	1
Cadmium	0.081	U	0.081	0.037	mg/Kg	☼	01/23/12 09:37	01/25/12 15:43	1
Cobalt	3.2		0.41	0.16	mg/Kg	☼	01/23/12 09:37	01/25/12 15:43	1
Chromium	8.6		0.81	0.20	mg/Kg	☼	01/23/12 09:37	01/25/12 15:43	1
Copper	9.3		0.81	0.75	mg/Kg	☼	01/23/12 09:37	01/25/12 15:43	1
Iron	14000		8.1	5.0	mg/Kg	☼	01/23/12 09:37	01/25/12 15:43	1
Manganese	160		0.81	0.075	mg/Kg	☼	01/23/12 09:37	01/25/12 15:43	1
Nickel	7.8		0.81	0.27	mg/Kg	☼	01/23/12 09:37	01/25/12 15:43	1
Vanadium	17		0.81	0.12	mg/Kg	☼	01/23/12 09:37	01/25/12 15:43	1
Lead	6.0		0.24	0.19	mg/Kg	☼	01/23/12 09:37	01/25/12 15:43	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-016
Date Collected: 01/18/12 13:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-16
Matrix: Solid
Percent Solids: 92.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.081	J	0.16	0.024	mg/Kg	☼	01/23/12 09:37	01/27/12 18:48	1
Arsenic	8.7		0.081	0.063	mg/Kg	☼	01/23/12 09:37	01/27/12 18:48	1
Selenium	0.54		0.16	0.091	mg/Kg	☼	01/23/12 09:37	01/27/12 18:48	1
Thallium	0.070	J B	0.081	0.013	mg/Kg	☼	01/23/12 09:37	01/27/12 18:48	1
Zinc	27	B	0.81	0.20	mg/Kg	☼	01/23/12 09:37	01/27/12 18:48	1
Silver	0.081	U	0.081	0.016	mg/Kg	☼	01/23/12 09:37	01/27/12 18:48	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-016
Date Collected: 01/18/12 13:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-16
Matrix: Solid
Percent Solids: 92.0

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.037	U	0.037	0.014	mg/Kg	☼	01/23/12 13:15	01/23/12 15:23	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-016
Date Collected: 01/18/12 13:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-16
Matrix: Solid
Percent Solids: 92.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.75	J	0.87	0.29	mg/Kg	☼	01/26/12 11:07	02/02/12 15:08	1
Cr (III)	7.9		0.87	0.14	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-017
Date Collected: 01/18/12 14:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-17
Matrix: Solid
Percent Solids: 89.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	670	U	670	190	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Benzene	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Bromodichloromethane	89	U	89	11	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Bromoform	89	U	89	21	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Bromomethane	220	U *	220	32	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
2-Butanone (MEK)	670	U	670	48	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Carbon disulfide	220	U	220	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Carbon tetrachloride	45	U	45	7.1	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Chlorobenzene	45	U	45	7.1	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Chloroethane	220	U *	220	68	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Chloroform	45	U	45	9.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Chloromethane	220	U	220	16	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,1-Dichloroethane	45	U	45	19	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,2-Dichloroethane	45	U	45	11	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,1-Dichloroethene	45	U	45	20	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,2-Dichloropropane	45	U	45	9.2	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
cis-1,3-Dichloropropene	45	U	45	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
trans-1,3-Dichloropropene	45	U	45	22	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Ethylbenzene	45	U	45	6.0	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
2-Hexanone	2200	U	2200	22	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Methylene Chloride	220	U	220	86	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	54	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Styrene	45	U	45	6.3	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,1,2,2-Tetrachloroethane	45	U	45	9.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Tetrachloroethene	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Toluene	89	U	89	19	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Trichloroethene	45	U	45	11	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Vinyl chloride	36	U	36	20	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Xylenes, Total	130	U	130	9.0	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,1,1-Trichloroethane	45	U	45	23	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,1,2-Trichloroethane	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Cyclohexane	1100	U	1100	45	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,2-Dibromo-3-Chloropropane	220	U	220	56	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,2-Dibromoethane	220	U	220	11	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Dichlorodifluoromethane	89	U	89	18	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
cis-1,2-Dichloroethene	45	U	45	7.7	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
trans-1,2-Dichloroethene	45	U	45	10	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Isopropylbenzene	220	U	220	7.3	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Methyl acetate	**89**	**J**	1100	28	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Methyl tert-butyl ether	220	U	220	7.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	44	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,2,4-Trichlorobenzene	220	U	220	8.1	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,2-Dichlorobenzene	89	U	89	9.6	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,3-Dichlorobenzene	89	U	89	5.4	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
1,4-Dichlorobenzene	89	U	89	8.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Trichlorofluoromethane	89	U	89	18	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Dibromochloromethane	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1
Methylcyclohexane	1100	U	1100	13	ug/Kg	☼	01/23/12 21:31	01/27/12 02:26	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-017
Date Collected: 01/18/12 14:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-17
Matrix: Solid
Percent Solids: 89.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		39 - 128	01/23/12 21:31	01/27/12 02:26	1
4-Bromofluorobenzene (Surr)	68		26 - 141	01/23/12 21:31	01/27/12 02:26	1
Toluene-d8 (Surr)	78		33 - 134	01/23/12 21:31	01/27/12 02:26	1
Dibromofluoromethane (Surr)	71		30 - 122	01/23/12 21:31	01/27/12 02:26	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-017
Date Collected: 01/18/12 14:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-17
Matrix: Solid
Percent Solids: 89.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	740	U	740	75	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2,2'-oxybis[1-chloropropane]	740	U	740	27	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2,4,5-Trichlorophenol	740	U	740	70	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2,4,6-Trichlorophenol	740	U	740	220	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2,4-Dichlorophenol	740	U	740	56	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2,4-Dimethylphenol	740	U	740	56	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2,4-Dinitrophenol	420	U	420	220	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2,4-Dinitrotoluene	740	U	740	75	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2,6-Dinitrotoluene	740	U	740	59	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2-Chloronaphthalene	740	U	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2-Chlorophenol	740	U	740	75	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2-Methylnaphthalene	**42**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2-Methylphenol	740	U	740	220	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2-Nitroaniline	560	U	560	25	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
2-Nitrophenol	740	U	740	75	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
3,3'-Dichlorobenzidine	4500	U	4500	50	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
3-Nitroaniline	560	U	560	45	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
4,6-Dinitro-2-methylphenol	420	U	420	220	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
4-Bromophenyl phenyl ether	740	U	740	36	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
4-Chloro-3-methylphenol	740	U	740	59	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
4-Chloroaniline	560	U	560	47	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
4-Chlorophenyl phenyl ether	740	U	740	36	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
4-Nitroaniline	560	U	560	73	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
4-Nitrophenol	920	U	920	220	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Acenaphthene	**43**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Acenaphthylene	740	U	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Acetophenone	740	U	740	26	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Anthracene	**130**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Atrazine	110	U	110	25	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Benzaldehyde	740	U	740	33	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Benzo[a]anthracene	**390**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Benzo[a]pyrene	**400**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Benzo[b]fluoranthene	**500**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Benzo[g,h,i]perylene	**370**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Benzo[k]fluoranthene	**230**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Bis(2-chloroethoxy)methane	740	U	740	61	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Bis(2-chloroethyl)ether	220	U	220	5.6	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Bis(2-ethylhexyl) phthalate	**86**	**J**	740	53	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Butyl benzyl phthalate	740	U	740	28	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Caprolactam	740	U	740	100	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Carbazole	**83**	**J**	740	75	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Chrysene	**400**	**J**	740	3.1	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Dibenz(a,h)anthracene	**54**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Dibenzofuran	**31**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Diethyl phthalate	740	U	740	45	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Dimethyl phthalate	740	U	740	47	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Di-n-butyl phthalate	740	U	740	42	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Di-n-octyl phthalate	740	U	740	75	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Fluoranthene	**890**		740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Fluorene	**40**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-017
Date Collected: 01/18/12 14:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-17
Matrix: Solid
Percent Solids: 89.8

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	740	U	740	5.9	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Hexachlorobutadiene	110	U	110	75	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Hexachlorocyclopentadiene	740	U	740	75	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Hexachloroethane	740	U	740	25	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Indeno[1,2,3-cd]pyrene	**260**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Isophorone	740	U	740	36	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Naphthalene	**33**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Nitrobenzene	740	U	740	6.1	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
N-Nitrosodi-n-propylamine	740	U	740	75	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
N-Nitrosodiphenylamine	740	U	740	59	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Pentachlorophenol	420	U	420	220	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Phenol	740	U	740	75	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Phenanthrene	**520**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
Pyrene	**670**	**J**	740	9.2	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5
3 & 4 Methylphenol	740	U	740	56	ug/Kg	☼	01/25/12 08:48	01/27/12 17:51	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*34 - 110*	*01/25/12 08:48*	*01/27/12 17:51*	*2.5*
2-Fluorophenol (Surr)	*64*		*26 - 110*	*01/25/12 08:48*	*01/27/12 17:51*	*2.5*
2,4,6-Tribromophenol (Surr)	*58*		*10 - 118*	*01/25/12 08:48*	*01/27/12 17:51*	*2.5*
Nitrobenzene-d5 (Surr)	*61*		*24 - 112*	*01/25/12 08:48*	*01/27/12 17:51*	*2.5*
Phenol-d5 (Surr)	*69*		*28 - 110*	*01/25/12 08:48*	*01/27/12 17:51*	*2.5*
Terphenyl-d14 (Surr)	*71*		*41 - 119*	*01/25/12 08:48*	*01/27/12 17:51*	*2.5*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-017
Date Collected: 01/18/12 14:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-17
Matrix: Solid
Percent Solids: 89.8

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	37	U	37	23	ug/Kg	☼	01/25/12 08:39	01/31/12 08:46	1
Aroclor-1221	37	U	37	18	ug/Kg	☼	01/25/12 08:39	01/31/12 08:46	1
Aroclor-1232	37	U	37	16	ug/Kg	☼	01/25/12 08:39	01/31/12 08:46	1
Aroclor-1242	37	U	37	14	ug/Kg	☼	01/25/12 08:39	01/31/12 08:46	1
Aroclor-1248	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/31/12 08:46	1
Aroclor-1254	37	U	37	19	ug/Kg	☼	01/25/12 08:39	01/31/12 08:46	1
Aroclor-1260	**79**		37	19	ug/Kg	☼	01/25/12 08:39	01/31/12 08:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*67*		*29 - 151*	*01/25/12 08:39*	*01/31/12 08:46*	*1*
DCB Decachlorobiphenyl	*159*		*14 - 163*	*01/25/12 08:39*	*01/31/12 08:46*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-017
Date Collected: 01/18/12 14:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-17
Matrix: Solid
Percent Solids: 89.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	3400		16	9.5	mg/Kg	☼	01/23/12 09:37	01/25/12 15:49	1
Barium	31	B	0.80	0.071	mg/Kg	☼	01/23/12 09:37	01/25/12 15:49	1
Beryllium	0.16	U	0.16	0.043	mg/Kg	☼	01/23/12 09:37	01/25/12 15:49	1
Cadmium	0.10		0.080	0.036	mg/Kg	☼	01/23/12 09:37	01/25/12 15:49	1
Cobalt	3.3		0.40	0.16	mg/Kg	☼	01/23/12 09:37	01/25/12 15:49	1
Chromium	9.6		0.80	0.20	mg/Kg	☼	01/23/12 09:37	01/25/12 15:49	1
Copper	18		0.80	0.74	mg/Kg	☼	01/23/12 09:37	01/25/12 15:49	1
Iron	7700		8.0	4.9	mg/Kg	☼	01/23/12 09:37	01/25/12 15:49	1
Manganese	190		0.80	0.074	mg/Kg	☼	01/23/12 09:37	01/25/12 15:49	1
Nickel	8.2		0.80	0.27	mg/Kg	☼	01/23/12 09:37	01/25/12 15:49	1
Vanadium	9.7		0.80	0.12	mg/Kg	☼	01/23/12 09:37	01/25/12 15:49	1
Lead	14		0.24	0.19	mg/Kg	☼	01/23/12 09:37	01/25/12 15:49	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-017
Date Collected: 01/18/12 14:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-17
Matrix: Solid
Percent Solids: 89.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.070	J	0.16	0.024	mg/Kg	☼	01/23/12 09:37	01/27/12 18:53	1
Arsenic	3.7		0.080	0.062	mg/Kg	☼	01/23/12 09:37	01/27/12 18:53	1
Selenium	0.48		0.16	0.089	mg/Kg	☼	01/23/12 09:37	01/27/12 18:53	1
Thallium	0.088	B	0.080	0.013	mg/Kg	☼	01/23/12 09:37	01/27/12 18:53	1
Zinc	26	B	0.80	0.20	mg/Kg	☼	01/23/12 09:37	01/27/12 18:53	1
Silver	0.033	J	0.080	0.016	mg/Kg	☼	01/23/12 09:37	01/27/12 18:53	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-017
Date Collected: 01/18/12 14:05
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-17
Matrix: Solid
Percent Solids: 89.8

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026	J	0.035	0.013	mg/Kg	☼	01/23/12 13:15	01/23/12 15:46	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-018
Date Collected: 01/18/12 14:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-18
Matrix: Solid
Percent Solids: 93.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	170	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Benzene	40	U	40	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Bromodichloromethane	80	U	80	9.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Bromoform	80	U	80	19	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Bromomethane	200	U *	200	29	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
2-Butanone (MEK)	600	U	600	43	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Carbon disulfide	200	U	200	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Carbon tetrachloride	40	U	40	6.4	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Chlorobenzene	40	U	40	6.4	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Chloroethane	200	U *	200	61	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Chloroform	40	U	40	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Chloromethane	200	U	200	14	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,1-Dichloroethane	40	U	40	17	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,2-Dichloroethane	40	U	40	10	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,1-Dichloroethene	40	U	40	18	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,2-Dichloropropane	40	U	40	8.2	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
cis-1,3-Dichloropropene	40	U	40	7.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
trans-1,3-Dichloropropene	40	U	40	20	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Ethylbenzene	40	U	40	5.4	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
2-Hexanone	2000	U	2000	20	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Methylene Chloride	200	U	200	77	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	48	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Styrene	40	U	40	5.6	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,1,2,2-Tetrachloroethane	40	U	40	8.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Tetrachloroethene	40	U	40	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Toluene	80	U	80	17	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Trichloroethene	40	U	40	9.7	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Vinyl chloride	32	U	32	18	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Xylenes, Total	120	U	120	8.1	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,1,1-Trichloroethane	40	U	40	21	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,1,2-Trichloroethane	40	U	40	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Cyclohexane	960	U	960	40	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,2-Dibromo-3-Chloropropane	200	U	200	50	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,2-Dibromoethane	200	U	200	10	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Dichlorodifluoromethane	80	U	80	16	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
cis-1,2-Dichloroethene	40	U	40	6.9	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
trans-1,2-Dichloroethene	40	U	40	9.2	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Isopropylbenzene	200	U	200	6.5	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Methyl acetate	960	U	960	25	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Methyl tert-butyl ether	200	U	200	7.1	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	39	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,2,4-Trichlorobenzene	200	U	200	7.3	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,2-Dichlorobenzene	80	U	80	8.6	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,3-Dichlorobenzene	80	U	80	4.8	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
1,4-Dichlorobenzene	80	U	80	8.0	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Trichlorofluoromethane	80	U	80	16	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Dibromochloromethane	40	U	40	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1
Methylcyclohexane	960	U	960	12	ug/Kg	☼	01/23/12 21:31	01/27/12 02:50	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-018
Date Collected: 01/18/12 14:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-18
Matrix: Solid
Percent Solids: 93.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		39 - 128	01/23/12 21:31	01/27/12 02:50	1
4-Bromofluorobenzene (Surr)	68		26 - 141	01/23/12 21:31	01/27/12 02:50	1
Toluene-d8 (Surr)	81		33 - 134	01/23/12 21:31	01/27/12 02:50	1
Dibromofluoromethane (Surr)	72		30 - 122	01/23/12 21:31	01/27/12 02:50	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-018
Date Collected: 01/18/12 14:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-18
Matrix: Solid
Percent Solids: 93.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2,2'-oxybis[1-chloropropane]	280	U	280	10	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2,4,5-Trichlorophenol	280	U	280	27	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2,4,6-Trichlorophenol	280	U	280	86	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2,4-Dichlorophenol	280	U	280	21	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2,4-Dimethylphenol	280	U	280	21	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2,4-Dinitrophenol	160	U	160	86	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2,4-Dinitrotoluene	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2,6-Dinitrotoluene	280	U	280	23	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2-Chloronaphthalene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2-Chlorophenol	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2-Methylnaphthalene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2-Methylphenol	280	U	280	86	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2-Nitroaniline	210	U	210	9.8	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
2-Nitrophenol	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
3,3'-Dichlorobenzidine	1700	U	1700	19	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
3-Nitroaniline	210	U	210	17	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
4,6-Dinitro-2-methylphenol	160	U	160	86	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
4-Bromophenyl phenyl ether	280	U	280	14	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
4-Chloro-3-methylphenol	280	U	280	23	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
4-Chloroaniline	210	U	210	18	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
4-Chlorophenyl phenyl ether	280	U	280	14	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
4-Nitroaniline	210	U	210	28	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
4-Nitrophenol	350	U	350	86	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Acenaphthene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Acenaphthylene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Acetophenone	280	U	280	9.9	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Anthracene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Atrazine	43	U	43	9.8	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Benzaldehyde	280	U	280	13	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Benzo[a]anthracene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Benzo[a]pyrene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Benzo[b]fluoranthene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Benzo[g,h,i]perylene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Benzo[k]fluoranthene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Bis(2-chloroethoxy)methane	280	U	280	24	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Bis(2-chloroethyl)ether	86	U	86	2.1	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Bis(2-ethylhexyl) phthalate	**38**	**J**	280	20	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Butyl benzyl phthalate	280	U	280	11	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Caprolactam	280	U	280	40	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Carbazole	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Chrysene	280	U	280	1.2	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Dibenz(a,h)anthracene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Dibenzofuran	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Diethyl phthalate	280	U	280	17	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Dimethyl phthalate	280	U	280	18	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Di-n-butyl phthalate	280	U	280	16	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Di-n-octyl phthalate	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Fluoranthene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Fluorene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-018
Date Collected: 01/18/12 14:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-18
Matrix: Solid
Percent Solids: 93.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	280	U	280	2.3	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Hexachlorobutadiene	43	U	43	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Hexachlorocyclopentadiene	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Hexachloroethane	280	U	280	9.6	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Indeno[1,2,3-cd]pyrene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Isophorone	280	U	280	14	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Naphthalene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Nitrobenzene	280	U	280	2.4	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
N-Nitrosodi-n-propylamine	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
N-Nitrosodiphenylamine	280	U	280	23	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Pentachlorophenol	160	U	160	86	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Phenol	280	U	280	29	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Phenanthrene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
Pyrene	280	U	280	3.5	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1
3 & 4 Methylphenol	280	U	280	21	ug/Kg	☼	01/25/12 08:48	01/27/12 14:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*51*		*34 - 110*	*01/25/12 08:48*	*01/27/12 14:58*	*1*
2-Fluorophenol (Surr)	*62*		*26 - 110*	*01/25/12 08:48*	*01/27/12 14:58*	*1*
2,4,6-Tribromophenol (Surr)	*32*		*10 - 118*	*01/25/12 08:48*	*01/27/12 14:58*	*1*
Nitrobenzene-d5 (Surr)	*60*		*24 - 112*	*01/25/12 08:48*	*01/27/12 14:58*	*1*
Phenol-d5 (Surr)	*63*		*28 - 110*	*01/25/12 08:48*	*01/27/12 14:58*	*1*
Terphenyl-d14 (Surr)	*71*		*41 - 119*	*01/25/12 08:48*	*01/27/12 14:58*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-018
Date Collected: 01/18/12 14:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-18
Matrix: Solid
Percent Solids: 93.6

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	35	U	35	22	ug/Kg	☼	01/25/12 08:39	01/30/12 12:28	1
Aroclor-1221	35	U	35	17	ug/Kg	☼	01/25/12 08:39	01/30/12 12:28	1
Aroclor-1232	35	U	35	15	ug/Kg	☼	01/25/12 08:39	01/30/12 12:28	1
Aroclor-1242	35	U	35	14	ug/Kg	☼	01/25/12 08:39	01/30/12 12:28	1
Aroclor-1248	35	U	35	18	ug/Kg	☼	01/25/12 08:39	01/30/12 12:28	1
Aroclor-1254	35	U	35	18	ug/Kg	☼	01/25/12 08:39	01/30/12 12:28	1
Aroclor-1260	35	U	35	18	ug/Kg	☼	01/25/12 08:39	01/30/12 12:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*29 - 151*	*01/25/12 08:39*	*01/30/12 12:28*	*1*
DCB Decachlorobiphenyl	*56*		*14 - 163*	*01/25/12 08:39*	*01/30/12 12:28*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-018
Date Collected: 01/18/12 14:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-18
Matrix: Solid
Percent Solids: 93.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	2900		16	9.3	mg/Kg	☼	01/23/12 09:37	01/25/12 15:56	1
Barium	47	B	0.78	0.069	mg/Kg	☼	01/23/12 09:37	01/25/12 15:56	1
Beryllium	0.070	J	0.16	0.042	mg/Kg	☼	01/23/12 09:37	01/25/12 15:56	1
Cadmium	0.15		0.078	0.035	mg/Kg	☼	01/23/12 09:37	01/25/12 15:56	1
Cobalt	6.3		0.39	0.16	mg/Kg	☼	01/23/12 09:37	01/25/12 15:56	1
Chromium	6.6		0.78	0.19	mg/Kg	☼	01/23/12 09:37	01/25/12 15:56	1
Copper	7.7		0.78	0.72	mg/Kg	☼	01/23/12 09:37	01/25/12 15:56	1
Iron	12000		7.8	4.8	mg/Kg	☼	01/23/12 09:37	01/25/12 15:56	1
Manganese	710		0.78	0.072	mg/Kg	☼	01/23/12 09:37	01/25/12 15:56	1
Nickel	9.7		0.78	0.26	mg/Kg	☼	01/23/12 09:37	01/25/12 15:56	1
Vanadium	17		0.78	0.12	mg/Kg	☼	01/23/12 09:37	01/25/12 15:56	1
Lead	4.9		0.23	0.18	mg/Kg	☼	01/23/12 09:37	01/25/12 15:56	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-018
Date Collected: 01/18/12 14:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-18
Matrix: Solid
Percent Solids: 93.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.071	J	0.16	0.023	mg/Kg	☼	01/23/12 09:37	01/27/12 18:59	1
Arsenic	7.7		0.078	0.060	mg/Kg	☼	01/23/12 09:37	01/27/12 18:59	1
Selenium	0.73		0.16	0.087	mg/Kg	☼	01/23/12 09:37	01/27/12 18:59	1
Thallium	0.075	J B	0.078	0.013	mg/Kg	☼	01/23/12 09:37	01/27/12 18:59	1
Zinc	19	B	0.78	0.19	mg/Kg	☼	01/23/12 09:37	01/27/12 18:59	1
Silver	0.078	U	0.078	0.016	mg/Kg	☼	01/23/12 09:37	01/27/12 18:59	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011812-DR-018
Date Collected: 01/18/12 14:10
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-18
Matrix: Solid
Percent Solids: 93.6

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035	U	0.035	0.013	mg/Kg	☼	01/23/12 13:15	01/23/12 15:48	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-019
Date Collected: 01/19/12 08:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-19
Matrix: Solid
Percent Solids: 90.6

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	680	U	680	190	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Benzene	45	U	45	14	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Bromodichloromethane	91	U	91	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Bromoform	91	U	91	22	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Bromomethane	230	U *	230	33	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
2-Butanone (MEK)	680	U	680	49	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Carbon disulfide	230	U	230	14	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Carbon tetrachloride	45	U	45	7.3	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Chlorobenzene	45	U	45	7.3	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Chloroethane	230	U *	230	69	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Chloroform	45	U	45	10	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Chloromethane	230	U	230	16	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,1-Dichloroethane	45	U	45	19	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,2-Dichloroethane	45	U	45	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,1-Dichloroethene	45	U	45	20	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,2-Dichloropropane	45	U	45	9.3	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
cis-1,3-Dichloropropene	45	U	45	9.0	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
trans-1,3-Dichloropropene	45	U	45	23	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Ethylbenzene	45	U	45	6.1	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
2-Hexanone	2300	U	2300	23	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Methylene Chloride	230	U	230	88	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
4-Methyl-2-pentanone (MIBK)	2300	U	2300	55	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Styrene	45	U	45	6.4	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,1,2,2-Tetrachloroethane	45	U	45	10	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Tetrachloroethene	45	U	45	14	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Toluene	91	U	91	19	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Trichloroethene	45	U	45	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Vinyl chloride	36	U	36	20	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Xylenes, Total	140	U	140	9.2	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,1,1-Trichloroethane	45	U	45	24	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,1,2-Trichloroethane	45	U	45	14	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Cyclohexane	1100	U	1100	45	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,2-Dibromo-3-Chloropropane	230	U	230	57	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,2-Dibromoethane	230	U	230	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Dichlorodifluoromethane	91	U	91	18	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
cis-1,2-Dichloroethene	45	U	45	7.8	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
trans-1,2-Dichloroethene	45	U	45	10	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Isopropylbenzene	230	U	230	7.4	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Methyl acetate	1100	U	1100	28	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Methyl tert-butyl ether	230	U	230	8.1	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	230	U	230	44	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,2,4-Trichlorobenzene	230	U	230	8.3	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,2-Dichlorobenzene	91	U	91	9.8	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,3-Dichlorobenzene	91	U	91	5.5	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
1,4-Dichlorobenzene	91	U	91	9.1	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Trichlorofluoromethane	91	U	91	18	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Dibromochloromethane	45	U	45	14	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1
Methylcyclohexane	1100	U	1100	14	ug/Kg	☼	01/23/12 21:31	01/27/12 03:14	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-019
Date Collected: 01/19/12 08:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-19
Matrix: Solid
Percent Solids: 90.6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	78		39 - 128	01/23/12 21:31	01/27/12 03:14	1
4-Bromofluorobenzene (Surr)	70		26 - 141	01/23/12 21:31	01/27/12 03:14	1
Toluene-d8 (Surr)	80		33 - 134	01/23/12 21:31	01/27/12 03:14	1
Dibromofluoromethane (Surr)	71		30 - 122	01/23/12 21:31	01/27/12 03:14	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-019
Date Collected: 01/19/12 08:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-19
Matrix: Solid
Percent Solids: 90.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	730	U	730	74	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2,2'-oxybis[1-chloropropane]	730	U	730	26	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2,4,5-Trichlorophenol	730	U	730	69	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2,4,6-Trichlorophenol	730	U	730	220	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2,4-Dichlorophenol	730	U	730	55	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2,4-Dimethylphenol	730	U	730	55	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2,4-Dinitrophenol	410	U	410	220	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2,4-Dinitrotoluene	730	U	730	74	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2,6-Dinitrotoluene	730	U	730	58	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2-Chloronaphthalene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2-Chlorophenol	730	U	730	74	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2-Methylnaphthalene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2-Methylphenol	730	U	730	220	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2-Nitroaniline	550	U	550	25	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
2-Nitrophenol	730	U	730	74	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
3,3'-Dichlorobenzidine	4400	U	4400	49	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
3-Nitroaniline	550	U	550	44	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
4,6-Dinitro-2-methylphenol	410	U	410	220	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
4-Bromophenyl phenyl ether	730	U	730	36	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
4-Chloro-3-methylphenol	730	U	730	58	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
4-Chloroaniline	550	U	550	47	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
4-Chlorophenyl phenyl ether	730	U	730	36	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
4-Nitroaniline	550	U	550	71	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
4-Nitrophenol	910	U	910	220	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Acenaphthene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Acenaphthylene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Acetophenone	730	U	730	25	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Anthracene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Atrazine	110	U	110	25	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Benzaldehyde	730	U	730	33	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Benzo[a]anthracene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Benzo[a]pyrene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Benzo[b]fluoranthene	**25**	**J**	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Benzo[g,h,i]perylene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Benzo[k]fluoranthene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Bis(2-chloroethoxy)methane	730	U	730	60	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Bis(2-chloroethyl)ether	220	U	220	5.5	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Bis(2-ethylhexyl) phthalate	730	U	730	52	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Butyl benzyl phthalate	730	U	730	27	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Caprolactam	730	U	730	100	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Carbazole	730	U	730	74	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Chrysene	730	U	730	3.0	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Dibenz(a,h)anthracene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Dibenzofuran	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Diethyl phthalate	730	U	730	44	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Dimethyl phthalate	730	U	730	47	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Di-n-butyl phthalate	730	U	730	41	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Di-n-octyl phthalate	730	U	730	74	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Fluoranthene	**10**	**J**	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Fluorene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-019
Date Collected: 01/19/12 08:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-19
Matrix: Solid
Percent Solids: 90.6

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	730	U	730	5.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Hexachlorobutadiene	110	U	110	74	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Hexachlorocyclopentadiene	730	U	730	74	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Hexachloroethane	730	U	730	25	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Indeno[1,2,3-cd]pyrene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Isophorone	730	U	730	36	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Naphthalene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Nitrobenzene	730	U	730	6.0	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
N-Nitrosodi-n-propylamine	730	U	730	74	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
N-Nitrosodiphenylamine	730	U	730	58	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Pentachlorophenol	410	U	410	220	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Phenol	730	U	730	74	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Phenanthrene	730	U	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
Pyrene	**9.4**	**J**	730	9.1	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5
3 & 4 Methylphenol	730	U	730	55	ug/Kg	☼	01/26/12 08:44	01/30/12 11:40	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*64*		*34 - 110*	*01/26/12 08:44*	*01/30/12 11:40*	*2.5*
2-Fluorophenol (Surr)	*72*		*26 - 110*	*01/26/12 08:44*	*01/30/12 11:40*	*2.5*
2,4,6-Tribromophenol (Surr)	*62*		*10 - 118*	*01/26/12 08:44*	*01/30/12 11:40*	*2.5*
Nitrobenzene-d5 (Surr)	*65*		*24 - 112*	*01/26/12 08:44*	*01/30/12 11:40*	*2.5*
Phenol-d5 (Surr)	*71*		*28 - 110*	*01/26/12 08:44*	*01/30/12 11:40*	*2.5*
Terphenyl-d14 (Surr)	*76*		*41 - 119*	*01/26/12 08:44*	*01/30/12 11:40*	*2.5*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-019
Date Collected: 01/19/12 08:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-19
Matrix: Solid
Percent Solids: 90.6

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	36	U	36	23	ug/Kg	☼	01/25/12 09:38	01/28/12 10:35	1
Aroclor-1221	36	U	36	18	ug/Kg	☼	01/25/12 09:38	01/28/12 10:35	1
Aroclor-1232	36	U	36	15	ug/Kg	☼	01/25/12 09:38	01/28/12 10:35	1
Aroclor-1242	36	U	36	14	ug/Kg	☼	01/25/12 09:38	01/28/12 10:35	1
Aroclor-1248	36	U	36	19	ug/Kg	☼	01/25/12 09:38	01/28/12 10:35	1
Aroclor-1254	36	U	36	19	ug/Kg	☼	01/25/12 09:38	01/28/12 10:35	1
Aroclor-1260	36	U	36	19	ug/Kg	☼	01/25/12 09:38	01/28/12 10:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*29 - 151*	*01/25/12 09:38*	*01/28/12 10:35*	*1*
DCB Decachlorobiphenyl	*54*		*14 - 163*	*01/25/12 09:38*	*01/28/12 10:35*	*1*

Client Sample Results

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-019
Date Collected: 01/19/12 08:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-19
Matrix: Solid
Percent Solids: 90.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	3900		17	10	mg/Kg	☼	01/24/12 10:41	01/25/12 16:39	1
Barium	19	B	0.87	0.078	mg/Kg	☼	01/24/12 10:41	01/25/12 16:39	1
Beryllium	0.17	U	0.17	0.047	mg/Kg	☼	01/24/12 10:41	01/25/12 16:39	1
Cadmium	0.087	U	0.087	0.039	mg/Kg	☼	01/24/12 10:41	01/25/12 16:39	1
Cobalt	1.6		0.44	0.17	mg/Kg	☼	01/24/12 10:41	01/25/12 16:39	1
Chromium	6.5		0.87	0.22	mg/Kg	☼	01/24/12 10:41	01/25/12 16:39	1
Copper	2.8		0.87	0.81	mg/Kg	☼	01/24/12 10:41	01/25/12 16:39	1
Iron	7000		8.7	5.4	mg/Kg	☼	01/24/12 10:41	01/25/12 16:39	1
Manganese	54	B	0.87	0.081	mg/Kg	☼	01/24/12 10:41	01/25/12 16:39	1
Nickel	4.2		0.87	0.29	mg/Kg	☼	01/24/12 10:41	01/25/12 16:39	1
Vanadium	13		0.87	0.13	mg/Kg	☼	01/24/12 10:41	01/25/12 16:39	1
Lead	4.5		0.26	0.21	mg/Kg	☼	01/24/12 10:41	01/25/12 16:39	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-019
Date Collected: 01/19/12 08:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-19
Matrix: Solid
Percent Solids: 90.6

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.042	J	0.17	0.026	mg/Kg	☼	01/24/12 10:41	01/30/12 19:43	1
Arsenic	3.1		0.087	0.068	mg/Kg	☼	01/24/12 10:41	01/30/12 19:43	1
Selenium	0.36		0.17	0.098	mg/Kg	☼	01/24/12 10:41	01/30/12 19:43	1
Thallium	0.11		0.087	0.014	mg/Kg	☼	01/24/12 10:41	01/30/12 19:43	1
Zinc	12	B	0.87	0.22	mg/Kg	☼	01/24/12 10:41	01/30/12 19:43	1
Silver	0.087	U	0.087	0.017	mg/Kg	☼	01/24/12 10:41	01/30/12 19:43	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-019
Date Collected: 01/19/12 08:30
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-19
Matrix: Solid
Percent Solids: 90.6

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041	U	0.041	0.015	mg/Kg	☼	01/24/12 13:45	01/27/12 17:27	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-020
Date Collected: 01/19/12 08:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-20
Matrix: Solid
Percent Solids: 90.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	670	U	670	190	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Benzene	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Bromodichloromethane	89	U	89	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Bromoform	89	U	89	21	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Bromomethane	220	U *	220	32	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
2-Butanone (MEK)	670	U	670	48	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Carbon disulfide	220	U	220	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Carbon tetrachloride	45	U	45	7.2	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Chlorobenzene	45	U	45	7.2	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Chloroethane	220	U *	220	68	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Chloroform	45	U	45	9.8	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Chloromethane	220	U	220	16	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,1-Dichloroethane	45	U	45	19	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,2-Dichloroethane	45	U	45	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,1-Dichloroethene	45	U	45	20	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,2-Dichloropropane	45	U	45	9.2	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
cis-1,3-Dichloropropene	45	U	45	8.8	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
trans-1,3-Dichloropropene	45	U	45	22	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Ethylbenzene	45	U	45	6.0	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
2-Hexanone	2200	U	2200	22	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Methylene Chloride	220	U	220	86	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
4-Methyl-2-pentanone (MIBK)	2200	U	2200	54	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Styrene	45	U	45	6.3	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,1,2,2-Tetrachloroethane	45	U	45	10	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Tetrachloroethene	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Toluene	89	U	89	19	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Trichloroethene	45	U	45	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Vinyl chloride	36	U	36	20	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Xylenes, Total	130	U	130	9.1	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,1,1-Trichloroethane	45	U	45	23	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,1,2-Trichloroethane	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Cyclohexane	1100	U	1100	45	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,2-Dibromo-3-Chloropropane	220	U	220	56	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,2-Dibromoethane	220	U	220	11	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Dichlorodifluoromethane	89	U	89	18	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
cis-1,2-Dichloroethene	45	U	45	7.7	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
trans-1,2-Dichloroethene	45	U	45	10	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Isopropylbenzene	220	U	220	7.3	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Methyl acetate	1100	U	1100	28	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Methyl tert-butyl ether	220	U	220	7.9	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	220	U	220	44	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,2,4-Trichlorobenzene	220	U	220	8.2	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,2-Dichlorobenzene	89	U	89	9.6	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,3-Dichlorobenzene	89	U	89	5.4	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
1,4-Dichlorobenzene	89	U	89	8.9	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Trichlorofluoromethane	89	U	89	18	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Dibromochloromethane	45	U	45	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1
Methylcyclohexane	1100	U	1100	13	ug/Kg	☼	01/23/12 21:31	01/27/12 03:39	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-020
Date Collected: 01/19/12 08:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-20
Matrix: Solid
Percent Solids: 90.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	79		39 - 128	01/23/12 21:31	01/27/12 03:39	1
4-Bromofluorobenzene (Surr)	70		26 - 141	01/23/12 21:31	01/27/12 03:39	1
Toluene-d8 (Surr)	79		33 - 134	01/23/12 21:31	01/27/12 03:39	1
Dibromofluoromethane (Surr)	74		30 - 122	01/23/12 21:31	01/27/12 03:39	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-020
Date Collected: 01/19/12 08:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-20
Matrix: Solid
Percent Solids: 90.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	30	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2,2'-oxybis[1-chloropropane]	290	U	290	11	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2,4,5-Trichlorophenol	290	U	290	28	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2,4,6-Trichlorophenol	290	U	290	89	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2,4-Dichlorophenol	290	U	290	22	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2,4-Dimethylphenol	290	U	290	22	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2,4-Dinitrophenol	170	U	170	89	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2,4-Dinitrotoluene	290	U	290	30	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2,6-Dinitrotoluene	290	U	290	23	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2-Chloronaphthalene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2-Chlorophenol	290	U	290	30	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2-Methylnaphthalene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2-Methylphenol	290	U	290	89	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2-Nitroaniline	220	U	220	10	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
2-Nitrophenol	290	U	290	30	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
3,3'-Dichlorobenzidine	1800	U	1800	20	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
3-Nitroaniline	220	U	220	18	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
4,6-Dinitro-2-methylphenol	170	U	170	89	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
4-Bromophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
4-Chloro-3-methylphenol	290	U	290	23	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
4-Chloroaniline	220	U	220	19	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
4-Chlorophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
4-Nitroaniline	220	U	220	29	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
4-Nitrophenol	370	U	370	89	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Acenaphthene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Acenaphthylene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Acetophenone	290	U	290	10	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Anthracene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Atrazine	44	U	44	10	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Benzaldehyde	290	U	290	13	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Benzo[a]anthracene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Benzo[a]pyrene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Benzo[b]fluoranthene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Benzo[g,h,i]perylene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Benzo[k]fluoranthene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Bis(2-chloroethoxy)methane	290	U	290	24	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Bis(2-chloroethyl)ether	89	U	89	2.2	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Bis(2-ethylhexyl) phthalate	290	U	290	21	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Butyl benzyl phthalate	290	U	290	11	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Caprolactam	290	U	290	41	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Carbazole	290	U	290	30	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Chrysene	290	U	290	1.2	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Dibenz(a,h)anthracene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Dibenzofuran	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Diethyl phthalate	290	U	290	18	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Dimethyl phthalate	290	U	290	19	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Di-n-butyl phthalate	290	U	290	17	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Di-n-octyl phthalate	290	U	290	30	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Fluoranthene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Fluorene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-020
Date Collected: 01/19/12 08:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-20
Matrix: Solid
Percent Solids: 90.0

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	290	U	290	2.3	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Hexachlorobutadiene	44	U	44	30	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Hexachlorocyclopentadiene	290	U	290	30	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Hexachloroethane	290	U	290	10	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Indeno[1,2,3-cd]pyrene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Isophorone	290	U	290	14	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Naphthalene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Nitrobenzene	290	U	290	2.4	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
N-Nitrosodi-n-propylamine	290	U	290	30	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
N-Nitrosodiphenylamine	290	U	290	23	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Pentachlorophenol	170	U	170	89	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Phenol	290	U	290	30	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Phenanthrene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
Pyrene	290	U	290	3.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1
3 & 4 Methylphenol	290	U	290	22	ug/Kg	☼	01/26/12 08:44	01/30/12 10:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*56*		*34 - 110*	*01/26/12 08:44*	*01/30/12 10:31*	*1*
2-Fluorophenol (Surr)	*65*		*26 - 110*	*01/26/12 08:44*	*01/30/12 10:31*	*1*
2,4,6-Tribromophenol (Surr)	*40*		*10 - 118*	*01/26/12 08:44*	*01/30/12 10:31*	*1*
Nitrobenzene-d5 (Surr)	*56*		*24 - 112*	*01/26/12 08:44*	*01/30/12 10:31*	*1*
Phenol-d5 (Surr)	*61*		*28 - 110*	*01/26/12 08:44*	*01/30/12 10:31*	*1*
Terphenyl-d14 (Surr)	*67*		*41 - 119*	*01/26/12 08:44*	*01/30/12 10:31*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-020
Date Collected: 01/19/12 08:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-20
Matrix: Solid
Percent Solids: 90.0

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	37	U	37	23	ug/Kg	☼	01/25/12 09:38	01/28/12 10:50	1
Aroclor-1221	37	U	37	18	ug/Kg	☼	01/25/12 09:38	01/28/12 10:50	1
Aroclor-1232	37	U	37	16	ug/Kg	☼	01/25/12 09:38	01/28/12 10:50	1
Aroclor-1242	37	U	37	14	ug/Kg	☼	01/25/12 09:38	01/28/12 10:50	1
Aroclor-1248	37	U	37	19	ug/Kg	☼	01/25/12 09:38	01/28/12 10:50	1
Aroclor-1254	37	U	37	19	ug/Kg	☼	01/25/12 09:38	01/28/12 10:50	1
Aroclor-1260	37	U	37	19	ug/Kg	☼	01/25/12 09:38	01/28/12 10:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*29 - 151*	*01/25/12 09:38*	*01/28/12 10:50*	*1*
DCB Decachlorobiphenyl	*50*		*14 - 163*	*01/25/12 09:38*	*01/28/12 10:50*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-020
Date Collected: 01/19/12 08:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-20
Matrix: Solid
Percent Solids: 90.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4100		16	9.8	mg/Kg	☼	01/24/12 10:41	01/25/12 17:03	1
Barium	16	B	0.82	0.072	mg/Kg	☼	01/24/12 10:41	01/25/12 17:03	1
Beryllium	0.16	U	0.16	0.044	mg/Kg	☼	01/24/12 10:41	01/25/12 17:03	1
Cadmium	0.082	U	0.082	0.037	mg/Kg	☼	01/24/12 10:41	01/25/12 17:03	1
Cobalt	2.7		0.41	0.16	mg/Kg	☼	01/24/12 10:41	01/25/12 17:03	1
Chromium	9.7		0.82	0.20	mg/Kg	☼	01/24/12 10:41	01/25/12 17:03	1
Copper	3.3		0.82	0.75	mg/Kg	☼	01/24/12 10:41	01/25/12 17:03	1
Iron	8600		8.2	5.0	mg/Kg	☼	01/24/12 10:41	01/25/12 17:03	1
Manganese	59	B	0.82	0.075	mg/Kg	☼	01/24/12 10:41	01/25/12 17:03	1
Nickel	7.0		0.82	0.28	mg/Kg	☼	01/24/12 10:41	01/25/12 17:03	1
Vanadium	13		0.82	0.12	mg/Kg	☼	01/24/12 10:41	01/25/12 17:03	1
Lead	4.7		0.24	0.19	mg/Kg	☼	01/24/12 10:41	01/25/12 17:03	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-020
Date Collected: 01/19/12 08:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-20
Matrix: Solid
Percent Solids: 90.0

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.037	J	0.16	0.024	mg/Kg	☼	01/24/12 10:41	01/30/12 20:20	1
Arsenic	3.0		0.082	0.063	mg/Kg	☼	01/24/12 10:41	01/30/12 20:20	1
Selenium	0.44		0.16	0.092	mg/Kg	☼	01/24/12 10:41	01/30/12 20:20	1
Thallium	0.13		0.082	0.013	mg/Kg	☼	01/24/12 10:41	01/30/12 20:20	1
Zinc	18	B	0.82	0.20	mg/Kg	☼	01/24/12 10:41	01/30/12 20:20	1
Silver	0.082	U	0.082	0.016	mg/Kg	☼	01/24/12 10:41	01/30/12 20:20	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-020
Date Collected: 01/19/12 08:35
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-20
Matrix: Solid
Percent Solids: 90.0

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.043	U	0.043	0.016	mg/Kg	☼	01/24/12 13:45	01/27/12 17:33	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-021
Date Collected: 01/19/12 08:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-21
Matrix: Solid
Percent Solids: 92.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	710	U	710	200	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Benzene	48	U	48	14	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Bromodichloromethane	95	U	95	12	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Bromoform	95	U	95	23	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Bromomethane	240	U *	240	34	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
2-Butanone (MEK)	710	U	710	51	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Carbon disulfide	240	U	240	14	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Carbon tetrachloride	48	U	48	7.6	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Chlorobenzene	48	U	48	7.6	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Chloroethane	240	U *	240	72	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Chloroform	48	U	48	10	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Chloromethane	240	U	240	17	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,1-Dichloroethane	48	U	48	20	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,2-Dichloroethane	48	U	48	12	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,1-Dichloroethene	48	U	48	21	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,2-Dichloropropane	48	U	48	9.7	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
cis-1,3-Dichloropropene	48	U	48	9.4	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
trans-1,3-Dichloropropene	48	U	48	24	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Ethylbenzene	48	U	48	6.4	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
2-Hexanone	2400	U	2400	24	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Methylene Chloride	240	U	240	92	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
4-Methyl-2-pentanone (MIBK)	2400	U	2400	57	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Styrene	48	U	48	6.7	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,1,2,2-Tetrachloroethane	48	U	48	11	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Tetrachloroethene	48	U	48	14	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Toluene	95	U	95	20	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Trichloroethene	48	U	48	12	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Vinyl chloride	38	U	38	21	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Xylenes, Total	140	U	140	9.6	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,1,1-Trichloroethane	48	U	48	25	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,1,2-Trichloroethane	48	U	48	14	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Cyclohexane	1100	U	1100	48	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,2-Dibromo-3-Chloropropane	240	U	240	59	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,2-Dibromoethane	240	U	240	12	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Dichlorodifluoromethane	95	U	95	19	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
cis-1,2-Dichloroethene	48	U	48	8.2	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
trans-1,2-Dichloroethene	48	U	48	11	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Isopropylbenzene	240	U	240	7.7	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Methyl acetate	1100	U	1100	30	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Methyl tert-butyl ether	240	U	240	8.4	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	240	U	240	46	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,2,4-Trichlorobenzene	**14**	**J**	240	8.7	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,2-Dichlorobenzene	95	U	95	10	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,3-Dichlorobenzene	95	U	95	5.7	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
1,4-Dichlorobenzene	95	U	95	9.5	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Trichlorofluoromethane	95	U	95	19	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Dibromochloromethane	48	U	48	14	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1
Methylcyclohexane	1100	U	1100	14	ug/Kg	☼	01/24/12 10:26	01/25/12 22:30	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-021
Date Collected: 01/19/12 08:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-21
Matrix: Solid
Percent Solids: 92.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		39 - 128	01/24/12 10:26	01/25/12 22:30	1
4-Bromofluorobenzene (Surr)	84		26 - 141	01/24/12 10:26	01/25/12 22:30	1
Toluene-d8 (Surr)	93		33 - 134	01/24/12 10:26	01/25/12 22:30	1
Dibromofluoromethane (Surr)	82		30 - 122	01/24/12 10:26	01/25/12 22:30	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-021
Date Collected: 01/19/12 08:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-21
Matrix: Solid
Percent Solids: 92.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	290	U	290	29	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2,2'-oxybis[1-chloropropane]	290	U	290	10	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2,4,5-Trichlorophenol	290	U	290	27	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2,4,6-Trichlorophenol	290	U	290	86	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2,4-Dichlorophenol	290	U	290	22	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2,4-Dimethylphenol	290	U	290	22	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2,4-Dinitrophenol	160	U	160	86	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2,4-Dinitrotoluene	290	U	290	29	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2,6-Dinitrotoluene	290	U	290	23	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2-Chloronaphthalene	290	U	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2-Chlorophenol	290	U	290	29	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2-Methylnaphthalene	290	U	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2-Methylphenol	290	U	290	86	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2-Nitroaniline	220	U	220	9.8	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
2-Nitrophenol	290	U	290	29	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
3,3'-Dichlorobenzidine	1700	U	1700	19	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
3-Nitroaniline	220	U	220	17	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
4,6-Dinitro-2-methylphenol	160	U	160	86	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
4-Bromophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
4-Chloro-3-methylphenol	290	U	290	23	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
4-Chloroaniline	220	U	220	18	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
4-Chlorophenyl phenyl ether	290	U	290	14	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
4-Nitroaniline	220	U	220	28	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
4-Nitrophenol	360	U	360	86	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Acenaphthene	290	U	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Acenaphthylene	290	U	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Acetophenone	290	U	290	9.9	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Anthracene	290	U	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Atrazine	43	U	43	9.8	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Benzaldehyde	290	U	290	13	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Benzo[a]anthracene	**24**	**J**	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Benzo[a]pyrene	**25**	**J**	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Benzo[b]fluoranthene	**46**	**J**	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Benzo[g,h,i]perylene	**24**	**J**	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Benzo[k]fluoranthene	**15**	**J**	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Bis(2-chloroethoxy)methane	290	U	290	24	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Bis(2-chloroethyl)ether	86	U	86	2.2	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Bis(2-ethylhexyl) phthalate	290	U	290	21	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Butyl benzyl phthalate	290	U	290	11	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Caprolactam	290	U	290	40	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Carbazole	290	U	290	29	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Chrysene	**28**	**J**	290	1.2	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Dibenz(a,h)anthracene	290	U	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Dibenzofuran	290	U	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Diethyl phthalate	290	U	290	17	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Dimethyl phthalate	290	U	290	18	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Di-n-butyl phthalate	290	U	290	16	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Di-n-octyl phthalate	290	U	290	29	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Fluoranthene	**28**	**J**	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Fluorene	290	U	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-021
Date Collected: 01/19/12 08:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-21
Matrix: Solid
Percent Solids: 92.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	290	U	290	2.3	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Hexachlorobutadiene	43	U	43	29	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Hexachlorocyclopentadiene	290	U	290	29	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Hexachloroethane	290	U	290	9.7	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Indeno[1,2,3-cd]pyrene	**19**	**J**	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Isophorone	290	U	290	14	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Naphthalene	290	U	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Nitrobenzene	290	U	290	2.4	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
N-Nitrosodi-n-propylamine	290	U	290	29	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
N-Nitrosodiphenylamine	290	U	290	23	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Pentachlorophenol	160	U	160	86	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Phenol	290	U	290	29	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Phenanthrene	290	U	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
Pyrene	**29**	**J**	290	3.6	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1
3 & 4 Methylphenol	290	U	290	22	ug/Kg	☼	01/26/12 08:44	01/30/12 10:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*53*		*34 - 110*	*01/26/12 08:44*	*01/30/12 10:48*	*1*
2-Fluorophenol (Surr)	*63*		*26 - 110*	*01/26/12 08:44*	*01/30/12 10:48*	*1*
2,4,6-Tribromophenol (Surr)	*42*		*10 - 118*	*01/26/12 08:44*	*01/30/12 10:48*	*1*
Nitrobenzene-d5 (Surr)	*54*		*24 - 112*	*01/26/12 08:44*	*01/30/12 10:48*	*1*
Phenol-d5 (Surr)	*60*		*28 - 110*	*01/26/12 08:44*	*01/30/12 10:48*	*1*
Terphenyl-d14 (Surr)	*68*		*41 - 119*	*01/26/12 08:44*	*01/30/12 10:48*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-021
Date Collected: 01/19/12 08:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-21
Matrix: Solid
Percent Solids: 92.3

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	36	U	36	23	ug/Kg	☼	01/25/12 09:38	01/28/12 11:05	1
Aroclor-1221	36	U	36	17	ug/Kg	☼	01/25/12 09:38	01/28/12 11:05	1
Aroclor-1232	36	U	36	15	ug/Kg	☼	01/25/12 09:38	01/28/12 11:05	1
Aroclor-1242	36	U	36	14	ug/Kg	☼	01/25/12 09:38	01/28/12 11:05	1
Aroclor-1248	36	U	36	18	ug/Kg	☼	01/25/12 09:38	01/28/12 11:05	1
Aroclor-1254	36	U	36	18	ug/Kg	☼	01/25/12 09:38	01/28/12 11:05	1
Aroclor-1260	36	U	36	18	ug/Kg	☼	01/25/12 09:38	01/28/12 11:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*29 - 151*	*01/25/12 09:38*	*01/28/12 11:05*	*1*
DCB Decachlorobiphenyl	*54*		*14 - 163*	*01/25/12 09:38*	*01/28/12 11:05*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-021
Date Collected: 01/19/12 08:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-21
Matrix: Solid
Percent Solids: 92.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	3500		15	9.1	mg/Kg	☼	01/24/12 10:41	01/25/12 17:09	1
Barium	19	B	0.76	0.067	mg/Kg	☼	01/24/12 10:41	01/25/12 17:09	1
Beryllium	0.15	U	0.15	0.041	mg/Kg	☼	01/24/12 10:41	01/25/12 17:09	1
Cadmium	0.075	J	0.076	0.034	mg/Kg	☼	01/24/12 10:41	01/25/12 17:09	1
Cobalt	3.0		0.38	0.15	mg/Kg	☼	01/24/12 10:41	01/25/12 17:09	1
Chromium	7.7		0.76	0.19	mg/Kg	☼	01/24/12 10:41	01/25/12 17:09	1
Copper	7.1		0.76	0.70	mg/Kg	☼	01/24/12 10:41	01/25/12 17:09	1
Iron	7600		7.6	4.7	mg/Kg	☼	01/24/12 10:41	01/25/12 17:09	1
Manganese	180	B	0.76	0.070	mg/Kg	☼	01/24/12 10:41	01/25/12 17:09	1
Nickel	7.6		0.76	0.26	mg/Kg	☼	01/24/12 10:41	01/25/12 17:09	1
Vanadium	11		0.76	0.11	mg/Kg	☼	01/24/12 10:41	01/25/12 17:09	1
Lead	5.5		0.23	0.18	mg/Kg	☼	01/24/12 10:41	01/25/12 17:09	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-021
Date Collected: 01/19/12 08:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-21
Matrix: Solid
Percent Solids: 92.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.063	J	0.15	0.023	mg/Kg	☼	01/24/12 10:41	01/30/12 20:26	1
Arsenic	3.7		0.076	0.059	mg/Kg	☼	01/24/12 10:41	01/30/12 20:26	1
Selenium	0.48		0.15	0.086	mg/Kg	☼	01/24/12 10:41	01/30/12 20:26	1
Thallium	0.11		0.076	0.012	mg/Kg	☼	01/24/12 10:41	01/30/12 20:26	1
Zinc	19	B	0.76	0.19	mg/Kg	☼	01/24/12 10:41	01/30/12 20:26	1
Silver	0.076	U	0.076	0.015	mg/Kg	☼	01/24/12 10:41	01/30/12 20:26	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-021
Date Collected: 01/19/12 08:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-21
Matrix: Solid
Percent Solids: 92.3

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041	U	0.041	0.015	mg/Kg	☼	01/24/12 13:45	01/27/12 17:34	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-021
Date Collected: 01/19/12 08:55
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-21
Matrix: Solid
Percent Solids: 92.3

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.45	J	0.87	0.29	mg/Kg	☼	02/01/12 15:31	02/02/12 14:13	1
Cr (III)	7.3		0.87	0.14	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-022
Date Collected: 01/19/12 09:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-22
Matrix: Solid
Percent Solids: 86.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	640	U	640	180	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Benzene	43	U	43	13	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Bromodichloromethane	85	U	85	11	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Bromoform	85	U	85	20	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Bromomethane	210	U *	210	31	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
2-Butanone (MEK)	640	U	640	46	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Carbon disulfide	210	U	210	13	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Carbon tetrachloride	43	U	43	6.8	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Chlorobenzene	43	U	43	6.8	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Chloroethane	210	U *	210	65	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Chloroform	43	U	43	9.4	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Chloromethane	210	U	210	15	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,1-Dichloroethane	43	U	43	18	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,2-Dichloroethane	43	U	43	11	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,1-Dichloroethene	43	U	43	19	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,2-Dichloropropane	43	U	43	8.7	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
cis-1,3-Dichloropropene	43	U	43	8.4	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
trans-1,3-Dichloropropene	43	U	43	21	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Ethylbenzene	43	U	43	5.8	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
2-Hexanone	2100	U	2100	21	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Methylene Chloride	210	U	210	82	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
4-Methyl-2-pentanone (MIBK)	2100	U	2100	51	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Styrene	43	U	43	6.0	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,1,2,2-Tetrachloroethane	43	U	43	9.5	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Tetrachloroethene	43	U	43	13	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Toluene	85	U	85	18	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Trichloroethene	43	U	43	10	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Vinyl chloride	34	U	34	19	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Xylenes, Total	130	U	130	8.6	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,1,1-Trichloroethane	43	U	43	22	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,1,2-Trichloroethane	43	U	43	13	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Cyclohexane	1000	U	1000	43	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,2-Dibromo-3-Chloropropane	210	U	210	53	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,2-Dibromoethane	210	U	210	11	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Dichlorodifluoromethane	85	U	85	17	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
cis-1,2-Dichloroethene	43	U	43	7.3	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
trans-1,2-Dichloroethene	43	U	43	9.8	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Isopropylbenzene	210	U	210	6.9	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Methyl acetate	**420**	**J**	1000	27	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Methyl tert-butyl ether	210	U	210	7.6	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	210	U	210	42	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,2,4-Trichlorobenzene	210	U	210	7.8	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,2-Dichlorobenzene	85	U	85	9.2	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,3-Dichlorobenzene	85	U	85	5.1	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
1,4-Dichlorobenzene	85	U	85	8.5	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Trichlorofluoromethane	85	U	85	17	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Dibromochloromethane	43	U	43	13	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1
Methylcyclohexane	1000	U	1000	13	ug/Kg	☼	01/24/12 10:26	01/25/12 22:53	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-022
Date Collected: 01/19/12 09:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-22
Matrix: Solid
Percent Solids: 86.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	72		39 - 128	01/24/12 10:26	01/25/12 22:53	1
4-Bromofluorobenzene (Surr)	72		26 - 141	01/24/12 10:26	01/25/12 22:53	1
Toluene-d8 (Surr)	79		33 - 134	01/24/12 10:26	01/25/12 22:53	1
Dibromofluoromethane (Surr)	70		30 - 122	01/24/12 10:26	01/25/12 22:53	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-022
Date Collected: 01/19/12 09:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-22
Matrix: Solid
Percent Solids: 86.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	310	U	310	31	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2,2'-oxybis[1-chloropropane]	310	U	310	11	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2,4,5-Trichlorophenol	310	U	310	29	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2,4,6-Trichlorophenol	310	U	310	93	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2,4-Dichlorophenol	310	U	310	23	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2,4-Dimethylphenol	310	U	310	23	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2,4-Dinitrophenol	170	U	170	93	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2,4-Dinitrotoluene	310	U	310	31	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2,6-Dinitrotoluene	310	U	310	24	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2-Chloronaphthalene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2-Chlorophenol	310	U	310	31	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2-Methylnaphthalene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2-Methylphenol	310	U	310	93	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2-Nitroaniline	230	U	230	11	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
2-Nitrophenol	310	U	310	31	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
3,3'-Dichlorobenzidine	1900	U	1900	21	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
3-Nitroaniline	230	U	230	19	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
4,6-Dinitro-2-methylphenol	170	U	170	93	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
4-Bromophenyl phenyl ether	310	U	310	15	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
4-Chloro-3-methylphenol	310	U	310	24	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
4-Chloroaniline	230	U	230	20	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
4-Chlorophenyl phenyl ether	310	U	310	15	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
4-Nitroaniline	230	U	230	30	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
4-Nitrophenol	380	U	380	93	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Acenaphthene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Acenaphthylene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Acetophenone	310	U	310	11	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Anthracene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Atrazine	46	U	46	11	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Benzaldehyde	310	U	310	14	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Benzo[a]anthracene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Benzo[a]pyrene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Benzo[b]fluoranthene	**8.5**	**J**	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Benzo[g,h,i]perylene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Benzo[k]fluoranthene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Bis(2-chloroethoxy)methane	310	U	310	25	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Bis(2-chloroethyl)ether	93	U	93	2.3	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Bis(2-ethylhexyl) phthalate	310	U	310	22	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Butyl benzyl phthalate	310	U	310	12	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Caprolactam	310	U	310	43	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Carbazole	310	U	310	31	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Chrysene	310	U	310	1.3	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Dibenz(a,h)anthracene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Dibenzofuran	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Diethyl phthalate	310	U	310	19	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Dimethyl phthalate	310	U	310	20	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Di-n-butyl phthalate	310	U	310	17	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Di-n-octyl phthalate	310	U	310	31	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Fluoranthene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Fluorene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-022
Date Collected: 01/19/12 09:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-22
Matrix: Solid
Percent Solids: 86.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	310	U	310	2.4	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Hexachlorobutadiene	46	U	46	31	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Hexachlorocyclopentadiene	310	U	310	31	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Hexachloroethane	310	U	310	10	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Indeno[1,2,3-cd]pyrene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Isophorone	310	U	310	15	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Naphthalene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Nitrobenzene	310	U	310	2.5	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
N-Nitrosodi-n-propylamine	310	U	310	31	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
N-Nitrosodiphenylamine	310	U	310	24	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Pentachlorophenol	170	U	170	93	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Phenol	310	U	310	31	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Phenanthrene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
Pyrene	310	U	310	3.8	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1
3 & 4 Methylphenol	310	U	310	23	ug/Kg	☼	01/26/12 08:44	01/30/12 11:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*50*		*34 - 110*	*01/26/12 08:44*	*01/30/12 11:06*	*1*
2-Fluorophenol (Surr)	*61*		*26 - 110*	*01/26/12 08:44*	*01/30/12 11:06*	*1*
2,4,6-Tribromophenol (Surr)	*48*		*10 - 118*	*01/26/12 08:44*	*01/30/12 11:06*	*1*
Nitrobenzene-d5 (Surr)	*53*		*24 - 112*	*01/26/12 08:44*	*01/30/12 11:06*	*1*
Phenol-d5 (Surr)	*59*		*28 - 110*	*01/26/12 08:44*	*01/30/12 11:06*	*1*
Terphenyl-d14 (Surr)	*63*		*41 - 119*	*01/26/12 08:44*	*01/30/12 11:06*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-022
Date Collected: 01/19/12 09:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-22
Matrix: Solid
Percent Solids: 86.3

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	38	U	38	24	ug/Kg	☼	01/25/12 09:38	01/28/12 11:20	1
Aroclor-1221	38	U	38	18	ug/Kg	☼	01/25/12 09:38	01/28/12 11:20	1
Aroclor-1232	38	U	38	16	ug/Kg	☼	01/25/12 09:38	01/28/12 11:20	1
Aroclor-1242	38	U	38	15	ug/Kg	☼	01/25/12 09:38	01/28/12 11:20	1
Aroclor-1248	38	U	38	20	ug/Kg	☼	01/25/12 09:38	01/28/12 11:20	1
Aroclor-1254	38	U	38	20	ug/Kg	☼	01/25/12 09:38	01/28/12 11:20	1
Aroclor-1260	38	U	38	20	ug/Kg	☼	01/25/12 09:38	01/28/12 11:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*29 - 151*	*01/25/12 09:38*	*01/28/12 11:20*	*1*
DCB Decachlorobiphenyl	*55*		*14 - 163*	*01/25/12 09:38*	*01/28/12 11:20*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-022
Date Collected: 01/19/12 09:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-22
Matrix: Solid
Percent Solids: 86.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5300		16	9.5	mg/Kg	☼	01/24/12 10:41	01/25/12 17:16	1
Barium	80	B	0.79	0.070	mg/Kg	☼	01/24/12 10:41	01/25/12 17:16	1
Beryllium	0.083	J	0.16	0.043	mg/Kg	☼	01/24/12 10:41	01/25/12 17:16	1
Cadmium	0.079	U	0.079	0.036	mg/Kg	☼	01/24/12 10:41	01/25/12 17:16	1
Cobalt	3.8		0.40	0.16	mg/Kg	☼	01/24/12 10:41	01/25/12 17:16	1
Chromium	11		0.79	0.20	mg/Kg	☼	01/24/12 10:41	01/25/12 17:16	1
Copper	5.6		0.79	0.73	mg/Kg	☼	01/24/12 10:41	01/25/12 17:16	1
Iron	16000		7.9	4.9	mg/Kg	☼	01/24/12 10:41	01/25/12 17:16	1
Manganese	300	B	0.79	0.073	mg/Kg	☼	01/24/12 10:41	01/25/12 17:16	1
Nickel	9.4		0.79	0.27	mg/Kg	☼	01/24/12 10:41	01/25/12 17:16	1
Vanadium	18		0.79	0.12	mg/Kg	☼	01/24/12 10:41	01/25/12 17:16	1
Lead	5.5		0.24	0.19	mg/Kg	☼	01/24/12 10:41	01/25/12 17:16	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-022
Date Collected: 01/19/12 09:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-22
Matrix: Solid
Percent Solids: 86.3

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.049	J	0.16	0.024	mg/Kg	☼	01/24/12 10:41	01/30/12 20:31	1
Arsenic	7.5		0.079	0.061	mg/Kg	☼	01/24/12 10:41	01/30/12 20:31	1
Selenium	0.63		0.16	0.089	mg/Kg	☼	01/24/12 10:41	01/30/12 20:31	1
Thallium	0.083		0.079	0.013	mg/Kg	☼	01/24/12 10:41	01/30/12 20:31	1
Zinc	32	B	0.79	0.20	mg/Kg	☼	01/24/12 10:41	01/30/12 20:31	1
Silver	0.025	J	0.079	0.016	mg/Kg	☼	01/24/12 10:41	01/30/12 20:31	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-022
Date Collected: 01/19/12 09:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-22
Matrix: Solid
Percent Solids: 86.3

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027	J	0.036	0.013	mg/Kg	☼	01/24/12 13:45	01/27/12 17:36	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: SO-17358-011912-DR-022
Date Collected: 01/19/12 09:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-22
Matrix: Solid
Percent Solids: 86.3

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.85	J	0.93	0.31	mg/Kg	☼	02/01/12 15:31	02/02/12 14:14	1
Cr (III)	10		0.93	0.15	mg/Kg	☼		01/26/12 12:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: TB-17358-011712
Date Collected: 01/17/12 00:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-23
Matrix: Solid

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**360**	**J**	600	170	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Benzene	40	U	40	12	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Bromodichloromethane	80	U	80	9.9	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Bromoform	80	U	80	19	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Bromomethane	200	U *	200	29	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
2-Butanone (MEK)	600	U	600	43	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Carbon disulfide	200	U	200	12	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Carbon tetrachloride	40	U	40	6.4	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Chlorobenzene	40	U	40	6.4	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Chloroethane	200	U *	200	61	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Chloroform	40	U	40	8.8	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Chloromethane	200	U	200	14	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,1-Dichloroethane	40	U	40	17	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,2-Dichloroethane	40	U	40	10	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,1-Dichloroethene	40	U	40	18	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,2-Dichloropropane	40	U	40	8.2	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
cis-1,3-Dichloropropene	40	U	40	7.9	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
trans-1,3-Dichloropropene	40	U	40	20	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Ethylbenzene	40	U	40	5.4	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
2-Hexanone	2000	U	2000	20	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Methylene Chloride	200	U	200	77	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	48	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Styrene	40	U	40	5.6	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,1,2,2-Tetrachloroethane	40	U	40	8.9	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Tetrachloroethene	40	U	40	12	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Toluene	80	U	80	17	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Trichloroethene	40	U	40	9.7	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Vinyl chloride	32	U	32	18	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Xylenes, Total	120	U	120	8.1	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,1,1-Trichloroethane	40	U	40	21	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,1,2-Trichloroethane	40	U	40	12	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Cyclohexane	960	U	960	40	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,2-Dibromo-3-Chloropropane	200	U	200	50	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,2-Dibromoethane	200	U	200	10	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Dichlorodifluoromethane	80	U	80	16	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
cis-1,2-Dichloroethene	40	U	40	6.9	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
trans-1,2-Dichloroethene	40	U	40	9.2	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Isopropylbenzene	200	U	200	6.5	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Methyl acetate	**610**	**J**	960	25	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Methyl tert-butyl ether	200	U	200	7.1	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	39	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,2,4-Trichlorobenzene	200	U	200	7.3	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,2-Dichlorobenzene	80	U	80	8.6	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,3-Dichlorobenzene	80	U	80	4.8	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
1,4-Dichlorobenzene	80	U	80	8.0	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Trichlorofluoromethane	80	U	80	16	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Dibromochloromethane	40	U	40	12	ug/Kg		01/24/12 10:26	01/25/12 23:16	1
Methylcyclohexane	960	U	960	12	ug/Kg		01/24/12 10:26	01/25/12 23:16	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Client Sample ID: TB-17358-011712
Date Collected: 01/17/12 00:00
Date Received: 01/20/12 09:30

Lab Sample ID: 240-7846-23
Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		39 - 128	01/24/12 10:26	01/25/12 23:16	1
4-Bromofluorobenzene (Surr)	77		26 - 141	01/24/12 10:26	01/25/12 23:16	1
Toluene-d8 (Surr)	82		33 - 134	01/24/12 10:26	01/25/12 23:16	1
Dibromofluoromethane (Surr)	70		30 - 122	01/24/12 10:26	01/25/12 23:16	1

GC/MS VOA

Prep Batch: 31125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	5035	
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	5035	
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	5035	
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	5035	
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	5035	
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	5035	
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	5035	
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	5035	
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	5035	
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	5035	
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	5035	
240-7846-12	SO-17358-011812-DR-012	Total/NA	Solid	5035	
240-7846-12 MS	SO-17358-011812-DR-012	Total/NA	Solid	5035	
240-7846-12 MSD	SO-17358-011812-DR-012	Total/NA	Solid	5035	
240-7846-13	SO-17358-011812-DR-013	Total/NA	Solid	5035	
240-7846-14	SO-17358-011812-DR-014	Total/NA	Solid	5035	
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	5035	
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	5035	
240-7846-17	SO-17358-011812-DR-017	Total/NA	Solid	5035	
240-7846-18	SO-17358-011812-DR-018	Total/NA	Solid	5035	
240-7846-19	SO-17358-011912-DR-019	Total/NA	Solid	5035	
240-7846-20	SO-17358-011912-DR-020	Total/NA	Solid	5035	
LCS 240-31125/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 240-31125/1-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 31190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	5035	
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	5035	
240-7846-23	TB-17358-011712	Total/NA	Solid	5035	
LCS 240-31190/2-A	Lab Control Sample	Total/NA	Solid	5035	
MB 240-31190/1-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 31435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	8260B	31190
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	8260B	31190
240-7846-23	TB-17358-011712	Total/NA	Solid	8260B	31190
LCS 240-31190/2-A	Lab Control Sample	Total/NA	Solid	8260B	31190
MB 240-31190/1-A	Method Blank	Total/NA	Solid	8260B	31190

Analysis Batch: 31614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	8260B	31125
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	8260B	31125
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	8260B	31125
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	8260B	31125
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	8260B	31125
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	8260B	31125
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	8260B	31125
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	8260B	31125
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	8260B	31125

GC/MS VOA (Continued)

Analysis Batch: 31614 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	8260B	31125
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	8260B	31125
240-7846-12	SO-17358-011812-DR-012	Total/NA	Solid	8260B	31125
240-7846-12 MS	SO-17358-011812-DR-012	Total/NA	Solid	8260B	31125
240-7846-12 MSD	SO-17358-011812-DR-012	Total/NA	Solid	8260B	31125
240-7846-13	SO-17358-011812-DR-013	Total/NA	Solid	8260B	31125
LCS 240-31125/2-A	Lab Control Sample	Total/NA	Solid	8260B	31125
MB 240-31125/1-A	Method Blank	Total/NA	Solid	8260B	31125

Analysis Batch: 31618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	8260B	31125
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	8260B	31125
240-7846-17	SO-17358-011812-DR-017	Total/NA	Solid	8260B	31125
240-7846-18	SO-17358-011812-DR-018	Total/NA	Solid	8260B	31125
240-7846-19	SO-17358-011912-DR-019	Total/NA	Solid	8260B	31125
240-7846-20	SO-17358-011912-DR-020	Total/NA	Solid	8260B	31125

Analysis Batch: 31772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-14	SO-17358-011812-DR-014	Total/NA	Solid	8260B	31125

GC/MS Semi VOA

Prep Batch: 31328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	3540C	
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	3540C	
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	3540C	
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	3540C	
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	3540C	
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	3540C	
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	3540C	
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	3540C	
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	3540C	
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	3540C	
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	3540C	
240-7846-12	SO-17358-011812-DR-012	Total/NA	Solid	3540C	
240-7846-12 MS	SO-17358-011812-DR-012	Total/NA	Solid	3540C	
240-7846-12 MSD	SO-17358-011812-DR-012	Total/NA	Solid	3540C	
240-7846-13	SO-17358-011812-DR-013	Total/NA	Solid	3540C	
240-7846-14	SO-17358-011812-DR-014	Total/NA	Solid	3540C	
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	3540C	
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	3540C	
240-7846-17	SO-17358-011812-DR-017	Total/NA	Solid	3540C	
240-7846-18	SO-17358-011812-DR-018	Total/NA	Solid	3540C	
LCS 240-31328/24-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-31328/23-A	Method Blank	Total/NA	Solid	3540C	

Prep Batch: 31494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-19	SO-17358-011912-DR-019	Total/NA	Solid	3540C	

GC/MS Semi VOA (Continued)

Prep Batch: 31494 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-20	SO-17358-011912-DR-020	Total/NA	Solid	3540C	
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	3540C	
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	3540C	
LCS 240-31494/20-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-31494/19-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 31656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	8270C	31328
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	8270C	31328
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	8270C	31328
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	8270C	31328
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	8270C	31328
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	8270C	31328
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	8270C	31328
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	8270C	31328
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	8270C	31328
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	8270C	31328
240-7846-12	SO-17358-011812-DR-012	Total/NA	Solid	8270C	31328
240-7846-12 MS	SO-17358-011812-DR-012	Total/NA	Solid	8270C	31328
240-7846-12 MSD	SO-17358-011812-DR-012	Total/NA	Solid	8270C	31328
240-7846-13	SO-17358-011812-DR-013	Total/NA	Solid	8270C	31328
240-7846-14	SO-17358-011812-DR-014	Total/NA	Solid	8270C	31328
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	8270C	31328
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	8270C	31328
240-7846-17	SO-17358-011812-DR-017	Total/NA	Solid	8270C	31328
240-7846-18	SO-17358-011812-DR-018	Total/NA	Solid	8270C	31328
LCS 240-31328/24-A	Lab Control Sample	Total/NA	Solid	8270C	31328
MB 240-31328/23-A	Method Blank	Total/NA	Solid	8270C	31328

Analysis Batch: 31833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-19	SO-17358-011912-DR-019	Total/NA	Solid	8270C	31494
240-7846-20	SO-17358-011912-DR-020	Total/NA	Solid	8270C	31494
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	8270C	31494
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	8270C	31494
LCS 240-31494/20-A	Lab Control Sample	Total/NA	Solid	8270C	31494
MB 240-31494/19-A	Method Blank	Total/NA	Solid	8270C	31494

Analysis Batch: 31851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	8270C	31328

GC Semi VOA

Prep Batch: 31327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	3540C	
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	3540C	
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	3540C	
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	3540C	
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	3540C	

GC Semi VOA (Continued)

Prep Batch: 31327 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	3540C	
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	3540C	
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	3540C	
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	3540C	
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	3540C	
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	3540C	
240-7846-12	SO-17358-011812-DR-012	Total/NA	Solid	3540C	
240-7846-12 MS	SO-17358-011812-DR-012	Total/NA	Solid	3540C	
240-7846-12 MSD	SO-17358-011812-DR-012	Total/NA	Solid	3540C	
240-7846-13	SO-17358-011812-DR-013	Total/NA	Solid	3540C	
240-7846-14	SO-17358-011812-DR-014	Total/NA	Solid	3540C	
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	3540C	
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	3540C	
240-7846-17	SO-17358-011812-DR-017	Total/NA	Solid	3540C	
240-7846-18	SO-17358-011812-DR-018	Total/NA	Solid	3540C	
LCS 240-31327/24-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-31327/23-A	Method Blank	Total/NA	Solid	3540C	

Prep Batch: 31338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-19	SO-17358-011912-DR-019	Total/NA	Solid	3540C	
240-7846-20	SO-17358-011912-DR-020	Total/NA	Solid	3540C	
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	3540C	
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	3540C	
LCS 240-31338/24-A	Lab Control Sample	Total/NA	Solid	3540C	
MB 240-31338/23-A	Method Blank	Total/NA	Solid	3540C	

Analysis Batch: 31732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	8082	31327
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	8082	31327
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	8082	31327
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	8082	31327
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	8082	31327
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	8082	31327
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	8082	31327
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	8082	31327
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	8082	31327
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	8082	31327
MB 240-31327/23-A	Method Blank	Total/NA	Solid	8082	31327

Analysis Batch: 31740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-19	SO-17358-011912-DR-019	Total/NA	Solid	8082	31338
240-7846-20	SO-17358-011912-DR-020	Total/NA	Solid	8082	31338
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	8082	31338
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	8082	31338
LCS 240-31338/24-A	Lab Control Sample	Total/NA	Solid	8082	31338
MB 240-31338/23-A	Method Blank	Total/NA	Solid	8082	31338

GC Semi VOA (Continued)

Analysis Batch: 31845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	8082	31327
240-7846-12	SO-17358-011812-DR-012	Total/NA	Solid	8082	31327
240-7846-12 MS	SO-17358-011812-DR-012	Total/NA	Solid	8082	31327
240-7846-12 MSD	SO-17358-011812-DR-012	Total/NA	Solid	8082	31327
240-7846-13	SO-17358-011812-DR-013	Total/NA	Solid	8082	31327
240-7846-14	SO-17358-011812-DR-014	Total/NA	Solid	8082	31327
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	8082	31327
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	8082	31327
240-7846-18	SO-17358-011812-DR-018	Total/NA	Solid	8082	31327
LCS 240-31327/24-A	Lab Control Sample	Total/NA	Solid	8082	31327

Analysis Batch: 32012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-17	SO-17358-011812-DR-017	Total/NA	Solid	8082	31327

Metals

Prep Batch: 31063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	3050B	
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	3050B	
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	3050B	
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	3050B	
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	3050B	
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	3050B	
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	3050B	
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	3050B	
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	3050B	
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	3050B	
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	3050B	
240-7846-12	SO-17358-011812-DR-012	Total/NA	Solid	3050B	
240-7846-12 MS	SO-17358-011812-DR-012	Total/NA	Solid	3050B	
240-7846-12 MS	SO-17358-011812-DR-012	Total/NA	Solid	3050B	
240-7846-12 MSD	SO-17358-011812-DR-012	Total/NA	Solid	3050B	
240-7846-12 MSD	SO-17358-011812-DR-012	Total/NA	Solid	3050B	
240-7846-13	SO-17358-011812-DR-013	Total/NA	Solid	3050B	
240-7846-14	SO-17358-011812-DR-014	Total/NA	Solid	3050B	
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	3050B	
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	3050B	
240-7846-17	SO-17358-011812-DR-017	Total/NA	Solid	3050B	
240-7846-18	SO-17358-011812-DR-018	Total/NA	Solid	3050B	
LCS 240-31063/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCS 240-31063/3-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-31063/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 31077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	7471A	
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	7471A	
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	7471A	
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	7471A	
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	7471A	

Metals (Continued)

Prep Batch: 31077 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	7471A	
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	7471A	
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	7471A	
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	7471A	
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	7471A	
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	7471A	
240-7846-12	SO-17358-011812-DR-012	Total/NA	Solid	7471A	
240-7846-12 MS	SO-17358-011812-DR-012	Total/NA	Solid	7471A	
240-7846-12 MSD	SO-17358-011812-DR-012	Total/NA	Solid	7471A	
240-7846-13	SO-17358-011812-DR-013	Total/NA	Solid	7471A	
240-7846-14	SO-17358-011812-DR-014	Total/NA	Solid	7471A	
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	7471A	
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	7471A	
240-7846-17	SO-17358-011812-DR-017	Total/NA	Solid	7471A	
240-7846-18	SO-17358-011812-DR-018	Total/NA	Solid	7471A	
LCS 240-31077/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-31077/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 31078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	7471A	31077
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	7471A	31077
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	7471A	31077
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	7471A	31077
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	7471A	31077
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	7471A	31077
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	7471A	31077
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	7471A	31077
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	7471A	31077
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	7471A	31077
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	7471A	31077
240-7846-12	SO-17358-011812-DR-012	Total/NA	Solid	7471A	31077
240-7846-12 MS	SO-17358-011812-DR-012	Total/NA	Solid	7471A	31077
240-7846-12 MSD	SO-17358-011812-DR-012	Total/NA	Solid	7471A	31077
240-7846-13	SO-17358-011812-DR-013	Total/NA	Solid	7471A	31077
240-7846-14	SO-17358-011812-DR-014	Total/NA	Solid	7471A	31077
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	7471A	31077
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	7471A	31077
240-7846-17	SO-17358-011812-DR-017	Total/NA	Solid	7471A	31077
240-7846-18	SO-17358-011812-DR-018	Total/NA	Solid	7471A	31077
LCS 240-31077/2-A	Lab Control Sample	Total/NA	Solid	7471A	31077
MB 240-31077/1-A	Method Blank	Total/NA	Solid	7471A	31077

Prep Batch: 31192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-19	SO-17358-011912-DR-019	Total/NA	Solid	3050B	
240-7846-19 MS	SO-17358-011912-DR-019	Total/NA	Solid	3050B	
240-7846-19 MS	SO-17358-011912-DR-019	Total/NA	Solid	3050B	
240-7846-19 MSD	SO-17358-011912-DR-019	Total/NA	Solid	3050B	
240-7846-19 MSD	SO-17358-011912-DR-019	Total/NA	Solid	3050B	
240-7846-20	SO-17358-011912-DR-020	Total/NA	Solid	3050B	
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 31192 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	3050B	
LCS 240-31192/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCS 240-31192/3-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-31192/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 31214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-19	SO-17358-011912-DR-019	Total/NA	Solid	7471A	
240-7846-19 MS	SO-17358-011912-DR-019	Total/NA	Solid	7471A	
240-7846-19 MSD	SO-17358-011912-DR-019	Total/NA	Solid	7471A	
240-7846-20	SO-17358-011912-DR-020	Total/NA	Solid	7471A	
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	7471A	
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	7471A	
LCS 240-31214/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-31214/1-A	Method Blank	Total/NA	Solid	7471A	

Analysis Batch: 31467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	6010B	31063
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	6010B	31063
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	6010B	31063
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	6010B	31063
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	6010B	31063
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	6010B	31063
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	6010B	31063
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	6010B	31063
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	6010B	31063
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	6010B	31063
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	6010B	31063
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	6010B	31063
240-7846-12	SO-17358-011812-DR-012	Total/NA	Solid	6010B	31063
240-7846-12 MS	SO-17358-011812-DR-012	Total/NA	Solid	6010B	31063
240-7846-12 MSD	SO-17358-011812-DR-012	Total/NA	Solid	6010B	31063
240-7846-13	SO-17358-011812-DR-013	Total/NA	Solid	6010B	31063
240-7846-14	SO-17358-011812-DR-014	Total/NA	Solid	6010B	31063
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	6010B	31063
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	6010B	31063
240-7846-17	SO-17358-011812-DR-017	Total/NA	Solid	6010B	31063
240-7846-18	SO-17358-011812-DR-018	Total/NA	Solid	6010B	31063
240-7846-19	SO-17358-011912-DR-019	Total/NA	Solid	6010B	31192
240-7846-19 MS	SO-17358-011912-DR-019	Total/NA	Solid	6010B	31192
240-7846-19 MSD	SO-17358-011912-DR-019	Total/NA	Solid	6010B	31192
240-7846-20	SO-17358-011912-DR-020	Total/NA	Solid	6010B	31192
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	6010B	31192
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	6010B	31192
LCS 240-31063/2-A	Lab Control Sample	Total/NA	Solid	6010B	31063
LCS 240-31192/2-A	Lab Control Sample	Total/NA	Solid	6010B	31192
MB 240-31063/1-A	Method Blank	Total/NA	Solid	6010B	31063
MB 240-31192/1-A	Method Blank	Total/NA	Solid	6010B	31192

Metals (Continued)

Analysis Batch: 31861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	6020	31063
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	6020	31063
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	6020	31063
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	6020	31063
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	6020	31063
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	6020	31063
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	6020	31063
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	6020	31063
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	6020	31063
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	6020	31063
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	6020	31063
240-7846-12	SO-17358-011812-DR-012	Total/NA	Solid	6020	31063
240-7846-12 MS	SO-17358-011812-DR-012	Total/NA	Solid	6020	31063
240-7846-12 MSD	SO-17358-011812-DR-012	Total/NA	Solid	6020	31063
240-7846-13	SO-17358-011812-DR-013	Total/NA	Solid	6020	31063
240-7846-14	SO-17358-011812-DR-014	Total/NA	Solid	6020	31063
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	6020	31063
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	6020	31063
240-7846-17	SO-17358-011812-DR-017	Total/NA	Solid	6020	31063
240-7846-18	SO-17358-011812-DR-018	Total/NA	Solid	6020	31063
LCS 240-31063/3-A	Lab Control Sample	Total/NA	Solid	6020	31063
MB 240-31063/1-A	Method Blank	Total/NA	Solid	6020	31063

Analysis Batch: 31868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-19	SO-17358-011912-DR-019	Total/NA	Solid	7471A	31214
240-7846-19 MS	SO-17358-011912-DR-019	Total/NA	Solid	7471A	31214
240-7846-19 MSD	SO-17358-011912-DR-019	Total/NA	Solid	7471A	31214
240-7846-20	SO-17358-011912-DR-020	Total/NA	Solid	7471A	31214
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	7471A	31214
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	7471A	31214
LCS 240-31214/2-A	Lab Control Sample	Total/NA	Solid	7471A	31214
MB 240-31214/1-A	Method Blank	Total/NA	Solid	7471A	31214

Analysis Batch: 31995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-19	SO-17358-011912-DR-019	Total/NA	Solid	6020	31192
240-7846-19 MS	SO-17358-011912-DR-019	Total/NA	Solid	6020	31192
240-7846-19 MSD	SO-17358-011912-DR-019	Total/NA	Solid	6020	31192
240-7846-20	SO-17358-011912-DR-020	Total/NA	Solid	6020	31192
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	6020	31192
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	6020	31192
LCS 240-31192/3-A	Lab Control Sample	Total/NA	Solid	6020	31192
MB 240-31192/1-A	Method Blank	Total/NA	Solid	6020	31192

General Chemistry

Analysis Batch: 31104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	Moisture	
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	Moisture	
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 31104 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	Moisture	
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	Moisture	
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	Moisture	
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	Moisture	
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	Moisture	
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	Moisture	
240-7846-9 DU	SO-17358-011812-DR-009	Total/NA	Solid	Moisture	
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	Moisture	
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	Moisture	
240-7846-12	SO-17358-011812-DR-012	Total/NA	Solid	Moisture	
240-7846-12 DU	SO-17358-011812-DR-012	Total/NA	Solid	Moisture	
240-7846-13	SO-17358-011812-DR-013	Total/NA	Solid	Moisture	
240-7846-14	SO-17358-011812-DR-014	Total/NA	Solid	Moisture	
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	Moisture	
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	Moisture	
240-7846-17	SO-17358-011812-DR-017	Total/NA	Solid	Moisture	
240-7846-18	SO-17358-011812-DR-018	Total/NA	Solid	Moisture	
240-7846-19	SO-17358-011912-DR-019	Total/NA	Solid	Moisture	
240-7846-20	SO-17358-011912-DR-020	Total/NA	Solid	Moisture	
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	Moisture	
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	Moisture	

Prep Batch: 31546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	3060A	
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	3060A	
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	3060A	
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	3060A	
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	3060A	
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	3060A	
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	3060A	
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	3060A	
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	3060A	
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	3060A	
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	3060A	
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	3060A	
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	3060A	
LCSI 240-31546/11-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 240-31546/10-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 240-31546/9-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 31555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	7196A	
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	7196A	
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	7196A	
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	7196A	
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	7196A	
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	7196A	
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	7196A	
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	7196A	
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	7196A	

General Chemistry (Continued)

Analysis Batch: 31555 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	7196A	
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	7196A	
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	7196A	
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	7196A	
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	7196A	
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	7196A	

Prep Batch: 32298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	3060A	
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	3060A	
LCSI 240-32298/11-A	Lab Control Sample	Total/NA	Solid	3060A	
LCSS 240-32298/10-A	Lab Control Sample	Total/NA	Solid	3060A	
MB 240-32298/9-A	Method Blank	Total/NA	Solid	3060A	

Analysis Batch: 32474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-21	SO-17358-011912-DR-021	Total/NA	Solid	7196A	32298
240-7846-22	SO-17358-011912-DR-022	Total/NA	Solid	7196A	32298
LCSI 240-32298/11-A	Lab Control Sample	Total/NA	Solid	7196A	32298
LCSS 240-32298/10-A	Lab Control Sample	Total/NA	Solid	7196A	32298
MB 240-32298/9-A	Method Blank	Total/NA	Solid	7196A	32298

Analysis Batch: 32492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7846-1	SO-17358-011712-DR-001	Total/NA	Solid	7196A	31546
240-7846-2	SO-17358-011712-DR-002	Total/NA	Solid	7196A	31546
240-7846-3	SO-17358-011712-DR-003	Total/NA	Solid	7196A	31546
240-7846-4	SO-17358-011712-DR-004	Total/NA	Solid	7196A	31546
240-7846-5	SO-17358-011712-DR-005	Total/NA	Solid	7196A	31546
240-7846-6	SO-17358-011712-DR-006	Total/NA	Solid	7196A	31546
240-7846-7	SO-17358-011812-DR-007	Total/NA	Solid	7196A	31546
240-7846-8	SO-17358-011812-DR-008	Total/NA	Solid	7196A	31546
240-7846-9	SO-17358-011812-DR-009	Total/NA	Solid	7196A	31546
240-7846-10	SO-17358-011812-DR-010	Total/NA	Solid	7196A	31546
240-7846-11	SO-17358-011812-DR-011	Total/NA	Solid	7196A	31546
240-7846-15	SO-17358-011812-DR-015	Total/NA	Solid	7196A	31546
240-7846-16	SO-17358-011812-DR-016	Total/NA	Solid	7196A	31546
LCSI 240-31546/11-A	Lab Control Sample	Total/NA	Solid	7196A	31546
LCSS 240-31546/10-A	Lab Control Sample	Total/NA	Solid	7196A	31546
MB 240-31546/9-A	Method Blank	Total/NA	Solid	7196A	31546

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-31125/1-A
Matrix: Solid
Analysis Batch: 31614

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31125

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	170	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Benzene	40	U	40	12	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Bromodichloromethane	80	U	80	9.9	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Bromoform	80	U	80	19	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Bromomethane	200	U	200	29	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
2-Butanone (MEK)	600	U	600	43	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Carbon disulfide	200	U	200	12	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Carbon tetrachloride	40	U	40	6.4	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Chlorobenzene	40	U	40	6.4	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Chloroethane	200	U	200	61	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Chloroform	40	U	40	8.8	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Chloromethane	200	U	200	14	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,1-Dichloroethane	40	U	40	17	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,2-Dichloroethane	40	U	40	10	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,1-Dichloroethene	40	U	40	18	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,2-Dichloropropane	40	U	40	8.2	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
cis-1,3-Dichloropropene	40	U	40	7.9	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
trans-1,3-Dichloropropene	40	U	40	20	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Ethylbenzene	40	U	40	5.4	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
2-Hexanone	2000	U	2000	20	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Methylene Chloride	200	U	200	77	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	48	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Styrene	40	U	40	5.6	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,1,2,2-Tetrachloroethane	40	U	40	8.9	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Tetrachloroethene	40	U	40	12	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Toluene	80	U	80	17	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Trichloroethene	40	U	40	9.7	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Vinyl chloride	32	U	32	18	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Xylenes, Total	120	U	120	8.1	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,1,1-Trichloroethane	40	U	40	21	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,1,2-Trichloroethane	40	U	40	12	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Cyclohexane	960	U	960	40	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,2-Dibromo-3-Chloropropane	200	U	200	50	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,2-Dibromoethane	200	U	200	10	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Dichlorodifluoromethane	80	U	80	16	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
cis-1,2-Dichloroethene	40	U	40	6.9	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
trans-1,2-Dichloroethene	40	U	40	9.2	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Isopropylbenzene	200	U	200	6.5	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Methyl acetate	960	U	960	25	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Methyl tert-butyl ether	200	U	200	7.1	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	39	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,2,4-Trichlorobenzene	12.6	J	200	7.3	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,2-Dichlorobenzene	80	U	80	8.6	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,3-Dichlorobenzene	80	U	80	4.8	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
1,4-Dichlorobenzene	80	U	80	8.0	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Trichlorofluoromethane	80	U	80	16	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Dibromochloromethane	40	U	40	12	ug/Kg		01/23/12 21:31	01/27/12 00:58	1
Methylcyclohexane	12.5	J	960	12	ug/Kg		01/23/12 21:31	01/27/12 00:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-31125/1-A
Matrix: Solid
Analysis Batch: 31614

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31125

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	76		39 - 128	01/23/12 21:31	01/27/12 00:58	1
4-Bromofluorobenzene (Surr)	80		26 - 141	01/23/12 21:31	01/27/12 00:58	1
Toluene-d8 (Surr)	86		33 - 134	01/23/12 21:31	01/27/12 00:58	1
Dibromofluoromethane (Surr)	75		30 - 122	01/23/12 21:31	01/27/12 00:58	1

Lab Sample ID: LCS 240-31125/2-A
Matrix: Solid
Analysis Batch: 31614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	1000	1060		ug/Kg		106	16 - 156
Benzene	500	505		ug/Kg		101	70 - 117
Bromodichloromethane	500	368		ug/Kg		74	28 - 123
Bromoform	500	215		ug/Kg		43	10 - 117
Bromomethane	500	645	*	ug/Kg		129	10 - 114
2-Butanone (MEK)	1000	970		ug/Kg		97	10 - 199
Carbon disulfide	500	493		ug/Kg		99	10 - 132
Carbon tetrachloride	500	376		ug/Kg		75	29 - 118
Chlorobenzene	500	480		ug/Kg		96	71 - 116
Chloroethane	500	640	*	ug/Kg		128	10 - 120
Chloroform	500	468		ug/Kg		94	63 - 116
Chloromethane	500	420		ug/Kg		84	25 - 110
1,1-Dichloroethane	500	497		ug/Kg		99	63 - 117
1,2-Dichloroethane	500	474		ug/Kg		95	68 - 119
1,1-Dichloroethene	500	600		ug/Kg		120	44 - 143
1,2-Dichloropropane	500	510		ug/Kg		102	73 - 113
cis-1,3-Dichloropropene	500	341		ug/Kg		68	25 - 120
trans-1,3-Dichloropropene	500	341		ug/Kg		68	22 - 122
Ethylbenzene	500	481		ug/Kg		96	66 - 119
2-Hexanone	1000	1120	J	ug/Kg		112	43 - 130
Methylene Chloride	500	570		ug/Kg		114	27 - 172
4-Methyl-2-pentanone (MIBK)	1000	995	J	ug/Kg		100	49 - 121
Styrene	500	477		ug/Kg		95	60 - 120
1,1,2,2-Tetrachloroethane	500	445		ug/Kg		89	54 - 121
Tetrachloroethene	500	498		ug/Kg		100	58 - 131
Toluene	500	510		ug/Kg		102	66 - 123
Trichloroethene	500	485		ug/Kg		97	59 - 124
Vinyl chloride	500	459		ug/Kg		92	33 - 110
Xylenes, Total	1500	1440		ug/Kg		96	68 - 119
1,1,1-Trichloroethane	500	421		ug/Kg		84	38 - 122
1,1,2-Trichloroethane	500	497		ug/Kg		99	74 - 114
Cyclohexane	500	438	J	ug/Kg		88	40 - 120
1,2-Dibromo-3-Chloropropane	500	242		ug/Kg		48	10 - 129
1,2-Dibromoethane	500	424		ug/Kg		85	47 - 123
Dichlorodifluoromethane	500	281		ug/Kg		56	10 - 110
cis-1,2-Dichloroethene	500	451		ug/Kg		90	60 - 125
trans-1,2-Dichloroethene	500	540		ug/Kg		108	58 - 121
Isopropylbenzene	500	484		ug/Kg		97	61 - 123
Methyl acetate	500	715	J	ug/Kg		143	44 - 173

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-31125/2-A
Matrix: Solid
Analysis Batch: 31614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	500	530		ug/Kg		106	34 - 157
1,1,2-Trichloro-1,2,2-trifluoroethane	500	590		ug/Kg		118	48 - 151
1,2,4-Trichlorobenzene	500	479		ug/Kg		96	41 - 135
1,2-Dichlorobenzene	500	498		ug/Kg		100	68 - 118
1,3-Dichlorobenzene	500	489		ug/Kg		98	66 - 121
1,4-Dichlorobenzene	500	473		ug/Kg		95	65 - 119
Trichlorofluoromethane	500	600		ug/Kg		120	17 - 145
Dibromochloromethane	500	278		ug/Kg		56	22 - 113
Methylcyclohexane	500	494	J	ug/Kg		99	41 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*39 - 128*
4-Bromofluorobenzene (Surr)	*81*		*26 - 141*
Toluene-d8 (Surr)	*87*		*33 - 134*
Dibromofluoromethane (Surr)	*79*		*30 - 122*

Lab Sample ID: 240-7846-12 MS
Matrix: Solid
Analysis Batch: 31614

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31125

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	740	U	1070	1170		ug/Kg	☼	109	10 - 142
Benzene	49	U	536	473		ug/Kg	☼	88	10 - 199
Bromodichloromethane	98	U	536	314		ug/Kg	☼	59	18 - 133
Bromoform	98	U	536	199		ug/Kg	☼	37	10 - 147
Bromomethane	250	U *	536	573		ug/Kg	☼	107	10 - 151
2-Butanone (MEK)	740	U	1070	964		ug/Kg	☼	90	10 - 172
Carbon disulfide	250	U	536	443		ug/Kg	☼	83	10 - 155
Carbon tetrachloride	49	U	536	356		ug/Kg	☼	66	12 - 135
Chlorobenzene	49	U	536	456		ug/Kg	☼	85	47 - 118
Chloroethane	250	U *	536	600		ug/Kg	☼	112	10 - 168
Chloroform	49	U	536	439		ug/Kg	☼	82	51 - 120
Chloromethane	250	U	536	375		ug/Kg	☼	70	16 - 115
1,1-Dichloroethane	49	U	536	466		ug/Kg	☼	87	18 - 160
1,2-Dichloroethane	49	U	536	461		ug/Kg	☼	86	25 - 150
1,1-Dichloroethene	49	U	536	546		ug/Kg	☼	102	10 - 179
1,2-Dichloropropane	49	U	536	468		ug/Kg	☼	87	58 - 118
cis-1,3-Dichloropropene	49	U	536	313		ug/Kg	☼	58	19 - 121
trans-1,3-Dichloropropene	49	U	536	316		ug/Kg	☼	59	10 - 136
Ethylbenzene	49	U	536	475		ug/Kg	☼	89	27 - 143
2-Hexanone	2500	U	1070	1130	J	ug/Kg	☼	105	21 - 141
Methylene Chloride	250	U	536	552		ug/Kg	☼	103	10 - 148
4-Methyl-2-pentanone (MIBK)	2500	U	1070	1010	J	ug/Kg	☼	94	19 - 151
Styrene	49	U	536	437		ug/Kg	☼	81	31 - 137
1,1,2,2-Tetrachloroethane	49	U	536	401		ug/Kg	☼	75	16 - 158
Tetrachloroethene	49	U	536	485		ug/Kg	☼	91	19 - 153
Toluene	98	U	536	486		ug/Kg	☼	91	10 - 168
Trichloroethene	49	U	536	470		ug/Kg	☼	88	10 - 193
Vinyl chloride	39	U	536	400		ug/Kg	☼	75	15 - 123

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-7846-12 MS
Matrix: Solid
Analysis Batch: 31614

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31125

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	150	U	1610	1370		ug/Kg	☼	85	16 - 150
1,1,1-Trichloroethane	49	U	536	382		ug/Kg	☼	71	10 - 159
1,1,2-Trichloroethane	49	U	536	468		ug/Kg	☼	87	34 - 152
Cyclohexane	1200	U	536	534	J	ug/Kg	☼	100	10 - 154
1,2-Dibromo-3-Chloropropane	250	U	536	219		ug/Kg	☼	41	10 - 137
1,2-Dibromoethane	250	U	536	410		ug/Kg	☼	77	32 - 127
Dichlorodifluoromethane	98	U	536	221		ug/Kg	☼	41	10 - 113
cis-1,2-Dichloroethene	49	U	536	440		ug/Kg	☼	82	34 - 137
trans-1,2-Dichloroethene	49	U	536	504		ug/Kg	☼	94	40 - 126
Isopropylbenzene	250	U	536	462		ug/Kg	☼	86	39 - 126
Methyl acetate	1200	U	536	734	J	ug/Kg	☼	137	10 - 175
Methyl tert-butyl ether	250	U	536	522		ug/Kg	☼	97	26 - 159
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	536	492		ug/Kg	☼	92	23 - 168
1,2,4-Trichlorobenzene	250	U	536	442		ug/Kg	☼	83	10 - 136
1,2-Dichlorobenzene	98	U	536	454		ug/Kg	☼	85	27 - 126
1,3-Dichlorobenzene	98	U	536	447		ug/Kg	☼	83	29 - 124
1,4-Dichlorobenzene	98	U	536	439		ug/Kg	☼	82	30 - 123
Trichlorofluoromethane	98	U	536	573		ug/Kg	☼	107	10 - 157
Dibromochloromethane	49	U	536	240		ug/Kg	☼	45	10 - 128
Methylcyclohexane	1200	U	536	451	J	ug/Kg	☼	84	11 - 156

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*72*		*39 - 128*
4-Bromofluorobenzene (Surr)	*73*		*26 - 141*
Toluene-d8 (Surr)	*78*		*33 - 134*
Dibromofluoromethane (Surr)	*68*		*30 - 122*

Lab Sample ID: 240-7846-12 MSD
Matrix: Solid
Analysis Batch: 31614

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31125

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	740	U	1150	1330		ug/Kg	☼	116	10 - 142	13	30
Benzene	49	U	575	536		ug/Kg	☼	93	10 - 199	13	30
Bromodichloromethane	98	U	575	363		ug/Kg	☼	63	18 - 133	14	30
Bromoform	98	U	575	227		ug/Kg	☼	39	10 - 147	13	30
Bromomethane	250	U *	575	627		ug/Kg	☼	109	10 - 151	9	30
2-Butanone (MEK)	740	U	1150	1100		ug/Kg	☼	96	10 - 172	14	30
Carbon disulfide	250	U	575	528		ug/Kg	☼	92	10 - 155	18	30
Carbon tetrachloride	49	U	575	417		ug/Kg	☼	73	12 - 135	16	30
Chlorobenzene	49	U	575	516		ug/Kg	☼	90	47 - 118	12	30
Chloroethane	250	U *	575	627		ug/Kg	☼	109	10 - 168	4	30
Chloroform	49	U	575	509		ug/Kg	☼	88	51 - 120	15	30
Chloromethane	250	U	575	410		ug/Kg	☼	71	16 - 115	9	30
1,1-Dichloroethane	49	U	575	539		ug/Kg	☼	94	18 - 160	15	30
1,2-Dichloroethane	49	U	575	517		ug/Kg	☼	90	25 - 150	11	30
1,1-Dichloroethene	49	U	575	644		ug/Kg	☼	112	10 - 179	16	30
1,2-Dichloropropane	49	U	575	542		ug/Kg	☼	94	58 - 118	15	30
cis-1,3-Dichloropropene	49	U	575	369		ug/Kg	☼	64	19 - 121	16	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-7846-12 MSD
Matrix: Solid
Analysis Batch: 31614

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31125

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	49	U	575	383		ug/Kg	☼	67	10 - 136	19	30
Ethylbenzene	49	U	575	520		ug/Kg	☼	90	27 - 143	9	30
2-Hexanone	2500	U	1150	1260	J	ug/Kg	☼	110	21 - 141	11	30
Methylene Chloride	250	U	575	644		ug/Kg	☼	112	10 - 148	15	30
4-Methyl-2-pentanone (MIBK)	2500	U	1150	1190	J	ug/Kg	☼	103	19 - 151	16	30
Styrene	49	U	575	520		ug/Kg	☼	90	31 - 137	18	30
1,1,2,2-Tetrachloroethane	49	U	575	502		ug/Kg	☼	87	16 - 158	22	30
Tetrachloroethene	49	U	575	546		ug/Kg	☼	95	19 - 153	12	30
Toluene	98	U	575	550		ug/Kg	☼	96	10 - 168	12	30
Trichloroethene	49	U	575	522		ug/Kg	☼	91	10 - 193	11	30
Vinyl chloride	39	U	575	470		ug/Kg	☼	82	15 - 123	16	30
Xylenes, Total	150	U	1720	1540		ug/Kg	☼	89	16 - 150	11	30
1,1,1-Trichloroethane	49	U	575	448		ug/Kg	☼	78	10 - 159	16	30
1,1,2-Trichloroethane	49	U	575	521		ug/Kg	☼	91	34 - 152	11	30
Cyclohexane	1200	U	575	408	J	ug/Kg	☼	71	10 - 154	27	30
1,2-Dibromo-3-Chloropropane	250	U	575	268		ug/Kg	☼	47	10 - 137	20	30
1,2-Dibromoethane	250	U	575	458		ug/Kg	☼	80	32 - 127	11	30
Dichlorodifluoromethane	98	U	575	235		ug/Kg	☼	41	10 - 113	6	30
cis-1,2-Dichloroethene	49	U	575	492		ug/Kg	☼	86	34 - 137	11	30
trans-1,2-Dichloroethene	49	U	575	581		ug/Kg	☼	101	40 - 126	14	30
Isopropylbenzene	250	U	575	517		ug/Kg	☼	90	39 - 126	11	30
Methyl acetate	1200	U	575	845	J	ug/Kg	☼	147	10 - 175	14	30
Methyl tert-butyl ether	250	U	575	581		ug/Kg	☼	101	26 - 159	11	30
1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	575	544		ug/Kg	☼	95	23 - 168	10	30
1,2,4-Trichlorobenzene	250	U	575	529		ug/Kg	☼	92	10 - 136	18	30
1,2-Dichlorobenzene	98	U	575	523		ug/Kg	☼	91	27 - 126	14	30
1,3-Dichlorobenzene	98	U	575	521		ug/Kg	☼	91	29 - 124	15	30
1,4-Dichlorobenzene	98	U	575	515		ug/Kg	☼	89	30 - 123	16	30
Trichlorofluoromethane	98	U	575	598		ug/Kg	☼	104	10 - 157	4	30
Dibromochloromethane	49	U	575	279		ug/Kg	☼	48	10 - 128	15	30
Methylcyclohexane	1200	U	575	516	J	ug/Kg	☼	90	11 - 156	13	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*74*		*39 - 128*
4-Bromofluorobenzene (Surr)	*74*		*26 - 141*
Toluene-d8 (Surr)	*79*		*33 - 134*
Dibromofluoromethane (Surr)	*71*		*30 - 122*

Lab Sample ID: MB 240-31190/1-A
Matrix: Solid
Analysis Batch: 31435

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	600	U	600	170	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Benzene	40	U	40	12	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Bromodichloromethane	80	U	80	9.9	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Bromoform	80	U	80	19	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Bromomethane	200	U	200	29	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
2-Butanone (MEK)	600	U	600	43	ug/Kg		01/24/12 10:26	01/25/12 21:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-31190/1-A
Matrix: Solid
Analysis Batch: 31435

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	200	U	200	12	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Carbon tetrachloride	40	U	40	6.4	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Chlorobenzene	40	U	40	6.4	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Chloroethane	200	U	200	61	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Chloroform	40	U	40	8.8	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Chloromethane	200	U	200	14	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,1-Dichloroethane	40	U	40	17	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,2-Dichloroethane	40	U	40	10	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,1-Dichloroethene	40	U	40	18	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,2-Dichloropropane	40	U	40	8.2	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
cis-1,3-Dichloropropene	40	U	40	7.9	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
trans-1,3-Dichloropropene	40	U	40	20	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Ethylbenzene	40	U	40	5.4	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
2-Hexanone	2000	U	2000	20	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Methylene Chloride	200	U	200	77	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
4-Methyl-2-pentanone (MIBK)	2000	U	2000	48	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Styrene	40	U	40	5.6	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,1,2,2-Tetrachloroethane	40	U	40	8.9	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Tetrachloroethene	40	U	40	12	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Toluene	80	U	80	17	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Trichloroethene	40	U	40	9.7	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Vinyl chloride	32	U	32	18	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Xylenes, Total	120	U	120	8.1	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,1,1-Trichloroethane	40	U	40	21	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,1,2-Trichloroethane	40	U	40	12	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Cyclohexane	960	U	960	40	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,2-Dibromo-3-Chloropropane	200	U	200	50	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,2-Dibromoethane	200	U	200	10	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Dichlorodifluoromethane	80	U	80	16	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
cis-1,2-Dichloroethene	40	U	40	6.9	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
trans-1,2-Dichloroethene	40	U	40	9.2	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Isopropylbenzene	200	U	200	6.5	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Methyl acetate	960	U	960	25	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Methyl tert-butyl ether	200	U	200	7.1	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	39	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,2,4-Trichlorobenzene	200	U	200	7.3	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,2-Dichlorobenzene	80	U	80	8.6	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,3-Dichlorobenzene	80	U	80	4.8	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
1,4-Dichlorobenzene	80	U	80	8.0	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Trichlorofluoromethane	80	U	80	16	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Dibromochloromethane	40	U	40	12	ug/Kg		01/24/12 10:26	01/25/12 21:42	1
Methylcyclohexane	960	U	960	12	ug/Kg		01/24/12 10:26	01/25/12 21:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*76*		*39 - 128*	*01/24/12 10:26*	*01/25/12 21:42*	*1*
4-Bromofluorobenzene (Surr)	*78*		*26 - 141*	*01/24/12 10:26*	*01/25/12 21:42*	*1*
Toluene-d8 (Surr)	*84*		*33 - 134*	*01/24/12 10:26*	*01/25/12 21:42*	*1*
Dibromofluoromethane (Surr)	*74*		*30 - 122*	*01/24/12 10:26*	*01/25/12 21:42*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-31190/2-A
Matrix: Solid
Analysis Batch: 31435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31190

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	1000	905		ug/Kg		91	16 - 156
Benzene	500	491		ug/Kg		98	70 - 117
Bromodichloromethane	500	430		ug/Kg		86	28 - 123
Bromoform	500	261		ug/Kg		52	10 - 117
Bromomethane	500	700	*	ug/Kg		140	10 - 114
2-Butanone (MEK)	1000	995		ug/Kg		100	10 - 199
Carbon disulfide	500	494		ug/Kg		99	10 - 132
Carbon tetrachloride	500	455		ug/Kg		91	29 - 118
Chlorobenzene	500	482		ug/Kg		96	71 - 116
Chloroethane	500	650	*	ug/Kg		130	10 - 120
Chloroform	500	466		ug/Kg		93	63 - 116
Chloromethane	500	398		ug/Kg		80	25 - 110
1,1-Dichloroethane	500	500		ug/Kg		100	63 - 117
1,2-Dichloroethane	500	475		ug/Kg		95	68 - 119
1,1-Dichloroethene	500	600		ug/Kg		120	44 - 143
1,2-Dichloropropane	500	475		ug/Kg		95	73 - 113
cis-1,3-Dichloropropene	500	379		ug/Kg		76	25 - 120
trans-1,3-Dichloropropene	500	417		ug/Kg		83	22 - 122
Ethylbenzene	500	482		ug/Kg		96	66 - 119
2-Hexanone	1000	1120	J	ug/Kg		112	43 - 130
Methylene Chloride	500	560		ug/Kg		112	27 - 172
4-Methyl-2-pentanone (MIBK)	1000	970	J	ug/Kg		97	49 - 121
Styrene	500	472		ug/Kg		94	60 - 120
1,1,2,2-Tetrachloroethane	500	450		ug/Kg		90	54 - 121
Tetrachloroethene	500	480		ug/Kg		96	58 - 131
Toluene	500	510		ug/Kg		102	66 - 123
Trichloroethene	500	471		ug/Kg		94	59 - 124
Vinyl chloride	500	440		ug/Kg		88	33 - 110
Xylenes, Total	1500	1440		ug/Kg		96	68 - 119
1,1,1-Trichloroethane	500	463		ug/Kg		93	38 - 122
1,1,2-Trichloroethane	500	491		ug/Kg		98	74 - 114
Cyclohexane	500	425	J	ug/Kg		85	40 - 120
1,2-Dibromo-3-Chloropropane	500	346		ug/Kg		69	10 - 129
1,2-Dibromoethane	500	470		ug/Kg		94	47 - 123
Dichlorodifluoromethane	500	279		ug/Kg		56	10 - 110
cis-1,2-Dichloroethene	500	453		ug/Kg		91	60 - 125
trans-1,2-Dichloroethene	500	477		ug/Kg		95	58 - 121
Isopropylbenzene	500	484		ug/Kg		97	61 - 123
Methyl acetate	500	650	J	ug/Kg		130	44 - 173
Methyl tert-butyl ether	500	530		ug/Kg		106	34 - 157
1,1,2-Trichloro-1,2,2-trifluoroethane	500	555		ug/Kg		111	48 - 151
1,2,4-Trichlorobenzene	500	464		ug/Kg		93	41 - 135
1,2-Dichlorobenzene	500	478		ug/Kg		96	68 - 118
1,3-Dichlorobenzene	500	478		ug/Kg		96	66 - 121
1,4-Dichlorobenzene	500	474		ug/Kg		95	65 - 119
Trichlorofluoromethane	500	625		ug/Kg		125	17 - 145
Dibromochloromethane	500	336		ug/Kg		67	22 - 113
Methylcyclohexane	500	471	J	ug/Kg		94	41 - 133

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-31190/2-A
Matrix: Solid
Analysis Batch: 31435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31190

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*78*		*39 - 128*
4-Bromofluorobenzene (Surr)	*80*		*26 - 141*
Toluene-d8 (Surr)	*84*		*33 - 134*
Dibromofluoromethane (Surr)	*77*		*30 - 122*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-31328/23-A
Matrix: Solid
Analysis Batch: 31656

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31328

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	260	U	260	27	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2,2'-oxybis[1-chloropropane]	260	U	260	9.5	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2,4,5-Trichlorophenol	260	U	260	25	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2,4,6-Trichlorophenol	260	U	260	80	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2,4-Dichlorophenol	260	U	260	20	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2,4-Dimethylphenol	260	U	260	20	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2,4-Dinitrophenol	150	U	150	80	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2,4-Dinitrotoluene	260	U	260	27	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2,6-Dinitrotoluene	260	U	260	21	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2-Chloronaphthalene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2-Chlorophenol	260	U	260	27	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2-Methylnaphthalene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2-Methylphenol	260	U	260	80	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
2-Nitrophenol	260	U	260	27	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
3,3'-Dichlorobenzidine	1600	U	1600	18	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
3-Nitroaniline	200	U	200	16	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
4,6-Dinitro-2-methylphenol	150	U	150	80	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
4-Bromophenyl phenyl ether	260	U	260	13	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
4-Chloro-3-methylphenol	260	U	260	21	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
4-Chloroaniline	200	U	200	17	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
4-Chlorophenyl phenyl ether	260	U	260	13	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
4-Nitroaniline	200	U	200	26	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
4-Nitrophenol	330	U	330	80	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Acenaphthene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Acenaphthylene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Acetophenone	260	U	260	9.2	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Anthracene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Atrazine	40	U	40	9.1	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Benzaldehyde	260	U	260	12	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Benzo[a]anthracene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Benzo[a]pyrene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Benzo[b]fluoranthene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Benzo[g,h,i]perylene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Benzo[k]fluoranthene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Bis(2-chloroethoxy)methane	260	U	260	22	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Bis(2-chloroethyl)ether	80	U	80	2.0	ug/Kg		01/25/12 08:48	01/27/12 09:30	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-31328/23-A
Matrix: Solid
Analysis Batch: 31656

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31328

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-ethylhexyl) phthalate	260	U	260	19	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Butyl benzyl phthalate	260	U	260	10	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Caprolactam	260	U	260	37	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Carbazole	260	U	260	27	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Chrysene	260	U	260	1.1	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Dibenz(a,h)anthracene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Dibenzofuran	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Diethyl phthalate	260	U	260	16	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Dimethyl phthalate	260	U	260	17	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Di-n-butyl phthalate	260	U	260	15	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Di-n-octyl phthalate	260	U	260	27	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Fluoranthene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Fluorene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Hexachlorobenzene	260	U	260	2.1	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Hexachlorobutadiene	40	U	40	27	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Hexachlorocyclopentadiene	260	U	260	27	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Hexachloroethane	260	U	260	9.0	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Indeno[1,2,3-cd]pyrene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Isophorone	260	U	260	13	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Naphthalene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Nitrobenzene	260	U	260	2.2	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
N-Nitrosodi-n-propylamine	260	U	260	27	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
N-Nitrosodiphenylamine	260	U	260	21	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Pentachlorophenol	150	U	150	80	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Phenol	260	U	260	27	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Phenanthrene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
Pyrene	260	U	260	3.3	ug/Kg		01/25/12 08:48	01/27/12 09:30	1
3 & 4 Methylphenol	260	U	260	20	ug/Kg		01/25/12 08:48	01/27/12 09:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*63*		*34 - 110*	*01/25/12 08:48*	*01/27/12 09:30*	*1*
2-Fluorophenol (Surr)	*77*		*26 - 110*	*01/25/12 08:48*	*01/27/12 09:30*	*1*
2,4,6-Tribromophenol (Surr)	*54*		*10 - 118*	*01/25/12 08:48*	*01/27/12 09:30*	*1*
Nitrobenzene-d5 (Surr)	*75*		*24 - 112*	*01/25/12 08:48*	*01/27/12 09:30*	*1*
Phenol-d5 (Surr)	*77*		*28 - 110*	*01/25/12 08:48*	*01/27/12 09:30*	*1*
Terphenyl-d14 (Surr)	*80*		*41 - 119*	*01/25/12 08:48*	*01/27/12 09:30*	*1*

Lab Sample ID: LCS 240-31328/24-A
Matrix: Solid
Analysis Batch: 31656

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	461		ug/Kg		69	50 - 130
2,2'-oxybis[1-chloropropane]	667	553		ug/Kg		83	36 - 116
2,4,5-Trichlorophenol	667	452		ug/Kg		68	42 - 110
2,4,6-Trichlorophenol	667	461		ug/Kg		69	37 - 110
2,4-Dichlorophenol	667	507		ug/Kg		76	40 - 110
2,4-Dimethylphenol	667	395		ug/Kg		59	28 - 110
2,4-Dinitrophenol	667	276		ug/Kg		41	10 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-31328/24-A
Matrix: Solid
Analysis Batch: 31656

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31328

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	667	525		ug/Kg		79	55 - 116
2,6-Dinitrotoluene	667	525		ug/Kg		79	54 - 115
2-Chloronaphthalene	667	467		ug/Kg		70	46 - 110
2-Chlorophenol	667	511		ug/Kg		77	39 - 110
2-Methylnaphthalene	667	492		ug/Kg		74	46 - 110
2-Methylphenol	667	512		ug/Kg		77	36 - 110
2-Nitroaniline	667	533		ug/Kg		80	47 - 124
2-Nitrophenol	667	486		ug/Kg		73	35 - 110
3,3'-Dichlorobenzidine	667	321	J	ug/Kg		48	31 - 110
3-Nitroaniline	667	426		ug/Kg		64	44 - 110
4,6-Dinitro-2-methylphenol	667	383		ug/Kg		57	21 - 110
4-Bromophenyl phenyl ether	667	475		ug/Kg		71	53 - 112
4-Chloro-3-methylphenol	667	543		ug/Kg		81	42 - 110
4-Chloroaniline	667	319		ug/Kg		48	25 - 110
4-Chlorophenyl phenyl ether	667	484		ug/Kg		73	53 - 110
4-Nitroaniline	667	467		ug/Kg		70	50 - 110
4-Nitrophenol	667	543		ug/Kg		81	24 - 117
Acenaphthene	667	469		ug/Kg		70	46 - 110
Acenaphthylene	667	481		ug/Kg		72	47 - 110
Acetophenone	667	519		ug/Kg		78	50 - 130
Anthracene	667	496		ug/Kg		74	56 - 111
Atrazine	667	554		ug/Kg		83	50 - 130
Benzaldehyde	667	627		ug/Kg		94	10 - 130
Benzo[a]anthracene	667	533		ug/Kg		80	58 - 111
Benzo[a]pyrene	667	444		ug/Kg		67	44 - 115
Benzo[b]fluoranthene	667	539		ug/Kg		81	43 - 124
Benzo[g,h,i]perylene	667	517		ug/Kg		77	44 - 120
Benzo[k]fluoranthene	667	436		ug/Kg		65	38 - 122
Bis(2-chloroethoxy)methane	667	524		ug/Kg		79	42 - 110
Bis(2-chloroethyl)ether	667	540		ug/Kg		81	41 - 110
Bis(2-ethylhexyl) phthalate	667	534		ug/Kg		80	56 - 123
Butyl benzyl phthalate	667	511		ug/Kg		77	57 - 121
Caprolactam	667	524		ug/Kg		79	50 - 130
Carbazole	667	487		ug/Kg		73	56 - 115
Chrysene	667	480		ug/Kg		72	56 - 111
Dibenz(a,h)anthracene	667	501		ug/Kg		75	45 - 122
Dibenzofuran	667	474		ug/Kg		71	50 - 110
Diethyl phthalate	667	497		ug/Kg		75	55 - 114
Dimethyl phthalate	667	492		ug/Kg		74	54 - 112
Di-n-butyl phthalate	667	527		ug/Kg		79	57 - 119
Di-n-octyl phthalate	667	548		ug/Kg		82	45 - 123
Fluoranthene	667	503		ug/Kg		75	55 - 118
Fluorene	667	481		ug/Kg		72	51 - 110
Hexachlorobenzene	667	463		ug/Kg		69	51 - 110
Hexachlorobutadiene	667	511		ug/Kg		77	39 - 110
Hexachlorocyclopentadiene	667	407		ug/Kg		61	10 - 110
Hexachloroethane	667	491		ug/Kg		74	38 - 110
Indeno[1,2,3-cd]pyrene	667	496		ug/Kg		74	45 - 121
Isophorone	667	542		ug/Kg		81	46 - 117
Naphthalene	667	511		ug/Kg		77	42 - 110

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-31328/24-A
Matrix: Solid
Analysis Batch: 31656

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31328

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrobenzene			667	561		ug/Kg		84	40 - 110		
N-Nitrosodi-n-propylamine			667	565		ug/Kg		85	40 - 114		
N-Nitrosodiphenylamine			667	447		ug/Kg		67	54 - 112		
Pentachlorophenol			667	244		ug/Kg		37	10 - 110		
Phenol			667	551		ug/Kg		83	39 - 110		
Phenanthrene			667	498		ug/Kg		75	54 - 110		
Pyrene			667	492		ug/Kg		74	58 - 113		
3 & 4 Methylphenol			1330	1070		ug/Kg		80	40 - 110		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*67*		*34 - 110*
2-Fluorophenol (Surr)	*83*		*26 - 110*
2,4,6-Tribromophenol (Surr)	*66*		*10 - 118*
Nitrobenzene-d5 (Surr)	*85*		*24 - 112*
Phenol-d5 (Surr)	*81*		*28 - 110*
Terphenyl-d14 (Surr)	*80*		*41 - 119*

Lab Sample ID: 240-7846-12 MS
Matrix: Solid
Analysis Batch: 31656

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31328

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1'-Biphenyl	300	U	754	479		ug/Kg	☼	64	50 - 130		
2,2'-oxybis[1-chloropropane]	300	U	754	478		ug/Kg	☼	63	25 - 124		
2,4,5-Trichlorophenol	300	U	754	503		ug/Kg	☼	67	32 - 112		
2,4,6-Trichlorophenol	300	U	754	427		ug/Kg	☼	57	22 - 110		
2,4-Dichlorophenol	300	U	754	552		ug/Kg	☼	73	33 - 110		
2,4-Dimethylphenol	300	U	754	546		ug/Kg	☼	72	19 - 114		
2,4-Dinitrophenol	170	U	754	311		ug/Kg	☼	41	10 - 110		
2,4-Dinitrotoluene	300	U	754	543		ug/Kg	☼	72	42 - 118		
2,6-Dinitrotoluene	300	U	754	564		ug/Kg	☼	75	28 - 137		
2-Chloronaphthalene	300	U	754	478		ug/Kg	☼	63	40 - 110		
2-Chlorophenol	300	U	754	474		ug/Kg	☼	63	32 - 110		
2-Methylnaphthalene	300	U	754	495		ug/Kg	☼	66	10 - 200		
2-Methylphenol	300	U	754	532		ug/Kg	☼	71	19 - 124		
2-Nitroaniline	230	U	754	580		ug/Kg	☼	77	31 - 141		
2-Nitrophenol	300	U	754	449		ug/Kg	☼	60	17 - 110		
3,3'-Dichlorobenzidine	1800	U	754	193	J	ug/Kg	☼	26	10 - 110		
3-Nitroaniline	230	U	754	451		ug/Kg	☼	60	24 - 110		
4,6-Dinitro-2-methylphenol	170	U	754	393		ug/Kg	☼	52	10 - 110		
4-Bromophenyl phenyl ether	300	U	754	529		ug/Kg	☼	70	44 - 120		
4-Chloro-3-methylphenol	300	U	754	612		ug/Kg	☼	81	32 - 117		
4-Chloroaniline	230	U	754	378		ug/Kg	☼	50	11 - 110		
4-Chlorophenyl phenyl ether	300	U	754	551		ug/Kg	☼	73	47 - 116		
4-Nitroaniline	230	U	754	509		ug/Kg	☼	67	23 - 124		
4-Nitrophenol	370	U	754	562		ug/Kg	☼	74	10 - 125		
Acenaphthene	300	U	754	497		ug/Kg	☼	66	10 - 200		
Acenaphthylene	300	U	754	513		ug/Kg	☼	68	10 - 200		
Acetophenone	300	U	754	464		ug/Kg	☼	62	50 - 130		

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-7846-12 MS
Matrix: Solid
Analysis Batch: 31656

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31328

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Anthracene	300	U	754	540		ug/Kg	☼	72	10 - 200
Atrazine	45	U	754	611		ug/Kg	☼	81	50 - 130
Benzaldehyde	300	U	754	467		ug/Kg	☼	62	10 - 130
Benzo[a]anthracene	300	U	754	532		ug/Kg	☼	71	10 - 200
Benzo[a]pyrene	300	U	754	472		ug/Kg	☼	63	10 - 200
Benzo[b]fluoranthene	300	U	754	548		ug/Kg	☼	73	10 - 200
Benzo[g,h,i]perylene	300	U	754	574		ug/Kg	☼	76	10 - 200
Benzo[k]fluoranthene	300	U	754	520		ug/Kg	☼	69	10 - 200
Bis(2-chloroethoxy)methane	300	U	754	478		ug/Kg	☼	63	36 - 110
Bis(2-chloroethyl)ether	90	U	754	522		ug/Kg	☼	69	32 - 118
Bis(2-ethylhexyl) phthalate	37	J	754	631		ug/Kg	☼	79	10 - 200
Butyl benzyl phthalate	300	U	754	576		ug/Kg	☼	76	43 - 138
Caprolactam	300	U	754	583		ug/Kg	☼	77	50 - 130
Carbazole	300	U	754	537		ug/Kg	☼	71	10 - 162
Chrysene	300	U	754	556		ug/Kg	☼	74	10 - 200
Dibenz(a,h)anthracene	300	U	754	563		ug/Kg	☼	75	10 - 200
Dibenzofuran	300	U	754	516		ug/Kg	☼	68	10 - 200
Diethyl phthalate	300	U	754	556		ug/Kg	☼	74	48 - 118
Dimethyl phthalate	300	U	754	542		ug/Kg	☼	72	47 - 116
Di-n-butyl phthalate	300	U	754	603		ug/Kg	☼	80	31 - 145
Di-n-octyl phthalate	300	U	754	630		ug/Kg	☼	84	10 - 182
Fluoranthene	300	U	754	573		ug/Kg	☼	76	10 - 200
Fluorene	300	U	754	534		ug/Kg	☼	71	10 - 187
Hexachlorobenzene	300	U	754	531		ug/Kg	☼	70	37 - 122
Hexachlorobutadiene	45	U	754	478		ug/Kg	☼	63	30 - 110
Hexachlorocyclopentadiene	300	U	754	176	J	ug/Kg	☼	23	10 - 110
Hexachloroethane	300	U	754	434		ug/Kg	☼	58	13 - 110
Indeno[1,2,3-cd]pyrene	300	U	754	561		ug/Kg	☼	74	10 - 200
Isophorone	300	U	754	489		ug/Kg	☼	65	32 - 129
Naphthalene	300	U	754	473		ug/Kg	☼	63	10 - 200
Nitrobenzene	300	U	754	487		ug/Kg	☼	65	33 - 111
N-Nitrosodi-n-propylamine	300	U	754	479		ug/Kg	☼	64	30 - 121
N-Nitrosodiphenylamine	300	U	754	515		ug/Kg	☼	68	10 - 169
Pentachlorophenol	170	U	754	249		ug/Kg	☼	33	10 - 182
Phenol	300	U	754	508		ug/Kg	☼	67	10 - 144
Phenanthrene	300	U	754	559		ug/Kg	☼	74	10 - 200
Pyrene	300	U	754	542		ug/Kg	☼	72	10 - 200
3 & 4 Methylphenol	300	U	1510	1090		ug/Kg	☼	72	27 - 116

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*62*		*34 - 110*
2-Fluorophenol (Surr)	*64*		*26 - 110*
2,4,6-Tribromophenol (Surr)	*54*		*10 - 118*
Nitrobenzene-d5 (Surr)	*62*		*24 - 112*
Phenol-d5 (Surr)	*68*		*28 - 110*
Terphenyl-d14 (Surr)	*78*		*41 - 119*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-7846-12 MSD
Matrix: Solid
Analysis Batch: 31656

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31328

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	300	U	751	487		ug/Kg	☼	65	50 - 130	2	30
2,2'-oxybis[1-chloropropane]	300	U	751	524		ug/Kg	☼	70	25 - 124	9	30
2,4,5-Trichlorophenol	300	U	751	491		ug/Kg	☼	65	32 - 112	2	30
2,4,6-Trichlorophenol	300	U	751	405		ug/Kg	☼	54	22 - 110	5	30
2,4-Dichlorophenol	300	U	751	541		ug/Kg	☼	72	33 - 110	2	30
2,4-Dimethylphenol	300	U	751	549		ug/Kg	☼	73	19 - 114	1	30
2,4-Dinitrophenol	170	U	751	277		ug/Kg	☼	37	10 - 110	11	30
2,4-Dinitrotoluene	300	U	751	559		ug/Kg	☼	74	42 - 118	3	30
2,6-Dinitrotoluene	300	U	751	559		ug/Kg	☼	75	28 - 137	1	30
2-Chloronaphthalene	300	U	751	486		ug/Kg	☼	65	40 - 110	2	30
2-Chlorophenol	300	U	751	527		ug/Kg	☼	70	32 - 110	11	30
2-Methylnaphthalene	300	U	751	525		ug/Kg	☼	70	10 - 200	6	30
2-Methylphenol	300	U	751	581		ug/Kg	☼	77	19 - 124	9	30
2-Nitroaniline	230	U	751	583		ug/Kg	☼	78	31 - 141	1	30
2-Nitrophenol	300	U	751	491		ug/Kg	☼	65	17 - 110	9	30
3,3'-Dichlorobenzidine	1800	U	751	228	J	ug/Kg	☼	30	10 - 110	17	30
3-Nitroaniline	230	U	751	455		ug/Kg	☼	61	24 - 110	1	30
4,6-Dinitro-2-methylphenol	170	U	751	334		ug/Kg	☼	45	10 - 110	16	30
4-Bromophenyl phenyl ether	300	U	751	497		ug/Kg	☼	66	44 - 120	6	30
4-Chloro-3-methylphenol	300	U	751	616		ug/Kg	☼	82	32 - 117	1	30
4-Chloroaniline	230	U	751	377		ug/Kg	☼	50	11 - 110	0	30
4-Chlorophenyl phenyl ether	300	U	751	539		ug/Kg	☼	72	47 - 116	2	30
4-Nitroaniline	230	U	751	499		ug/Kg	☼	66	23 - 124	2	30
4-Nitrophenol	370	U	751	560		ug/Kg	☼	75	10 - 125	0	30
Acenaphthene	300	U	751	506		ug/Kg	☼	67	10 - 200	2	30
Acenaphthylene	300	U	751	513		ug/Kg	☼	68	10 - 200	0	30
Acetophenone	300	U	751	514		ug/Kg	☼	69	50 - 130	10	30
Anthracene	300	U	751	516		ug/Kg	☼	69	10 - 200	5	30
Atrazine	45	U	751	583		ug/Kg	☼	78	50 - 130	5	30
Benzaldehyde	300	U	751	509		ug/Kg	☼	68	10 - 130	9	30
Benzo[a]anthracene	300	U	751	520		ug/Kg	☼	69	10 - 200	2	30
Benzo[a]pyrene	300	U	751	464		ug/Kg	☼	62	10 - 200	2	30
Benzo[b]fluoranthene	300	U	751	539		ug/Kg	☼	72	10 - 200	2	30
Benzo[g,h,i]perylene	300	U	751	549		ug/Kg	☼	73	10 - 200	4	30
Benzo[k]fluoranthene	300	U	751	496		ug/Kg	☼	66	10 - 200	5	30
Bis(2-chloroethoxy)methane	300	U	751	513		ug/Kg	☼	68	36 - 110	7	30
Bis(2-chloroethyl)ether	90	U	751	532		ug/Kg	☼	71	32 - 118	2	30
Bis(2-ethylhexyl) phthalate	37	J	751	578		ug/Kg	☼	72	10 - 200	9	30
Butyl benzyl phthalate	300	U	751	553		ug/Kg	☼	74	43 - 138	4	30
Caprolactam	300	U	751	583		ug/Kg	☼	78	50 - 130	0	30
Carbazole	300	U	751	513		ug/Kg	☼	68	10 - 162	5	30
Chrysene	300	U	751	535		ug/Kg	☼	71	10 - 200	4	30
Dibenz(a,h)anthracene	300	U	751	538		ug/Kg	☼	72	10 - 200	4	30
Dibenzofuran	300	U	751	523		ug/Kg	☼	70	10 - 200	1	30
Diethyl phthalate	300	U	751	544		ug/Kg	☼	73	48 - 118	2	30
Dimethyl phthalate	300	U	751	533		ug/Kg	☼	71	47 - 116	2	30
Di-n-butyl phthalate	300	U	751	562		ug/Kg	☼	75	31 - 145	7	30
Di-n-octyl phthalate	300	U	751	585		ug/Kg	☼	78	10 - 182	7	30
Fluoranthene	300	U	751	538		ug/Kg	☼	72	10 - 200	6	30

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-7846-12 MSD
Matrix: Solid
Analysis Batch: 31656

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31328

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluorene	300	U	751	541		ug/Kg	☼	72	10 - 187	1	30
Hexachlorobenzene	300	U	751	505		ug/Kg	☼	67	37 - 122	5	30
Hexachlorobutadiene	45	U	751	494		ug/Kg	☼	66	30 - 110	3	30
Hexachlorocyclopentadiene	300	U	751	151	J	ug/Kg	☼	20	10 - 110	15	30
Hexachloroethane	300	U	751	455		ug/Kg	☼	61	13 - 110	5	30
Indeno[1,2,3-cd]pyrene	300	U	751	526		ug/Kg	☼	70	10 - 200	6	30
Isophorone	300	U	751	520		ug/Kg	☼	69	32 - 129	6	30
Naphthalene	300	U	751	508		ug/Kg	☼	68	10 - 200	7	30
Nitrobenzene	300	U	751	523		ug/Kg	☼	70	33 - 111	7	30
N-Nitrosodi-n-propylamine	300	U	751	547		ug/Kg	☼	73	30 - 121	13	30
N-Nitrosodiphenylamine	300	U	751	480		ug/Kg	☼	64	10 - 169	7	30
Pentachlorophenol	170	U	751	159	J F	ug/Kg	☼	21	10 - 182	44	30
Phenol	300	U	751	570		ug/Kg	☼	76	10 - 144	11	30
Phenanthrene	300	U	751	535		ug/Kg	☼	71	10 - 200	4	30
Pyrene	300	U	751	517		ug/Kg	☼	69	10 - 200	5	30
3 & 4 Methylphenol	300	U	1500	1180		ug/Kg	☼	79	27 - 116	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*64*		*34 - 110*
2-Fluorophenol (Surr)	*71*		*26 - 110*
2,4,6-Tribromophenol (Surr)	*52*		*10 - 118*
Nitrobenzene-d5 (Surr)	*67*		*24 - 112*
Phenol-d5 (Surr)	*75*		*28 - 110*
Terphenyl-d14 (Surr)	*73*		*41 - 119*

Lab Sample ID: MB 240-31494/19-A
Matrix: Solid
Analysis Batch: 31833

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31494

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	260	U	260	27	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2,2'-oxybis[1-chloropropane]	260	U	260	9.5	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2,4,5-Trichlorophenol	260	U	260	25	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2,4,6-Trichlorophenol	260	U	260	80	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2,4-Dichlorophenol	260	U	260	20	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2,4-Dimethylphenol	260	U	260	20	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2,4-Dinitrophenol	150	U	150	80	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2,4-Dinitrotoluene	260	U	260	27	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2,6-Dinitrotoluene	260	U	260	21	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2-Chloronaphthalene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2-Chlorophenol	260	U	260	27	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2-Methylnaphthalene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2-Methylphenol	260	U	260	80	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2-Nitroaniline	200	U	200	9.1	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
2-Nitrophenol	260	U	260	27	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
3,3'-Dichlorobenzidine	1600	U	1600	18	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
3-Nitroaniline	200	U	200	16	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
4,6-Dinitro-2-methylphenol	150	U	150	80	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
4-Bromophenyl phenyl ether	260	U	260	13	ug/Kg		01/26/12 08:44	01/30/12 08:30	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-31494/19-A
Matrix: Solid
Analysis Batch: 31833

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31494

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	260	U	260	21	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
4-Chloroaniline	200	U	200	17	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
4-Chlorophenyl phenyl ether	260	U	260	13	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
4-Nitroaniline	200	U	200	26	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
4-Nitrophenol	330	U	330	80	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Acenaphthene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Acenaphthylene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Acetophenone	260	U	260	9.2	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Anthracene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Atrazine	40	U	40	9.1	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Benzaldehyde	260	U	260	12	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Benzo[a]anthracene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Benzo[a]pyrene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Benzo[b]fluoranthene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Benzo[g,h,i]perylene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Benzo[k]fluoranthene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Bis(2-chloroethoxy)methane	260	U	260	22	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Bis(2-chloroethyl)ether	80	U	80	2.0	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Bis(2-ethylhexyl) phthalate	260	U	260	19	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Butyl benzyl phthalate	260	U	260	10	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Caprolactam	260	U	260	37	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Carbazole	260	U	260	27	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Chrysene	260	U	260	1.1	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Dibenz(a,h)anthracene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Dibenzofuran	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Diethyl phthalate	260	U	260	16	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Dimethyl phthalate	260	U	260	17	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Di-n-butyl phthalate	260	U	260	15	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Di-n-octyl phthalate	260	U	260	27	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Fluoranthene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Fluorene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Hexachlorobenzene	260	U	260	2.1	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Hexachlorobutadiene	40	U	40	27	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Hexachlorocyclopentadiene	260	U	260	27	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Hexachloroethane	260	U	260	9.0	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Indeno[1,2,3-cd]pyrene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Isophorone	260	U	260	13	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Naphthalene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Nitrobenzene	260	U	260	2.2	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
N-Nitrosodi-n-propylamine	260	U	260	27	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
N-Nitrosodiphenylamine	260	U	260	21	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Pentachlorophenol	150	U	150	80	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Phenol	260	U	260	27	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Phenanthrene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
Pyrene	260	U	260	3.3	ug/Kg		01/26/12 08:44	01/30/12 08:30	1
3 & 4 Methylphenol	260	U	260	20	ug/Kg		01/26/12 08:44	01/30/12 08:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*45*		*34 - 110*	*01/26/12 08:44*	*01/30/12 08:30*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-31494/19-A
Matrix: Solid
Analysis Batch: 31833

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31494

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	52		26 - 110	01/26/12 08:44	01/30/12 08:30	1
2,4,6-Tribromophenol (Surr)	31		10 - 118	01/26/12 08:44	01/30/12 08:30	1
Nitrobenzene-d5 (Surr)	48		24 - 112	01/26/12 08:44	01/30/12 08:30	1
Phenol-d5 (Surr)	50		28 - 110	01/26/12 08:44	01/30/12 08:30	1
Terphenyl-d14 (Surr)	70		41 - 119	01/26/12 08:44	01/30/12 08:30	1

Lab Sample ID: LCS 240-31494/20-A
Matrix: Solid
Analysis Batch: 31833

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	431		ug/Kg		65	50 - 130
2,2'-oxybis[1-chloropropane]	667	499		ug/Kg		75	36 - 116
2,4,5-Trichlorophenol	667	477		ug/Kg		72	42 - 110
2,4,6-Trichlorophenol	667	433		ug/Kg		65	37 - 110
2,4-Dichlorophenol	667	485		ug/Kg		73	40 - 110
2,4-Dimethylphenol	667	358		ug/Kg		54	28 - 110
2,4-Dinitrophenol	667	342		ug/Kg		51	10 - 110
2,4-Dinitrotoluene	667	533		ug/Kg		80	55 - 116
2,6-Dinitrotoluene	667	539		ug/Kg		81	54 - 115
2-Chloronaphthalene	667	463		ug/Kg		69	46 - 110
2-Chlorophenol	667	477		ug/Kg		72	39 - 110
2-Methylnaphthalene	667	467		ug/Kg		70	46 - 110
2-Methylphenol	667	427		ug/Kg		64	36 - 110
2-Nitroaniline	667	519		ug/Kg		78	47 - 124
2-Nitrophenol	667	441		ug/Kg		66	35 - 110
3,3'-Dichlorobenzidine	667	299	J	ug/Kg		45	31 - 110
3-Nitroaniline	667	451		ug/Kg		68	44 - 110
4,6-Dinitro-2-methylphenol	667	384		ug/Kg		58	21 - 110
4-Bromophenyl phenyl ether	667	505		ug/Kg		76	53 - 112
4-Chloro-3-methylphenol	667	504		ug/Kg		76	42 - 110
4-Chloroaniline	667	315		ug/Kg		47	25 - 110
4-Chlorophenyl phenyl ether	667	481		ug/Kg		72	53 - 110
4-Nitroaniline	667	457		ug/Kg		69	50 - 110
4-Nitrophenol	667	431		ug/Kg		65	24 - 117
Acenaphthene	667	457		ug/Kg		69	46 - 110
Acenaphthylene	667	471		ug/Kg		71	47 - 110
Acetophenone	667	462		ug/Kg		69	50 - 130
Anthracene	667	511		ug/Kg		77	56 - 111
Atrazine	667	553		ug/Kg		83	50 - 130
Benzaldehyde	667	516		ug/Kg		77	10 - 130
Benzo[a]anthracene	667	487		ug/Kg		73	58 - 111
Benzo[a]pyrene	667	477		ug/Kg		71	44 - 115
Benzo[b]fluoranthene	667	457		ug/Kg		68	43 - 124
Benzo[g,h,i]perylene	667	526		ug/Kg		79	44 - 120
Benzo[k]fluoranthene	667	568		ug/Kg		85	38 - 122
Bis(2-chloroethoxy)methane	667	455		ug/Kg		68	42 - 110
Bis(2-chloroethyl)ether	667	469		ug/Kg		70	41 - 110
Bis(2-ethylhexyl) phthalate	667	529		ug/Kg		79	56 - 123

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-31494/20-A
Matrix: Solid
Analysis Batch: 31833

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31494

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Butyl benzyl phthalate	667	551		ug/Kg		83	57 - 121
Caprolactam	667	400		ug/Kg		60	50 - 130
Carbazole	667	503		ug/Kg		75	56 - 115
Chrysene	667	559		ug/Kg		84	56 - 111
Dibenz(a,h)anthracene	667	517		ug/Kg		78	45 - 122
Dibenzofuran	667	465		ug/Kg		70	50 - 110
Diethyl phthalate	667	501		ug/Kg		75	55 - 114
Dimethyl phthalate	667	502		ug/Kg		75	54 - 112
Di-n-butyl phthalate	667	531		ug/Kg		80	57 - 119
Di-n-octyl phthalate	667	511		ug/Kg		77	45 - 123
Fluoranthene	667	521		ug/Kg		78	55 - 118
Fluorene	667	487		ug/Kg		73	51 - 110
Hexachlorobenzene	667	485		ug/Kg		73	51 - 110
Hexachlorobutadiene	667	431		ug/Kg		65	39 - 110
Hexachlorocyclopentadiene	667	345		ug/Kg		52	10 - 110
Hexachloroethane	667	438		ug/Kg		66	38 - 110
Indeno[1,2,3-cd]pyrene	667	513		ug/Kg		77	45 - 121
Isophorone	667	464		ug/Kg		70	46 - 117
Naphthalene	667	449		ug/Kg		67	42 - 110
Nitrobenzene	667	458		ug/Kg		69	40 - 110
N-Nitrosodi-n-propylamine	667	477		ug/Kg		72	40 - 114
N-Nitrosodiphenylamine	667	469		ug/Kg		70	54 - 112
Pentachlorophenol	667	355		ug/Kg		53	10 - 110
Phenol	667	487		ug/Kg		73	39 - 110
Phenanthrene	667	501		ug/Kg		75	54 - 110
Pyrene	667	506		ug/Kg		76	58 - 113
3 & 4 Methylphenol	1330	980		ug/Kg		74	40 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*66*		*34 - 110*
2-Fluorophenol (Surr)	*74*		*26 - 110*
2,4,6-Tribromophenol (Surr)	*62*		*10 - 118*
Nitrobenzene-d5 (Surr)	*69*		*24 - 112*
Phenol-d5 (Surr)	*75*		*28 - 110*
Terphenyl-d14 (Surr)	*82*		*41 - 119*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-31327/23-A
Matrix: Solid
Analysis Batch: 31732

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31327

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	33	U	33	21	ug/Kg		01/25/12 08:39	01/27/12 20:15	1
Aroclor-1221	33	U	33	16	ug/Kg		01/25/12 08:39	01/27/12 20:15	1
Aroclor-1232	33	U	33	14	ug/Kg		01/25/12 08:39	01/27/12 20:15	1
Aroclor-1242	33	U	33	13	ug/Kg		01/25/12 08:39	01/27/12 20:15	1
Aroclor-1248	33	U	33	17	ug/Kg		01/25/12 08:39	01/27/12 20:15	1
Aroclor-1254	33	U	33	17	ug/Kg		01/25/12 08:39	01/27/12 20:15	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 240-31327/23-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31732 — **Prep Batch: 31327**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1260	33	U	33	17	ug/Kg		01/25/12 08:39	01/27/12 20:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*29 - 151*	*01/25/12 08:39*	*01/27/12 20:15*	*1*
DCB Decachlorobiphenyl	*61*		*14 - 163*	*01/25/12 08:39*	*01/27/12 20:15*	*1*

Lab Sample ID: LCS 240-31327/24-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31845 — **Prep Batch: 31327**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			333	258		ug/Kg		77	62 - 120		
Aroclor-1260			333	219		ug/Kg		66	56 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*92*		*29 - 151*
DCB Decachlorobiphenyl	*57*		*14 - 163*

Lab Sample ID: 240-7846-12 MS — **Client Sample ID: SO-17358-011812-DR-012**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31845 — **Prep Batch: 31327**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	37	U	376	301		ug/Kg	☼	80	22 - 157		
Aroclor-1260	37	U	376	266		ug/Kg	☼	71	13 - 161		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*29 - 151*
DCB Decachlorobiphenyl	*65*		*14 - 163*

Lab Sample ID: 240-7846-12 MSD — **Client Sample ID: SO-17358-011812-DR-012**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31845 — **Prep Batch: 31327**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	37	U	376	284		ug/Kg	☼	75	22 - 157	6	30
Aroclor-1260	37	U	376	247		ug/Kg	☼	66	13 - 161	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*74*		*29 - 151*
DCB Decachlorobiphenyl	*60*		*14 - 163*

Lab Sample ID: MB 240-31338/23-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31740 — **Prep Batch: 31338**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	33	U	33	21	ug/Kg		01/25/12 09:38	01/28/12 12:49	1
Aroclor-1221	33	U	33	16	ug/Kg		01/25/12 09:38	01/28/12 12:49	1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: MB 240-31338/23-A
Matrix: Solid
Analysis Batch: 31740

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31338

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1232	33	U	33	14	ug/Kg		01/25/12 09:38	01/28/12 12:49	1
Aroclor-1242	33	U	33	13	ug/Kg		01/25/12 09:38	01/28/12 12:49	1
Aroclor-1248	33	U	33	17	ug/Kg		01/25/12 09:38	01/28/12 12:49	1
Aroclor-1254	33	U	33	17	ug/Kg		01/25/12 09:38	01/28/12 12:49	1
Aroclor-1260	33	U	33	17	ug/Kg		01/25/12 09:38	01/28/12 12:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*85*		*29 - 151*	*01/25/12 09:38*	*01/28/12 12:49*	*1*
DCB Decachlorobiphenyl	*65*		*14 - 163*	*01/25/12 09:38*	*01/28/12 12:49*	*1*

Lab Sample ID: LCS 240-31338/24-A
Matrix: Solid
Analysis Batch: 31740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31338

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			333	310		ug/Kg		93	62 - 120		
Aroclor-1260			333	298		ug/Kg		89	56 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*90*		*29 - 151*
DCB Decachlorobiphenyl	*77*		*14 - 163*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-31063/1-A
Matrix: Solid
Analysis Batch: 31467

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16	U	16	9.6	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Barium	0.124	J	0.80	0.071	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Beryllium	0.16	U	0.16	0.043	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Calcium	17.8	J	400	16	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Cadmium	0.080	U	0.080	0.036	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Cobalt	0.40	U	0.40	0.16	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Chromium	0.80	U	0.80	0.20	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Copper	0.80	U	0.80	0.74	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Iron	8.0	U	8.0	4.9	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Potassium	23.2	J	400	6.2	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Magnesium	21.2	J	80	5.1	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Manganese	0.80	U	0.80	0.074	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Sodium	80	U	80	66	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Nickel	0.80	U	0.80	0.27	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Vanadium	0.80	U	0.80	0.12	mg/Kg		01/23/12 09:37	01/25/12 13:16	1
Lead	0.24	U	0.24	0.19	mg/Kg		01/23/12 09:37	01/25/12 13:16	1

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: LCS 240-31063/2-A
Matrix: Solid
Analysis Batch: 31467

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	200	209		mg/Kg		105	80 - 120
Barium	200	206		mg/Kg		103	80 - 120
Beryllium	5.00	5.03		mg/Kg		101	80 - 120
Calcium	5000	5130		mg/Kg		103	80 - 120
Cadmium	5.00	5.00		mg/Kg		100	80 - 120
Cobalt	50.0	49.4		mg/Kg		99	80 - 120
Chromium	20.0	20.0		mg/Kg		100	80 - 120
Copper	25.0	24.7		mg/Kg		99	80 - 120
Iron	100	104		mg/Kg		104	80 - 120
Potassium	5000	5220		mg/Kg		104	80 - 120
Magnesium	5000	4980		mg/Kg		100	80 - 120
Manganese	50.0	50.4		mg/Kg		101	80 - 120
Sodium	5000	5110		mg/Kg		102	80 - 120
Nickel	50.0	49.1		mg/Kg		98	80 - 120
Vanadium	50.0	49.5		mg/Kg		99	80 - 120
Lead	50.0	49.4		mg/Kg		99	80 - 120

Lab Sample ID: 240-7846-12 MS
Matrix: Solid
Analysis Batch: 31467

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31063

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	3300		219	3970	4	mg/Kg	☼	316	75 - 125
Barium	13	B	219	230		mg/Kg	☼	99	75 - 125
Beryllium	0.17	U	5.48	5.21		mg/Kg	☼	95	75 - 125
Calcium	6900	B	5480	9800	F	mg/Kg	☼	52	75 - 125
Cadmium	0.084	J	5.48	5.28		mg/Kg	☼	95	75 - 125
Cobalt	2.9		54.8	54.9		mg/Kg	☼	95	75 - 125
Chromium	7.9		21.9	29.4		mg/Kg	☼	98	75 - 125
Copper	6.8		27.4	32.7		mg/Kg	☼	95	75 - 125
Iron	9400		110	9580	4	mg/Kg	☼	118	75 - 125
Potassium	260	J B	5480	5800		mg/Kg	☼	101	75 - 125
Magnesium	2200	B	5480	7230		mg/Kg	☼	93	75 - 125
Manganese	110		54.8	146	F	mg/Kg	☼	60	75 - 125
Sodium	87	U	5480	5400		mg/Kg	☼	99	75 - 125
Nickel	8.2		54.8	60.0		mg/Kg	☼	95	75 - 125
Vanadium	13		54.8	66.4		mg/Kg	☼	97	75 - 125
Lead	5.4		54.8	62.7		mg/Kg	☼	105	75 - 125

Lab Sample ID: 240-7846-12 MSD
Matrix: Solid
Analysis Batch: 31467

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31063

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	3300		219	4310	4	mg/Kg	☼	475	75 - 125	8	20
Barium	13	B	219	242		mg/Kg	☼	104	75 - 125	5	20
Beryllium	0.17	U	5.48	5.23		mg/Kg	☼	95	75 - 125	0	20
Calcium	6900	B	5480	11700		mg/Kg	☼	87	75 - 125	17	20
Cadmium	0.084	J	5.48	5.31		mg/Kg	☼	95	75 - 125	1	20
Cobalt	2.9		54.8	54.9		mg/Kg	☼	95	75 - 125	0	20

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 240-7846-12 MSD
Matrix: Solid
Analysis Batch: 31467

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31063

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	7.9		21.9	29.8		mg/Kg	☼	100	75 - 125	1	20
Copper	6.8		27.4	32.8		mg/Kg	☼	95	75 - 125	0	20
Iron	9400		110	9380	4	mg/Kg	☼	-59	75 - 125	2	20
Potassium	260	J B	5480	5880		mg/Kg	☼	103	75 - 125	1	20
Magnesium	2200	B	5480	7490		mg/Kg	☼	97	75 - 125	4	20
Manganese	110		54.8	264	F	mg/Kg	☼	275	75 - 125	57	20
Sodium	87	U	5480	5380		mg/Kg	☼	98	75 - 125	0	20
Nickel	8.2		54.8	60.2		mg/Kg	☼	95	75 - 125	0	20
Vanadium	13		54.8	66.3		mg/Kg	☼	97	75 - 125	0	20
Lead	5.4		54.8	59.7		mg/Kg	☼	99	75 - 125	5	20

Lab Sample ID: MB 240-31192/1-A
Matrix: Solid
Analysis Batch: 31467

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	16	U	16	9.6	mg/Kg		01/24/12 10:41	01/25/12 16:26	1
Barium	0.173	J	0.80	0.071	mg/Kg		01/24/12 10:41	01/25/12 16:26	1
Beryllium	0.16	U	0.16	0.043	mg/Kg		01/24/12 10:41	01/25/12 16:26	1
Cadmium	0.080	U	0.080	0.036	mg/Kg		01/24/12 10:41	01/25/12 16:26	1
Cobalt	0.40	U	0.40	0.16	mg/Kg		01/24/12 10:41	01/25/12 16:26	1
Chromium	0.80	U	0.80	0.20	mg/Kg		01/24/12 10:41	01/25/12 16:26	1
Copper	0.80	U	0.80	0.74	mg/Kg		01/24/12 10:41	01/25/12 16:26	1
Iron	8.0	U	8.0	4.9	mg/Kg		01/24/12 10:41	01/25/12 16:26	1
Manganese	0.0815	J	0.80	0.074	mg/Kg		01/24/12 10:41	01/25/12 16:26	1
Nickel	0.80	U	0.80	0.27	mg/Kg		01/24/12 10:41	01/25/12 16:26	1
Vanadium	0.80	U	0.80	0.12	mg/Kg		01/24/12 10:41	01/25/12 16:26	1
Lead	0.24	U	0.24	0.19	mg/Kg		01/24/12 10:41	01/25/12 16:26	1

Lab Sample ID: LCS 240-31192/2-A
Matrix: Solid
Analysis Batch: 31467

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31192

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	200	207		mg/Kg		103	80 - 120
Barium	200	205		mg/Kg		102	80 - 120
Beryllium	5.00	5.01		mg/Kg		100	80 - 120
Cadmium	5.00	4.89		mg/Kg		98	80 - 120
Cobalt	50.0	48.2		mg/Kg		96	80 - 120
Chromium	20.0	19.6		mg/Kg		98	80 - 120
Copper	25.0	23.8		mg/Kg		95	80 - 120
Iron	100	102		mg/Kg		102	80 - 120
Manganese	50.0	49.4		mg/Kg		99	80 - 120
Nickel	50.0	48.8		mg/Kg		98	80 - 120
Vanadium	50.0	48.2		mg/Kg		96	80 - 120
Lead	50.0	48.6		mg/Kg		97	80 - 120

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 240-7846-19 MS
Matrix: Solid
Analysis Batch: 31467

Client Sample ID: SO-17358-011912-DR-019
Prep Type: Total/NA
Prep Batch: 31192

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	3900		216	6200	4	mg/Kg	☼	1068	75 - 125
Barium	19	B	216	233		mg/Kg	☼	99	75 - 125
Beryllium	0.17	U	5.41	5.14		mg/Kg	☼	95	75 - 125
Cadmium	0.087	U	5.41	4.84		mg/Kg	☼	89	75 - 125
Cobalt	1.6		54.1	51.2		mg/Kg	☼	92	75 - 125
Chromium	6.5		21.6	28.5		mg/Kg	☼	102	75 - 125
Copper	2.8		27.0	31.1		mg/Kg	☼	105	75 - 125
Iron	7000		108	16900	4	mg/Kg	☼	9086	75 - 125
Manganese	54	B	54.1	220	F	mg/Kg	☼	306	75 - 125
Nickel	4.2		54.1	55.9		mg/Kg	☼	95	75 - 125
Vanadium	13		54.1	71.5		mg/Kg	☼	109	75 - 125
Lead	4.5		54.1	55.6		mg/Kg	☼	94	75 - 125

Lab Sample ID: 240-7846-19 MSD
Matrix: Solid
Analysis Batch: 31467

Client Sample ID: SO-17358-011912-DR-019
Prep Type: Total/NA
Prep Batch: 31192

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	3900		216	7330	4	mg/Kg	☼	1592	75 - 125	17	20
Barium	19	B	216	234		mg/Kg	☼	100	75 - 125	0	20
Beryllium	0.17	U	5.41	5.02		mg/Kg	☼	93	75 - 125	2	20
Cadmium	0.087	U	5.41	4.94		mg/Kg	☼	91	75 - 125	2	20
Cobalt	1.6		54.1	51.6		mg/Kg	☼	93	75 - 125	1	20
Chromium	6.5		21.6	29.0		mg/Kg	☼	104	75 - 125	2	20
Copper	2.8		27.0	28.1		mg/Kg	☼	94	75 - 125	10	20
Iron	7000		108	8920	4 F	mg/Kg	☼	1743	75 - 125	62	20
Manganese	54	B	54.1	112	F	mg/Kg	☼	108	75 - 125	65	20
Nickel	4.2		54.1	55.9		mg/Kg	☼	96	75 - 125	0	20
Vanadium	13		54.1	66.9		mg/Kg	☼	100	75 - 125	7	20
Lead	4.5		54.1	53.7		mg/Kg	☼	91	75 - 125	3	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-31063/1-A
Matrix: Solid
Analysis Batch: 31861

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.16	U	0.16	0.024	mg/Kg		01/23/12 09:37	01/27/12 16:28	1
Arsenic	0.080	U	0.080	0.062	mg/Kg		01/23/12 09:37	01/27/12 16:28	1
Selenium	0.16	U	0.16	0.090	mg/Kg		01/23/12 09:37	01/27/12 16:28	1
Thallium	0.0132	J	0.080	0.013	mg/Kg		01/23/12 09:37	01/27/12 16:28	1
Zinc	0.407	J	0.80	0.20	mg/Kg		01/23/12 09:37	01/27/12 16:28	1
Silver	0.080	U	0.080	0.016	mg/Kg		01/23/12 09:37	01/27/12 16:28	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-31063/3-A
Matrix: Solid
Analysis Batch: 31861

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	10.0	8.89		mg/Kg		89	68 - 113
Arsenic	100	87.1		mg/Kg		87	73 - 110
Selenium	100	81.0		mg/Kg		81	65 - 110
Thallium	25.0	25.5		mg/Kg		102	71 - 110
Zinc	100	89.0		mg/Kg		89	72 - 113
Silver	10.0	9.83		mg/Kg		98	60 - 114

Lab Sample ID: 240-7846-12 MS
Matrix: Solid
Analysis Batch: 31861

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31063

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.067	J	11.0	4.72	F	mg/Kg	☼	42	75 - 125
Arsenic	4.2		110	99.0		mg/Kg	☼	87	23 - 131
Selenium	0.52		110	89.5		mg/Kg	☼	81	39 - 116
Thallium	0.12	B	27.4	26.4		mg/Kg	☼	96	62 - 110
Zinc	22	B	110	117		mg/Kg	☼	87	10 - 199
Silver	0.087	U	11.0	10.2		mg/Kg	☼	93	75 - 125

Lab Sample ID: 240-7846-12 MSD
Matrix: Solid
Analysis Batch: 31861

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31063

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.067	J	11.0	4.52	F	mg/Kg	☼	41	75 - 125	4	20
Arsenic	4.2		110	100		mg/Kg	☼	88	23 - 131	1	20
Selenium	0.52		110	91.1		mg/Kg	☼	83	39 - 116	2	20
Thallium	0.12	B	27.4	26.8		mg/Kg	☼	98	62 - 110	2	20
Zinc	22	B	110	118		mg/Kg	☼	88	10 - 199	1	20
Silver	0.087	U	11.0	10.1		mg/Kg	☼	93	75 - 125	1	20

Lab Sample ID: MB 240-31192/1-A
Matrix: Solid
Analysis Batch: 31995

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.16	U	0.16	0.024	mg/Kg		01/24/12 10:41	01/30/12 19:30	1
Arsenic	0.080	U	0.080	0.062	mg/Kg		01/24/12 10:41	01/30/12 19:30	1
Selenium	0.16	U	0.16	0.090	mg/Kg		01/24/12 10:41	01/30/12 19:30	1
Thallium	0.080	U	0.080	0.013	mg/Kg		01/24/12 10:41	01/30/12 19:30	1
Zinc	0.625	J	0.80	0.20	mg/Kg		01/24/12 10:41	01/30/12 19:30	1
Silver	0.080	U	0.080	0.016	mg/Kg		01/24/12 10:41	01/30/12 19:30	1

Lab Sample ID: LCS 240-31192/3-A
Matrix: Solid
Analysis Batch: 31995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31192

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	10.0	9.19		mg/Kg		92	68 - 113
Arsenic	100	87.9		mg/Kg		88	73 - 110

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-31192/3-A
Matrix: Solid
Analysis Batch: 31995

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31192

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	100	85.8		mg/Kg		86	65 - 110
Thallium	25.0	27.1		mg/Kg		108	71 - 110
Zinc	100	93.9		mg/Kg		94	72 - 113
Silver	10.0	9.87		mg/Kg		99	60 - 114

Lab Sample ID: 240-7846-19 MS
Matrix: Solid
Analysis Batch: 31995

Client Sample ID: SO-17358-011912-DR-019
Prep Type: Total/NA
Prep Batch: 31192

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.042	J	10.8	3.70	F	mg/Kg	☼	34	75 - 125
Arsenic	3.1		108	101		mg/Kg	☼	91	23 - 131
Selenium	0.36		108	99.1		mg/Kg	☼	91	39 - 116
Thallium	0.11		27.0	26.8		mg/Kg	☼	99	62 - 110
Zinc	12	B	108	125		mg/Kg	☼	105	10 - 199
Silver	0.087	U	10.8	9.80		mg/Kg	☼	91	75 - 125

Lab Sample ID: 240-7846-19 MSD
Matrix: Solid
Analysis Batch: 31995

Client Sample ID: SO-17358-011912-DR-019
Prep Type: Total/NA
Prep Batch: 31192

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.042	J	10.8	3.39	F	mg/Kg	☼	31	75 - 125	9	20
Arsenic	3.1		108	95.2		mg/Kg	☼	85	23 - 131	6	20
Selenium	0.36		108	89.6		mg/Kg	☼	83	39 - 116	10	20
Thallium	0.11		27.0	28.0		mg/Kg	☼	103	62 - 110	4	20
Zinc	12	B	108	116		mg/Kg	☼	96	10 - 199	8	20
Silver	0.087	U	10.8	9.98		mg/Kg	☼	92	75 - 125	2	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-31077/1-A
Matrix: Solid
Analysis Batch: 31078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31077

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	U	0.040	0.015	mg/Kg		01/23/12 13:15	01/23/12 14:31	1

Lab Sample ID: LCS 240-31077/2-A
Matrix: Solid
Analysis Batch: 31078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31077

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.789		mg/Kg		95	73 - 121

Lab Sample ID: 240-7846-12 MS
Matrix: Solid
Analysis Batch: 31078

Client Sample ID: SO-17358-011812-DR-012
Prep Type: Total/NA
Prep Batch: 31077

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.044	U	0.179	0.191		mg/Kg	☼	107	11 - 192

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: 240-7846-12 MSD — **Client Sample ID: SO-17358-011812-DR-012**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31078 — **Prep Batch: 31077**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.044	U	0.179	0.189		mg/Kg	☼	105	11 - 192	1	20

Lab Sample ID: MB 240-31214/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31868 — **Prep Batch: 31214**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040	U	0.040	0.015	mg/Kg		01/24/12 13:45	01/27/12 17:25	1

Lab Sample ID: LCS 240-31214/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31868 — **Prep Batch: 31214**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.836		mg/Kg		100	73 - 121

Lab Sample ID: 240-7846-19 MS — **Client Sample ID: SO-17358-011912-DR-019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31868 — **Prep Batch: 31214**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.041	U	0.175	0.201		mg/Kg	☼	115	11 - 192

Lab Sample ID: 240-7846-19 MSD — **Client Sample ID: SO-17358-011912-DR-019**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 31868 — **Prep Batch: 31214**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.041	U	0.175	0.201		mg/Kg	☼	115	11 - 192	0	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-31546/9-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 32492 — **Prep Batch: 31546**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.80	U	0.80	0.27	mg/Kg		01/26/12 11:07	02/02/12 00:00	1

Lab Sample ID: LCSI 240-31546/11-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 32492 — **Prep Batch: 31546**

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	643	592		mg/Kg		92	75 - 125

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: LCSS 240-31546/10-A
Matrix: Solid
Analysis Batch: 32492

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31546

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	19.7		mg/Kg		99	90 - 110

Lab Sample ID: MB 240-32298/9-A
Matrix: Solid
Analysis Batch: 32474

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32298

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.80	U	0.80	0.27	mg/Kg		02/01/12 15:29	02/02/12 00:00	1

Lab Sample ID: LCSI 240-32298/11-A
Matrix: Solid
Analysis Batch: 32474

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32298

Analyte	Spike Added	LCSI Result	LCSI Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	643	594		mg/Kg		92	75 - 125

Lab Sample ID: LCSS 240-32298/10-A
Matrix: Solid
Analysis Batch: 32474

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32298

Analyte	Spike Added	LCSS Result	LCSS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	20.0	19.7		mg/Kg		99	90 - 110

Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(39-128)	(26-141)	(33-134)	(30-122)
240-7846-1	SO-17358-011712-DR-001	76	76	83	71
240-7846-2	SO-17358-011712-DR-002	75	75	79	71
240-7846-3	SO-17358-011712-DR-003	77	78	84	74
240-7846-4	SO-17358-011712-DR-004	68	69	74	65
240-7846-5	SO-17358-011712-DR-005	75	74	81	69
240-7846-6	SO-17358-011712-DR-006	69	70	75	65
240-7846-7	SO-17358-011812-DR-007	77	75	83	71
240-7846-8	SO-17358-011812-DR-008	72	70	78	66
240-7846-9	SO-17358-011812-DR-009	75	75	84	67
240-7846-10	SO-17358-011812-DR-010	76	76	82	70
240-7846-11	SO-17358-011812-DR-011	72	71	79	65
240-7846-12	SO-17358-011812-DR-012	75	73	80	68
240-7846-12 MS	SO-17358-011812-DR-012	72	73	78	68
240-7846-12 MSD	SO-17358-011812-DR-012	74	74	79	71
240-7846-13	SO-17358-011812-DR-013	74	75	82	71
240-7846-14	SO-17358-011812-DR-014	79	69	78	72
240-7846-15	SO-17358-011812-DR-015	73	70	79	73
240-7846-16	SO-17358-011812-DR-016	70	66	75	66
240-7846-17	SO-17358-011812-DR-017	76	68	78	71
240-7846-18	SO-17358-011812-DR-018	78	68	81	72
240-7846-19	SO-17358-011912-DR-019	78	70	80	71
240-7846-20	SO-17358-011912-DR-020	79	70	79	74
240-7846-21	SO-17358-011912-DR-021	85	84	93	82
240-7846-22	SO-17358-011912-DR-022	72	72	79	70
240-7846-23	TB-17358-011712	76	77	82	70
LCS 240-31125/2-A	Lab Control Sample	81	81	87	79
LCS 240-31190/2-A	Lab Control Sample	78	80	84	77
MB 240-31125/1-A	Method Blank	76	80	86	75
MB 240-31190/1-A	Method Blank	76	78	84	74

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(34-110)	(26-110)	(10-118)	(24-112)	(28-110)	(41-119)
240-7846-1	SO-17358-011712-DR-001	66	76	44	76	76	81
240-7846-2	SO-17358-011712-DR-002	64	76	38	73	75	78
240-7846-3	SO-17358-011712-DR-003	65	78	53	75	77	77
240-7846-4	SO-17358-011712-DR-004	66	80	42	77	77	82
240-7846-5	SO-17358-011712-DR-005	62	70	64	64	71	70
240-7846-6	SO-17358-011712-DR-006	65	77	45	76	76	77
240-7846-7	SO-17358-011812-DR-007	72	81	77	78	75	89
240-7846-8	SO-17358-011812-DR-008	58	68	51	65	66	74
240-7846-9	SO-17358-011812-DR-009	60	68	40	64	69	74

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(34-110)	(26-110)	(10-118)	(24-112)	(28-110)	(41-119)
240-7846-10	SO-17358-011812-DR-010	66	81	45	75	79	76
240-7846-11	SO-17358-011812-DR-011	59	69	43	68	69	75
240-7846-12	SO-17358-011812-DR-012	55	67	47	62	67	73
240-7846-12 MS	SO-17358-011812-DR-012	62	64	54	62	68	78
240-7846-12 MSD	SO-17358-011812-DR-012	64	71	52	67	75	73
240-7846-13	SO-17358-011812-DR-013	57	72	41	66	72	75
240-7846-14	SO-17358-011812-DR-014	58	68	41	64	67	73
240-7846-15	SO-17358-011812-DR-015	60	67	57	63	74	66
240-7846-16	SO-17358-011812-DR-016	54	67	42	65	67	74
240-7846-17	SO-17358-011812-DR-017	59	64	58	61	69	71
240-7846-18	SO-17358-011812-DR-018	51	62	32	60	63	71
240-7846-19	SO-17358-011912-DR-019	64	72	62	65	71	76
240-7846-20	SO-17358-011912-DR-020	56	65	40	56	61	67
240-7846-21	SO-17358-011912-DR-021	53	63	42	54	60	68
240-7846-22	SO-17358-011912-DR-022	50	61	48	53	59	63
LCS 240-31328/24-A	Lab Control Sample	67	83	66	85	81	80
LCS 240-31494/20-A	Lab Control Sample	66	74	62	69	75	82
MB 240-31328/23-A	Method Blank	63	77	54	75	77	80
MB 240-31494/19-A	Method Blank	45	52	31	48	50	70

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCB2
Lab Sample ID	Client Sample ID	(29-151)	(14-163)
240-7846-1	SO-17358-011712-DR-001	83	77
240-7846-2	SO-17358-011712-DR-002	78	74
240-7846-3	SO-17358-011712-DR-003	80	82
240-7846-4	SO-17358-011712-DR-004	77	73
240-7846-5	SO-17358-011712-DR-005	66	45
240-7846-6	SO-17358-011712-DR-006	80	57
240-7846-7	SO-17358-011812-DR-007	73	57
240-7846-8	SO-17358-011812-DR-008	71	65
240-7846-9	SO-17358-011812-DR-009	81	57
240-7846-10	SO-17358-011812-DR-010	75	53
240-7846-11	SO-17358-011812-DR-011	76	65
240-7846-12	SO-17358-011812-DR-012	73	57
240-7846-12 MS	SO-17358-011812-DR-012	83	65
240-7846-12 MSD	SO-17358-011812-DR-012	74	60
240-7846-13	SO-17358-011812-DR-013	75	62
240-7846-14	SO-17358-011812-DR-014	76	64
240-7846-15	SO-17358-011812-DR-015	74	49

Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	TCX2 (29-151)	DCB2 (14-163)								
240-7846-16	SO-17358-011812-DR-016	71	61								
240-7846-18	SO-17358-011812-DR-018	68	56								
LCS 240-31327/24-A	Lab Control Sample	92	57								
MB 240-31327/23-A	Method Blank	83	61								

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	TCX1 (29-151)	DCB1 (14-163)								
240-7846-17	SO-17358-011812-DR-017	67	159								
240-7846-19	SO-17358-011912-DR-019	84	54								
240-7846-20	SO-17358-011912-DR-020	77	50								
240-7846-21	SO-17358-011912-DR-021	78	54								
240-7846-22	SO-17358-011912-DR-022	80	55								
LCS 240-31338/24-A	Lab Control Sample	90	77								
MB 240-31338/23-A	Method Blank	85	65								

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Client Sample ID: SO-17358-011712-DR-001

Lab Sample ID: 240-7846-1

Date Collected: 01/17/12 10:10

Matrix: Solid

Date Received: 01/20/12 09:30

Percent Solids: 94.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 01:46	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 12:04	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31732	01/27/12 17:46	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 14:37	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 14:05	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 17:18	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 14:50	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 14:51	JM	TAL NC

Client Sample ID: SO-17358-011712-DR-002

Lab Sample ID: 240-7846-2

Date Collected: 01/17/12 10:20

Matrix: Solid

Date Received: 01/20/12 09:30

Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 02:10	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 14:38	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31732	01/27/12 18:01	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 14:38	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 14:11	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 17:23	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 14:50	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 14:52	JM	TAL NC

Client Sample ID: SO-17358-011712-DR-003

Lab Sample ID: 240-7846-3

Date Collected: 01/17/12 10:40

Matrix: Solid

Date Received: 01/20/12 09:30

Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 02:34	TL	TAL NC

Client Sample ID: SO-17358-011712-DR-003

Lab Sample ID: 240-7846-3

Date Collected: 01/17/12 10:40
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 12:23	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31732	01/27/12 18:16	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 14:39	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 14:17	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 17:29	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 14:50	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 14:52	JM	TAL NC

Client Sample ID: SO-17358-011712-DR-004

Lab Sample ID: 240-7846-4

Date Collected: 01/17/12 10:45
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 02:58	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 14:00	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31732	01/27/12 18:31	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 14:41	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 14:23	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 17:34	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 14:54	JM	TAL NC

Client Sample ID: SO-17358-011712-DR-005

Lab Sample ID: 240-7846-5

Date Collected: 01/17/12 13:55
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 03:22	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		4	31656	01/27/12 18:10	MU	TAL NC

Client Sample ID: SO-17358-011712-DR-005

Lab Sample ID: 240-7846-5

Date Collected: 01/17/12 13:55
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 92.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31732	01/27/12 18:46	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 14:42	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 14:30	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 17:40	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 14:55	JM	TAL NC

Client Sample ID: SO-17358-011712-DR-006

Lab Sample ID: 240-7846-6

Date Collected: 01/17/12 14:00
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 03:47	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 13:21	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31732	01/27/12 19:01	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 15:12	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 14:36	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 17:46	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 14:56	JM	TAL NC

Client Sample ID: SO-17358-011812-DR-007

Lab Sample ID: 240-7846-7

Date Collected: 01/18/12 08:45
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 04:11	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31851	01/30/12 19:51	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31732	01/27/12 19:16	LH	TAL NC

Client Sample ID: SO-17358-011812-DR-007

Lab Sample ID: 240-7846-7

Date Collected: 01/18/12 08:45
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 15:13	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 14:42	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 17:51	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 14:57	JM	TAL NC

Client Sample ID: SO-17358-011812-DR-008

Lab Sample ID: 240-7846-8

Date Collected: 01/18/12 08:50
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 04:35	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 12:43	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31732	01/27/12 19:31	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 15:14	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 14:48	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 17:57	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 14:59	JM	TAL NC

Client Sample ID: SO-17358-011812-DR-009

Lab Sample ID: 240-7846-9

Date Collected: 01/18/12 10:05
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 04:59	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 17:12	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31732	01/27/12 19:45	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 15:16	AS	TAL NC

Client Sample ID: SO-17358-011812-DR-009

Lab Sample ID: 240-7846-9

Date Collected: 01/18/12 10:05
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 14:54	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 18:15	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 15:00	JM	TAL NC

Client Sample ID: SO-17358-011812-DR-010

Lab Sample ID: 240-7846-10

Date Collected: 01/18/12 10:10
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 05:24	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 16:53	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31732	01/27/12 20:00	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 15:17	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 15:13	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 18:20	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 15:02	JM	TAL NC

Client Sample ID: SO-17358-011812-DR-011

Lab Sample ID: 240-7846-11

Date Collected: 01/18/12 10:15
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 05:48	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 15:36	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31845	01/30/12 10:14	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 15:18	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		5	31467	01/26/12 06:13	KC	TAL NC

Client Sample ID: SO-17358-011812-DR-011

Lab Sample ID: 240-7846-11

Date Collected: 01/18/12 10:15
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	31467	01/25/12 15:19	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 18:26	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 15:03	JM	TAL NC

Client Sample ID: SO-17358-011812-DR-012

Lab Sample ID: 240-7846-12

Date Collected: 01/18/12 11:20
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 88.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 06:12	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 15:55	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31845	01/30/12 10:29	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 14:33	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 13:28	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 16:41	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC

Client Sample ID: SO-17358-011812-DR-013

Lab Sample ID: 240-7846-13

Date Collected: 01/18/12 13:20
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31614	01/27/12 07:25	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 15:17	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31845	01/30/12 11:14	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 15:19	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 15:25	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 18:31	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC

Client Sample ID: SO-17358-011812-DR-014

Lab Sample ID: 240-7846-14

Date Collected: 01/18/12 13:25

Matrix: Solid

Date Received: 01/20/12 09:30

Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31772	01/27/12 23:04	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 13:02	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31845	01/30/12 11:29	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 15:21	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 15:31	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 18:37	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC

Client Sample ID: SO-17358-011812-DR-015

Lab Sample ID: 240-7846-15

Date Collected: 01/18/12 13:30

Matrix: Solid

Date Received: 01/20/12 09:30

Percent Solids: 94.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31618	01/27/12 01:37	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		4	31656	01/27/12 18:29	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31845	01/30/12 11:43	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 15:22	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 15:37	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 18:42	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 15:07	JM	TAL NC

Client Sample ID: SO-17358-011812-DR-016

Lab Sample ID: 240-7846-16

Date Collected: 01/18/12 13:35

Matrix: Solid

Date Received: 01/20/12 09:30

Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31618	01/27/12 02:01	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 14:19	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC

Client Sample ID: SO-17358-011812-DR-016

Lab Sample ID: 240-7846-16

Date Collected: 01/18/12 13:35

Matrix: Solid

Date Received: 01/20/12 09:30

Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	31845	01/30/12 11:58	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 15:23	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 15:43	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 18:48	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			31546	01/26/12 11:07	CN	TAL NC
Total/NA	Analysis	7196A		1	32492	02/02/12 15:08	JM	TAL NC

Client Sample ID: SO-17358-011812-DR-017

Lab Sample ID: 240-7846-17

Date Collected: 01/18/12 14:05

Matrix: Solid

Date Received: 01/20/12 09:30

Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31618	01/27/12 02:26	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		2.5	31656	01/27/12 17:51	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	32012	01/31/12 08:46	SG	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 15:46	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 15:49	KC	TAL NC
Total/NA	Analysis	6020		1	31861	01/27/12 18:53	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC

Client Sample ID: SO-17358-011812-DR-018

Lab Sample ID: 240-7846-18

Date Collected: 01/18/12 14:10

Matrix: Solid

Date Received: 01/20/12 09:30

Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31618	01/27/12 02:50	TL	TAL NC
Total/NA	Prep	3540C			31328	01/25/12 08:48	AK	TAL NC
Total/NA	Analysis	8270C		1	31656	01/27/12 14:58	MU	TAL NC
Total/NA	Prep	3540C			31327	01/25/12 08:39	AK	TAL NC
Total/NA	Analysis	8082		1	31845	01/30/12 12:28	LH	TAL NC
Total/NA	Prep	7471A			31077	01/23/12 13:15	DE	TAL NC
Total/NA	Analysis	7471A		1	31078	01/23/12 15:48	AS	TAL NC
Total/NA	Prep	3050B			31063	01/23/12 09:37	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 15:56	KC	TAL NC

Client Sample ID: SO-17358-011812-DR-018

Lab Sample ID: 240-7846-18

Date Collected: 01/18/12 14:10
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 93.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6020		1	31861	01/27/12 18:59	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC

Client Sample ID: SO-17358-011912-DR-019

Lab Sample ID: 240-7846-19

Date Collected: 01/19/12 08:30
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 90.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31618	01/27/12 03:14	TL	TAL NC
Total/NA	Prep	3540C			31494	01/26/12 08:44	AK	TAL NC
Total/NA	Analysis	8270C		2.5	31833	01/30/12 11:40	TH	TAL NC
Total/NA	Prep	3540C			31338	01/25/12 09:38	AK	TAL NC
Total/NA	Analysis	8082		1	31740	01/28/12 10:35	LH	TAL NC
Total/NA	Prep	3050B			31192	01/24/12 10:41	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 16:39	KC	TAL NC
Total/NA	Prep	7471A			31214	01/24/12 13:45	DE	TAL NC
Total/NA	Analysis	7471A		1	31868	01/27/12 17:27	AS	TAL NC
Total/NA	Analysis	6020		1	31995	01/30/12 19:43	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC

Client Sample ID: SO-17358-011912-DR-020

Lab Sample ID: 240-7846-20

Date Collected: 01/19/12 08:35
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31125	01/23/12 21:31	LM	TAL NC
Total/NA	Analysis	8260B		1	31618	01/27/12 03:39	TL	TAL NC
Total/NA	Prep	3540C			31494	01/26/12 08:44	AK	TAL NC
Total/NA	Analysis	8270C		1	31833	01/30/12 10:31	TH	TAL NC
Total/NA	Prep	3540C			31338	01/25/12 09:38	AK	TAL NC
Total/NA	Analysis	8082		1	31740	01/28/12 10:50	LH	TAL NC
Total/NA	Prep	3050B			31192	01/24/12 10:41	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 17:03	KC	TAL NC
Total/NA	Prep	7471A			31214	01/24/12 13:45	DE	TAL NC
Total/NA	Analysis	7471A		1	31868	01/27/12 17:33	AS	TAL NC
Total/NA	Analysis	6020		1	31995	01/30/12 20:20	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC

Client Sample ID: SO-17358-011912-DR-021

Lab Sample ID: 240-7846-21

Date Collected: 01/19/12 08:55
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 92.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31190	01/24/12 10:26	LM	TAL NC
Total/NA	Analysis	8260B		1	31435	01/25/12 22:30	TL	TAL NC
Total/NA	Prep	3540C			31494	01/26/12 08:44	AK	TAL NC
Total/NA	Analysis	8270C		1	31833	01/30/12 10:48	TH	TAL NC
Total/NA	Prep	3540C			31338	01/25/12 09:38	AK	TAL NC
Total/NA	Analysis	8082		1	31740	01/28/12 11:05	LH	TAL NC
Total/NA	Prep	3050B			31192	01/24/12 10:41	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 17:09	KC	TAL NC
Total/NA	Prep	7471A			31214	01/24/12 13:45	DE	TAL NC
Total/NA	Analysis	7471A		1	31868	01/27/12 17:34	AS	TAL NC
Total/NA	Analysis	6020		1	31995	01/30/12 20:26	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:01	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			32298	02/01/12 15:31	CN	TAL NC
Total/NA	Analysis	7196A		1	32474	02/02/12 14:13	JM	TAL NC

Client Sample ID: SO-17358-011912-DR-022

Lab Sample ID: 240-7846-22

Date Collected: 01/19/12 09:00
Matrix: Solid
Date Received: 01/20/12 09:30
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31190	01/24/12 10:26	LM	TAL NC
Total/NA	Analysis	8260B		1	31435	01/25/12 22:53	TL	TAL NC
Total/NA	Prep	3540C			31494	01/26/12 08:44	AK	TAL NC
Total/NA	Analysis	8270C		1	31833	01/30/12 11:06	TH	TAL NC
Total/NA	Prep	3540C			31338	01/25/12 09:38	AK	TAL NC
Total/NA	Analysis	8082		1	31740	01/28/12 11:20	LH	TAL NC
Total/NA	Prep	3050B			31192	01/24/12 10:41	DE	TAL NC
Total/NA	Analysis	6010B		1	31467	01/25/12 17:16	KC	TAL NC
Total/NA	Prep	7471A			31214	01/24/12 13:45	DE	TAL NC
Total/NA	Analysis	7471A		1	31868	01/27/12 17:36	AS	TAL NC
Total/NA	Analysis	6020		1	31995	01/30/12 20:31	BD	TAL NC
Total/NA	Analysis	Moisture		1	31104	01/23/12 15:05	CN	TAL NC
Total/NA	Analysis	7196A		1	31555	01/26/12 12:21	KC	TAL NC
Total/NA	Prep	3060A			32298	02/01/12 15:31	CN	TAL NC
Total/NA	Analysis	7196A		1	32474	02/02/12 14:14	JM	TAL NC

Client Sample ID: TB-17358-011712

Lab Sample ID: 240-7846-23

Date Collected: 01/17/12 00:00
Matrix: Solid
Date Received: 01/20/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			31190	01/24/12 10:26	LM	TAL NC
Total/NA	Analysis	8260B		1	31435	01/25/12 23:16	TL	TAL NC

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Laboratory References:

TAL NC = TestAmerica North Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7846-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica North Canton	ACLASS	DoD ELAP		ADE-1437
TestAmerica North Canton	California	NELAC	9	01144CA
TestAmerica North Canton	Connecticut	State Program	1	PH-0590
TestAmerica North Canton	Florida	NELAC	4	E87225
TestAmerica North Canton	Georgia	Georgia EPD	4	N/A
TestAmerica North Canton	Illinois	NELAC	5	200004
TestAmerica North Canton	Kansas	NELAC	7	E-10336
TestAmerica North Canton	Kentucky	State Program	4	58
TestAmerica North Canton	Minnesota	NELAC	5	039-999-348
TestAmerica North Canton	Nevada	State Program	9	OH-000482008A
TestAmerica North Canton	New Jersey	NELAC	2	OH001
TestAmerica North Canton	New York	NELAC	2	10975
TestAmerica North Canton	Ohio	OVAP	5	CL0024
TestAmerica North Canton	Pennsylvania	NELAC	3	68-00340
TestAmerica North Canton	USDA	USDA		P330-11-00328
TestAmerica North Canton	Virginia	NELAC Secondary AB	3	460175
TestAmerica North Canton	Washington	State Program	10	C971
TestAmerica North Canton	West Virginia	West Virginia DEP	3	210
TestAmerica North Canton	Wisconsin	State Program	5	999518190

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

CHAIN OF CUSTODY RECORD

COC NO. PL- 08077
PAGE 1 OF 2

CONESTOGA-ROVERS & ASSOCIATES
14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170
Phone: (734) 453-5123 Fax: (734) 453-5201

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 017358-T01	Laboratory Name: Test America
Project Name: Willow Run Powertrain	Lab Contact: D. Heckler
Project Location: Ypsilanti, MI	Lab Location: North Canton, OH
Chemistry Contact: P. Wiseman	Lab Quote No:
Sampler(s): D. Rivers	SSOW ID: 11991-T01-008
	Cooler No: 2 to fed
	Carrier: FED EX
	Airbill No: 9029 3738 9355 9306
	Date Shipped: 1/19/12

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd//yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: TCL VOCs	TCL SVOCs	PCBs	Cr III/Cr VI	Site spec THL metals	THL metals	MS/MSD Request
1	50-17358-011712-DR-001	1/17/12	1010	SO	G	1					1			2	X	X	X	X	X		
2	-002		1020			1					1			2	X	X	X	X	X		
3	-003		1040			1					1			2	X	X	X	X	X		
4	-004		1045			1					1			2	X	X	X	X	X		
5	-005		1355			1					1			2	X	X	X	X	X		
6	-006		1400			1					1			2	X	X	X	X	X		
7	-011812-DR-007	1/18/12	845			1					1			2	X	X	X	X	X		
8	-008		850			1					1			2	X	X	X	X	X		
9	-009		1005			1					1			2	X	X	X	X		X	
10	-010		1010			1					1			2	X	X	X	X		X	
11	-011		1015			1					1			2	X	X	X	X		X	
12	-012		1120			2					3			5	X	X	X			X	X
13	-013		1320			1					1			2	X	X	X		X	X	
14	-014		1325			1					1			2	X	X	X		X		
15	-015		1330			1					1			2	X	X	X	X	X		

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers: 33

All Samples in Cooler must be on COC

Notes/ Special Requirements: END OF BATCH
Fine/Coarse Pb if > 75 ppm

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. D. Rivers	CRA	1/19/12	1700	1. Mike Hanlon	TAL	1/20/12	930
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

Page 295 of 270

2/3/2012

CHAIN OF CUSTODY RECORD

COC NO. PL- 08078
PAGE 2 OF 2

CONESTOGA-ROVERS & ASSOCIATES
14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170
Phone: (734) 453-5123 Fax: (734) 453-5201

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 017358-T01
Project Name: Willow Run Powertrain
Project Location: Ypsilanti, MI
Chemistry Contact: P. Wiseman
Sampler(s): D. Rivers

Laboratory Name: TEST AMERICA
Lab Contact: D. Heckler
Lab Location: North Canton, OH
Lab Quote No:

SSOW ID: 119911-T01-008
Cooler No: 2 total
Carrier: FED EX
Airbill No:
Date Shipped: 1/19/12

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: TCL VOCs	TCL SVOCs	PCBs	Cr III/Cr VI	Site Spec. TAL metals	TAL metals	MS/MSD Request	Comments/ Special Instructions:
1	SO-17358-011812-DR-016	1/18/12	1335	SO	G	1					1			2	X	X	X	X	X			
2	-017		1405			1					1			2	X	X	X		X			
3	-018		1410			1					1			2	X	X	X		X			
4	-011912-DR-019	1/19/12	830			1					1			2	X	X	X		X			
5	-020		835			1					1			2	X	X	X		X			
6	-021		855			1					1			2	X	X	X	X	X			
7	-022		900			1					1			2	X	X	X	X	X			
8	TB-17358-011712	1/17/12	—	SQ	—						1			1	X							
9																						
10																						
11																						
12																						
13																						
14																						
15																						

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers: 15
All Samples in Cooler must be on COC

Notes/ Special Requirements: END OF BATCH
Fine/Course Pb if > 75ppm

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. D. Rivers	CRA	1/19/12	1700	1. Mike Lanlone	TAL	1/20/12	930
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT — ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE — Fully Executed Copy (CRA) YELLOW — Receiving Laboratory Copy PINK — Shipper GOLDENROD — Sampling Crew

CRA Form: COC-10A (20110804)

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 7846
North Canton Facility

Client CRA Project _____ By: _____ (Signature)
Cooler Received on 1/20/12 Opened on 1/20/12
RedEx 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# 110410-HNO_3; Sulfuric Acid Lot# 041911-H_2SO_4; Sodium Hydroxide Lot# 121809 -NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot#* 100108-*$(CH_3COO)_2ZN$/NaOH.* What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 240-7846-1

Login Number: 7846

List Source: TestAmerica North Canton

List Number: 1

Creator: Gambone, Mike

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.8/0.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica North Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-7899-1
Client Project/Site: 17358-T01-08, RACER Willow Run

For:
Conestoga-Rovers & Associates, Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Mr. Paul Wiseman

Denise D Heckler

Authorized for release by:
2/6/2012 10:39:37 AM

Denise Heckler
Project Manager II
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Definitions/Glossary 6
Sample Summary 7
Detection Summary 8
Method Summary 12
Client Sample Results 13
QC Association Summary 95
QC Sample Results 99
Surrogate Summary 116
Lab Chronicle 118
Certification Summary 122
Chain of Custody 123
Receipt Checklists 129

Job ID: 240-7899-1

Laboratory: TestAmerica North Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 17358-T01-08, RACER Willow Run

Report Number: 240-7899-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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 application 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 01/24/2012 and 01/25/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 0.2, 1.0, 1.2, 1.5 and 2.4 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GW-17358-012412-DR-030 (240-7932-1), GW-17358-012412-DR-031 (240-7932-2), GW-17358-012412-DR-032 (240-7932-3), GW-17358-012412-DR-033 (240-7932-4) and TB-17358-012412 (240-7932-5) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. Samples TB-17358-012312 (240-7899-1), GW-17358-012312-DR-023 (240-7899-2), GW-17358-012312-DR-024 (240-7899-3), GW-17358-012312-DR-025 (240-7899-4), GW-17358-012312-DR-026 (240-7899-5), GW-17358-012312-DR-027 (240-7899-6), GW-17358-012312-DR-028 (240-7899-7) and GW-17358-012312-DR-029 (240-7899-8) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 01/27/2012.

Methylene Chloride was detected in method blank MB 240-31710/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

No other difficulties were encountered during the VOCs analyses.

Job ID: 240-7899-1 (Continued)

Laboratory: TestAmerica North Canton (Continued)

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GW-17358-012312-DR-023 (240-7899-2), GW-17358-012312-DR-024 (240-7899-3), GW-17358-012312-DR-025 (240-7899-4), GW-17358-012312-DR-026 (240-7899-5), GW-17358-012312-DR-027 (240-7899-6), GW-17358-012312-DR-028 (240-7899-7) and GW-17358-012312-DR-029 (240-7899-8) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. Samples GW-17358-012412-DR-030 (240-7932-1), GW-17358-012412-DR-031 (240-7932-2), GW-17358-012412-DR-032 (240-7932-3) and GW-17358-012412-DR-033 (240-7932-4) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 01/26/2012 and analyzed on 01/30/2012.

Bis(2-ethylhexyl) phthalate was detected in method blank MB 240-31476/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged.

Bis(2-ethylhexyl) phthalate and Indeno[1,2,3-cd]pyrene exceeded the rpd limit for the MSD of sample GW-17358-012412-DR-031MSD (240-7932-2) in batch 240-31864.

No other difficulties were encountered during the SVOC analyses.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples GW-17358-012312-DR-026 (240-7899-5), GW-17358-012312-DR-027 (240-7899-6), GW-17358-012312-DR-028 (240-7899-7) and GW-17358-012312-DR-029 (240-7899-8) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. Samples GW-17358-012412-DR-030 (240-7932-1), GW-17358-012412-DR-031 (240-7932-2), GW-17358-012412-DR-032 (240-7932-3) and GW-17358-012412-DR-033 (240-7932-4) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared and analyzed on 01/26/2012.

No difficulties were encountered during the PCBs analyses.

All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICP)

Samples GW-17358-012412-DR-030 (240-7932-1) and GW-17358-012412-DR-031 (240-7932-2) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 01/27/2012 and analyzed on 01/30/2012.

Calcium, Magnesium and Potassium were detected in method blank MB 240-31676/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICPMS)

Samples GW-17358-012412-DR-030 (240-7932-1), GW-17358-012412-DR-031 (240-7932-2), GW-17358-012412-DR-032 (240-7932-3) and GW-17358-012412-DR-033 (240-7932-4) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020. Samples GW-17358-012312-DR-023 (240-7899-2), GW-17358-012312-DR-024 (240-7899-3), GW-17358-012312-DR-025 (240-7899-4), GW-17358-012312-DR-026 (240-7899-5), GW-17358-012312-DR-027 (240-7899-6), GW-17358-012312-DR-028 (240-7899-7) and GW-17358-012312-DR-029 (240-7899-8) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 01/27/2012 and analyzed on 01/30/2012 and 01/31/2012.

Barium, Copper and Zinc were detected in method blank MB 240-31676/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged “J”. If the associated sample reported a result

Job ID: 240-7899-1 (Continued)

Laboratory: TestAmerica North Canton (Continued)

above the MDL and/or RL, the result has been “B” flagged.

Lead and Thallium failed the recovery criteria high for the MS of sample GW-17358-012412-DR-031MS (240-7932-2) in batch 240-31995.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM

Sample GW-17358-012412-DR-031 (240-7932-2) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. Sample GW-17358-012312-DR-026 (240-7899-5) was analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 01/24/2012 and 01/25/2012.

No difficulties were encountered during the hexavalent chromium analysis.

All quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples GW-17358-012312-DR-023 (240-7899-2), GW-17358-012312-DR-024 (240-7899-3), GW-17358-012312-DR-025 (240-7899-4), GW-17358-012312-DR-026 (240-7899-5), GW-17358-012312-DR-027 (240-7899-6), GW-17358-012312-DR-028 (240-7899-7) and GW-17358-012312-DR-029 (240-7899-8) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. Samples GW-17358-012412-DR-030 (240-7932-1), GW-17358-012412-DR-031 (240-7932-2), GW-17358-012412-DR-032 (240-7932-3) and GW-17358-012412-DR-033 (240-7932-4) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 01/27/2012 and analyzed on 01/31/2012.

No difficulties were encountered during the mercury analyses.

All quality control parameters were within the acceptance limits.

TRIVALENT CHROMIUM

Sample GW-17358-012312-DR-026 (240-7899-5) was analyzed for trivalent chromium in accordance with SW-846 7196A_CR3. Sample GW-17358-012412-DR-031 (240-7932-2) was analyzed for trivalent chromium in accordance with SW-846 7196A_CR3. The samples were analyzed on 02/01/2012.

No difficulties were encountered during the trivalent chromium analysis.

All quality control parameters were within the acceptance limits.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F	RPD of the MS and MSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
U	Indicates the analyte was analyzed for but not detected.
F	MS or MSD exceeds the control limits

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
H	Sample was prepped or analyzed beyond the specified holding time

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-7899-1	TB-17358-012312	Water	01/23/12 00:00	01/24/12 09:30
240-7899-2	GW-17358-012312-DR-023	Water	01/23/12 09:10	01/24/12 09:30
240-7899-3	GW-17358-012312-DR-024	Water	01/23/12 09:35	01/24/12 09:30
240-7899-4	GW-17358-012312-DR-025	Water	01/23/12 13:15	01/24/12 09:30
240-7899-5	GW-17358-012312-DR-026	Water	01/23/12 11:15	01/24/12 09:30
240-7899-6	GW-17358-012312-DR-027	Water	01/23/12 14:20	01/24/12 09:30
240-7899-7	GW-17358-012312-DR-028	Water	01/23/12 14:30	01/24/12 09:30
240-7899-8	GW-17358-012312-DR-029	Water	01/23/12 14:40	01/24/12 09:30
240-7932-1	GW-17358-012412-DR-030	Water	01/24/12 09:00	01/25/12 09:30
240-7932-2	GW-17358-012412-DR-031	Water	01/24/12 09:35	01/25/12 09:30
240-7932-3	GW-17358-012412-DR-032	Water	01/24/12 09:40	01/25/12 09:30
240-7932-4	GW-17358-012412-DR-033	Water	01/24/12 10:15	01/25/12 09:30
240-7932-5	TB-17358-012412	Water	01/24/12 00:00	01/25/12 09:30

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Client Sample ID: TB-17358-012312 — Lab Sample ID: 240-7899-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J	10	1.1	ug/L	1		8260B	Total/NA
Methylene Chloride	0.48	J B	5.0	0.33	ug/L	1		8260B	Total/NA

Client Sample ID: GW-17358-012312-DR-023 — Lab Sample ID: 240-7899-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	1.1	J B	5.1	0.82	ug/L	1		8270C	Total/NA
Aluminum	1400		50	19	ug/L	1		6020	Total Recovera
Antimony	0.42	J	2.0	0.13	ug/L	1		6020	Total Recovera
Arsenic	1.6	J	5.0	0.40	ug/L	1		6020	Total Recovera
Barium	79	J B	100	0.19	ug/L	1		6020	Total Recovera
Cobalt	1.2	J	20	0.058	ug/L	1		6020	Total Recovera
Chromium	2.1	J	10	0.71	ug/L	1		6020	Total Recovera
Copper	2.5	J B	4.0	0.29	ug/L	1		6020	Total Recovera
Iron	1100		200	26	ug/L	1		6020	Total Recovera
Manganese	100		50	0.83	ug/L	1		6020	Total Recovera
Nickel	11	J	20	0.20	ug/L	1		6020	Total Recovera
Lead	0.69	J	3.0	0.18	ug/L	1		6020	Total Recovera
Selenium	0.80	J	5.0	0.57	ug/L	1		6020	Total Recovera
Thallium	0.69	J	2.0	0.14	ug/L	1		6020	Total Recovera
Vanadium	3.3	J	4.0	0.44	ug/L	1		6020	Total Recovera
Zinc	7.6	J B	50	2.3	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012312-DR-024 — Lab Sample ID: 240-7899-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.97	J B	5.2	0.82	ug/L	1		8270C	Total/NA
Aluminum	350		50	19	ug/L	1		6020	Total Recovera
Antimony	0.20	J	2.0	0.13	ug/L	1		6020	Total Recovera
Arsenic	1.2	J	5.0	0.40	ug/L	1		6020	Total Recovera
Barium	75	J B	100	0.19	ug/L	1		6020	Total Recovera
Cobalt	0.99	J	20	0.058	ug/L	1		6020	Total Recovera
Copper	0.75	J B	4.0	0.29	ug/L	1		6020	Total Recovera
Iron	460		200	26	ug/L	1		6020	Total Recovera
Manganese	230		50	0.83	ug/L	1		6020	Total Recovera
Nickel	2.1	J	20	0.20	ug/L	1		6020	Total Recovera
Lead	0.32	J	3.0	0.18	ug/L	1		6020	Total Recovera
Thallium	0.36	J	2.0	0.14	ug/L	1		6020	Total Recovera
Vanadium	1.1	J	4.0	0.44	ug/L	1		6020	Total Recovera
Zinc	3.3	J B	50	2.3	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012312-DR-025 — Lab Sample ID: 240-7899-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.4	J	10	1.1	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	0.57	J	10	0.57	ug/L	1		8260B	Total/NA
Aluminum	35000		50	19	ug/L	1		6020	Total Recovera
Antimony	2.2		2.0	0.13	ug/L	1		6020	Total Recovera
Arsenic	17		5.0	0.40	ug/L	1		6020	Total Recovera
Barium	290	B	100	0.19	ug/L	1		6020	Total Recovera
Beryllium	2.0		1.0	0.20	ug/L	1		6020	Total Recovera
Cadmium	0.20	J	1.0	0.13	ug/L	1		6020	Total Recovera
Cobalt	7.1	J	20	0.058	ug/L	1		6020	Total Recovera
Chromium	21		10	0.71	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012312-DR-025 (Continued) — Lab Sample ID: 240-7899-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	33	B	4.0	0.29	ug/L	1		6020	Total Recovera
Iron	24000		200	26	ug/L	1		6020	Total Recovera
Manganese	250		50	0.83	ug/L	1		6020	Total Recovera
Nickel	20		20	0.20	ug/L	1		6020	Total Recovera
Lead	27		3.0	0.18	ug/L	1		6020	Total Recovera
Selenium	4.6	J	5.0	0.57	ug/L	1		6020	Total Recovera
Thallium	0.61	J	2.0	0.14	ug/L	1		6020	Total Recovera
Vanadium	47		4.0	0.44	ug/L	1		6020	Total Recovera
Zinc	81	B	50	2.3	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012312-DR-026 — Lab Sample ID: 240-7899-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	330		50	19	ug/L	1		6020	Total Recovera
Antimony	0.29	J	2.0	0.13	ug/L	1		6020	Total Recovera
Arsenic	2.6	J	5.0	0.40	ug/L	1		6020	Total Recovera
Barium	140	B	100	0.19	ug/L	1		6020	Total Recovera
Cobalt	1.9	J	20	0.058	ug/L	1		6020	Total Recovera
Copper	1.1	J B	4.0	0.29	ug/L	1		6020	Total Recovera
Iron	840		200	26	ug/L	1		6020	Total Recovera
Manganese	280		50	0.83	ug/L	1		6020	Total Recovera
Nickel	2.6	J	20	0.20	ug/L	1		6020	Total Recovera
Lead	0.36	J	3.0	0.18	ug/L	1		6020	Total Recovera
Thallium	0.18	J	2.0	0.14	ug/L	1		6020	Total Recovera
Vanadium	1.0	J	4.0	0.44	ug/L	1		6020	Total Recovera
Zinc	4.4	J B	50	2.3	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012312-DR-027 — Lab Sample ID: 240-7899-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	27	J	50	19	ug/L	1		6020	Total Recovera
Antimony	0.14	J	2.0	0.13	ug/L	1		6020	Total Recovera
Arsenic	0.88	J	5.0	0.40	ug/L	1		6020	Total Recovera
Barium	58	J B	100	0.19	ug/L	1		6020	Total Recovera
Cobalt	0.40	J	20	0.058	ug/L	1		6020	Total Recovera
Copper	0.51	J B	4.0	0.29	ug/L	1		6020	Total Recovera
Iron	540		200	26	ug/L	1		6020	Total Recovera
Manganese	200		50	0.83	ug/L	1		6020	Total Recovera
Nickel	1.2	J	20	0.20	ug/L	1		6020	Total Recovera
Selenium	1.4	J	5.0	0.57	ug/L	1		6020	Total Recovera
Thallium	0.16	J	2.0	0.14	ug/L	1		6020	Total Recovera
Zinc	2.5	J B	50	2.3	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012312-DR-028 — Lab Sample ID: 240-7899-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	20	J	50	19	ug/L	1		6020	Total Recovera
Antimony	0.13	J	2.0	0.13	ug/L	1		6020	Total Recovera
Arsenic	0.81	J	5.0	0.40	ug/L	1		6020	Total Recovera
Barium	64	J B	100	0.19	ug/L	1		6020	Total Recovera
Cobalt	0.40	J	20	0.058	ug/L	1		6020	Total Recovera
Copper	0.44	J B	4.0	0.29	ug/L	1		6020	Total Recovera
Iron	540		200	26	ug/L	1		6020	Total Recovera
Manganese	200		50	0.83	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012312-DR-028 (Continued)

Lab Sample ID: 240-7899-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	1.2	J	20	0.20	ug/L	1		6020	Total Recovera
Selenium	0.97	J	5.0	0.57	ug/L	1		6020	Total Recovera
Thallium	0.14	J	2.0	0.14	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012312-DR-029

Lab Sample ID: 240-7899-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	42	J	50	19	ug/L	1		6020	Total Recovera
Antimony	0.19	J	2.0	0.13	ug/L	1		6020	Total Recovera
Arsenic	4.5	J	5.0	0.40	ug/L	1		6020	Total Recovera
Barium	23	J B	100	0.19	ug/L	1		6020	Total Recovera
Cobalt	0.17	J	20	0.058	ug/L	1		6020	Total Recovera
Copper	0.72	J B	4.0	0.29	ug/L	1		6020	Total Recovera
Iron	150	J	200	26	ug/L	1		6020	Total Recovera
Manganese	60		50	0.83	ug/L	1		6020	Total Recovera
Nickel	1.6	J	20	0.20	ug/L	1		6020	Total Recovera
Zinc	3.0	J B	50	2.3	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012412-DR-030

Lab Sample ID: 240-7932-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	40000		5000	590	ug/L	1		6010B	Total Recovera
Potassium	1400	J B	5000	72	ug/L	1		6010B	Total Recovera
Calcium	92000	B	5000	130	ug/L	1		6010B	Total Recovera
Magnesium	18000	B	5000	34	ug/L	1		6010B	Total Recovera
Aluminum	440		50	19	ug/L	1		6020	Total Recovera
Antimony	0.40	J	2.0	0.13	ug/L	1		6020	Total Recovera
Arsenic	1.1	J	5.0	0.40	ug/L	1		6020	Total Recovera
Barium	66	J B	100	0.19	ug/L	1		6020	Total Recovera
Cobalt	0.61	J	20	0.058	ug/L	1		6020	Total Recovera
Copper	1.6	J B	4.0	0.29	ug/L	1		6020	Total Recovera
Iron	600		200	26	ug/L	1		6020	Total Recovera
Manganese	110		50	0.83	ug/L	1		6020	Total Recovera
Nickel	2.4	J	20	0.20	ug/L	1		6020	Total Recovera
Lead	0.43	J	3.0	0.18	ug/L	1		6020	Total Recovera
Vanadium	1.4	J	4.0	0.44	ug/L	1		6020	Total Recovera
Zinc	4.5	J B	50	2.3	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012412-DR-031

Lab Sample ID: 240-7932-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	34000		5000	590	ug/L	1		6010B	Total Recovera
Potassium	1200	J B	5000	72	ug/L	1		6010B	Total Recovera
Calcium	85000	B	5000	130	ug/L	1		6010B	Total Recovera
Magnesium	16000	B	5000	34	ug/L	1		6010B	Total Recovera
Aluminum	420		50	19	ug/L	1		6020	Total Recovera
Antimony	0.56	J	2.0	0.13	ug/L	1		6020	Total Recovera
Arsenic	1.1	J	5.0	0.40	ug/L	1		6020	Total Recovera
Barium	47	J B	100	0.19	ug/L	1		6020	Total Recovera
Cobalt	0.57	J	20	0.058	ug/L	1		6020	Total Recovera
Copper	1.1	J B	4.0	0.29	ug/L	1		6020	Total Recovera
Iron	450		200	26	ug/L	1		6020	Total Recovera
Manganese	59		50	0.83	ug/L	1		6020	Total Recovera
Nickel	2.6	J	20	0.20	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012412-DR-031 (Continued) — Lab Sample ID: 240-7932-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	0.32	J	3.0	0.18	ug/L	1		6020	Total Recovera
Selenium	1.1	J	5.0	0.57	ug/L	1		6020	Total Recovera
Thallium	0.54	J	2.0	0.14	ug/L	1		6020	Total Recovera
Vanadium	1.3	J	4.0	0.44	ug/L	1		6020	Total Recovera
Zinc	3.8	J B	50	2.3	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012412-DR-032 — Lab Sample ID: 240-7932-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	430		50	19	ug/L	1		6020	Total Recovera
Antimony	0.28	J	2.0	0.13	ug/L	1		6020	Total Recovera
Arsenic	3.8	J	5.0	0.40	ug/L	1		6020	Total Recovera
Barium	110	B	100	0.19	ug/L	1		6020	Total Recovera
Cobalt	0.47	J	20	0.058	ug/L	1		6020	Total Recovera
Copper	0.84	J B	4.0	0.29	ug/L	1		6020	Total Recovera
Iron	760		200	26	ug/L	1		6020	Total Recovera
Manganese	190		50	0.83	ug/L	1		6020	Total Recovera
Nickel	1.4	J	20	0.20	ug/L	1		6020	Total Recovera
Lead	0.35	J	3.0	0.18	ug/L	1		6020	Total Recovera
Thallium	0.17	J	2.0	0.14	ug/L	1		6020	Total Recovera
Vanadium	1.2	J	4.0	0.44	ug/L	1		6020	Total Recovera
Zinc	3.6	J B	50	2.3	ug/L	1		6020	Total Recovera

Client Sample ID: GW-17358-012412-DR-033 — Lab Sample ID: 240-7932-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	100		50	19	ug/L	1		6020	Total Recovera
Antimony	0.84	J	2.0	0.13	ug/L	1		6020	Total Recovera
Arsenic	3.0	J	5.0	0.40	ug/L	1		6020	Total Recovera
Barium	62	J B	100	0.19	ug/L	1		6020	Total Recovera
Cobalt	0.55	J	20	0.058	ug/L	1		6020	Total Recovera
Copper	0.82	J B	4.0	0.29	ug/L	1		6020	Total Recovera
Iron	150	J	200	26	ug/L	1		6020	Total Recovera
Manganese	51		50	0.83	ug/L	1		6020	Total Recovera
Nickel	2.9	J	20	0.20	ug/L	1		6020	Total Recovera
Lead	0.33	J	3.0	0.18	ug/L	1		6020	Total Recovera
Vanadium	1.5	J	4.0	0.44	ug/L	1		6020	Total Recovera
Zinc	8.6	J B	50	2.3	ug/L	1		6020	Total Recovera

Client Sample ID: TB-17358-012412 — Lab Sample ID: 240-7932-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.1	J	10	1.1	ug/L	1		8260B	Total/NA

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NC
8270C	TCL Semivolatile Compounds (OLMO4.2)	SW846	TAL NC
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NC
6010B	Metals (ICP)	SW846	TAL NC
6020	Metals (ICP/MS)	SW846	TAL NC
7470A	Mercury (CVAA)	SW846	TAL NC
7196A	Chromium, Hexavalent	SW846	TAL NC
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL NC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NC = TestAmerica North Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17358-012312
Date Collected: 01/23/12 00:00
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.0**	**J**	10	1.1	ug/L			01/27/12 14:19	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 14:19	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 14:19	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 14:19	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 14:19	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 14:19	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 14:19	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 14:19	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 14:19	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 14:19	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 14:19	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 14:19	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 14:19	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 14:19	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 14:19	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 14:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 14:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 14:19	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 14:19	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 14:19	1
Methylene Chloride	**0.48**	**J B**	5.0	0.33	ug/L			01/27/12 14:19	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 14:19	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 14:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 14:19	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 14:19	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 14:19	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 14:19	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 14:19	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 14:19	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 14:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 14:19	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 14:19	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 14:19	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 14:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 14:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 14:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 14:19	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 14:19	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 14:19	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 14:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 14:19	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 14:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 14:19	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 14:19	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 14:19	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 14:19	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 14:19	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 14:19	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		63 - 129		01/27/12 14:19	1
4-Bromofluorobenzene (Surr)	96		66 - 117		01/27/12 14:19	1
Toluene-d8 (Surr)	96		74 - 115		01/27/12 14:19	1
Dibromofluoromethane (Surr)	102		75 - 121		01/27/12 14:19	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-012312-DR-023
Date Collected: 01/23/12 09:10
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			01/27/12 14:42	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 14:42	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 14:42	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 14:42	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 14:42	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 14:42	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 14:42	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 14:42	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 14:42	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 14:42	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 14:42	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 14:42	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 14:42	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 14:42	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 14:42	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 14:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 14:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 14:42	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 14:42	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 14:42	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			01/27/12 14:42	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 14:42	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 14:42	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 14:42	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 14:42	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 14:42	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 14:42	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 14:42	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 14:42	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 14:42	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 14:42	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 14:42	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 14:42	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 14:42	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 14:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 14:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 14:42	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 14:42	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 14:42	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 14:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 14:42	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 14:42	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 14:42	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 14:42	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 14:42	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 14:42	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 14:42	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 14:42	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 129		01/27/12 14:42	1
4-Bromofluorobenzene (Surr)	90		66 - 117		01/27/12 14:42	1
Toluene-d8 (Surr)	95		74 - 115		01/27/12 14:42	1
Dibromofluoromethane (Surr)	96		75 - 121		01/27/12 14:42	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-012312-DR-024
Date Collected: 01/23/12 09:35
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			01/27/12 15:04	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 15:04	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 15:04	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 15:04	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 15:04	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 15:04	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 15:04	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 15:04	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 15:04	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 15:04	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 15:04	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 15:04	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 15:04	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 15:04	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 15:04	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 15:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 15:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 15:04	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 15:04	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 15:04	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			01/27/12 15:04	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 15:04	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 15:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 15:04	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 15:04	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 15:04	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 15:04	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 15:04	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 15:04	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 15:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 15:04	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 15:04	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 15:04	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 15:04	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 15:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 15:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 15:04	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 15:04	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 15:04	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 15:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 15:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 15:04	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 15:04	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 15:04	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 15:04	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 15:04	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 15:04	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 15:04	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	91		63 - 129		01/27/12 15:04	1
4-Bromofluorobenzene (Surr)	94		66 - 117		01/27/12 15:04	1
Toluene-d8 (Surr)	95		74 - 115		01/27/12 15:04	1
Dibromofluoromethane (Surr)	95		75 - 121		01/27/12 15:04	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-012312-DR-025
Date Collected: 01/23/12 13:15
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.4**	**J**	10	1.1	ug/L			01/27/12 15:27	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 15:27	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 15:27	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 15:27	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 15:27	1
2-Butanone (MEK)	**0.57**	**J**	10	0.57	ug/L			01/27/12 15:27	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 15:27	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 15:27	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 15:27	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 15:27	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 15:27	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 15:27	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 15:27	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 15:27	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 15:27	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 15:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 15:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 15:27	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 15:27	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 15:27	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			01/27/12 15:27	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 15:27	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 15:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 15:27	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 15:27	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 15:27	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 15:27	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 15:27	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 15:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 15:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 15:27	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 15:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 15:27	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 15:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 15:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 15:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 15:27	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 15:27	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 15:27	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 15:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 15:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 15:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 15:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 15:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 15:27	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 15:27	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 15:27	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 15:27	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		63 - 129		01/27/12 15:27	1
4-Bromofluorobenzene (Surr)	85		66 - 117		01/27/12 15:27	1
Toluene-d8 (Surr)	86		74 - 115		01/27/12 15:27	1
Dibromofluoromethane (Surr)	87		75 - 121		01/27/12 15:27	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-012312-DR-026
Date Collected: 01/23/12 11:15
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			01/27/12 15:50	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 15:50	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 15:50	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 15:50	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 15:50	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 15:50	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 15:50	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 15:50	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 15:50	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 15:50	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 15:50	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 15:50	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 15:50	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 15:50	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 15:50	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 15:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 15:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 15:50	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 15:50	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 15:50	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			01/27/12 15:50	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 15:50	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 15:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 15:50	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 15:50	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 15:50	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 15:50	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 15:50	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 15:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 15:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 15:50	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 15:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 15:50	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 15:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 15:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 15:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 15:50	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 15:50	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 15:50	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 15:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 15:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 15:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 15:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 15:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 15:50	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 15:50	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 15:50	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 15:50	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		63 - 129		01/27/12 15:50	1
4-Bromofluorobenzene (Surr)	88		66 - 117		01/27/12 15:50	1
Toluene-d8 (Surr)	88		74 - 115		01/27/12 15:50	1
Dibromofluoromethane (Surr)	89		75 - 121		01/27/12 15:50	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-012312-DR-027
Date Collected: 01/23/12 14:20
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			01/27/12 16:12	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 16:12	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 16:12	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 16:12	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 16:12	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 16:12	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 16:12	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 16:12	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 16:12	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 16:12	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 16:12	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 16:12	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 16:12	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 16:12	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 16:12	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 16:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 16:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 16:12	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 16:12	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 16:12	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			01/27/12 16:12	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 16:12	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 16:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 16:12	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 16:12	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 16:12	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 16:12	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 16:12	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 16:12	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 16:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 16:12	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 16:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 16:12	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 16:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 16:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 16:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 16:12	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 16:12	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 16:12	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 16:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 16:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 16:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 16:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 16:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 16:12	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 16:12	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 16:12	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 16:12	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		63 - 129		01/27/12 16:12	1
4-Bromofluorobenzene (Surr)	83		66 - 117		01/27/12 16:12	1
Toluene-d8 (Surr)	88		74 - 115		01/27/12 16:12	1
Dibromofluoromethane (Surr)	88		75 - 121		01/27/12 16:12	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-012312-DR-028
Date Collected: 01/23/12 14:30
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			01/27/12 16:35	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 16:35	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 16:35	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 16:35	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 16:35	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 16:35	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 16:35	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 16:35	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 16:35	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 16:35	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 16:35	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 16:35	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 16:35	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 16:35	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 16:35	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 16:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 16:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 16:35	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 16:35	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 16:35	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			01/27/12 16:35	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 16:35	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 16:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 16:35	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 16:35	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 16:35	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 16:35	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 16:35	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 16:35	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 16:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 16:35	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 16:35	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 16:35	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 16:35	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 16:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 16:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 16:35	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 16:35	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 16:35	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 16:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 16:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 16:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 16:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 16:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 16:35	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 16:35	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 16:35	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 16:35	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		63 - 129		01/27/12 16:35	1
4-Bromofluorobenzene (Surr)	82		66 - 117		01/27/12 16:35	1
Toluene-d8 (Surr)	85		74 - 115		01/27/12 16:35	1
Dibromofluoromethane (Surr)	89		75 - 121		01/27/12 16:35	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-012312-DR-029
Date Collected: 01/23/12 14:40
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			01/27/12 16:57	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 16:57	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 16:57	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 16:57	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 16:57	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 16:57	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 16:57	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 16:57	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 16:57	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 16:57	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 16:57	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 16:57	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 16:57	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 16:57	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 16:57	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 16:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 16:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 16:57	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 16:57	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 16:57	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			01/27/12 16:57	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 16:57	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 16:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 16:57	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 16:57	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 16:57	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 16:57	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 16:57	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 16:57	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 16:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 16:57	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 16:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 16:57	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 16:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 16:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 16:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 16:57	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 16:57	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 16:57	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 16:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 16:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 16:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 16:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 16:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 16:57	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 16:57	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 16:57	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 16:57	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		63 - 129		01/27/12 16:57	1
4-Bromofluorobenzene (Surr)	84		66 - 117		01/27/12 16:57	1
Toluene-d8 (Surr)	87		74 - 115		01/27/12 16:57	1
Dibromofluoromethane (Surr)	87		75 - 121		01/27/12 16:57	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-012412-DR-030
Date Collected: 01/24/12 09:00
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			01/27/12 17:20	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 17:20	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 17:20	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 17:20	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 17:20	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 17:20	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 17:20	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 17:20	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 17:20	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 17:20	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 17:20	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 17:20	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 17:20	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 17:20	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 17:20	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 17:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 17:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 17:20	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 17:20	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 17:20	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			01/27/12 17:20	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 17:20	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 17:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 17:20	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 17:20	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 17:20	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 17:20	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 17:20	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 17:20	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 17:20	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 17:20	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 17:20	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 17:20	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 17:20	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 17:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 17:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 17:20	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 17:20	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 17:20	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 17:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 17:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 17:20	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 17:20	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 17:20	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 17:20	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 17:20	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 17:20	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 17:20	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		63 - 129		01/27/12 17:20	1
4-Bromofluorobenzene (Surr)	93		66 - 117		01/27/12 17:20	1
Toluene-d8 (Surr)	96		74 - 115		01/27/12 17:20	1
Dibromofluoromethane (Surr)	100		75 - 121		01/27/12 17:20	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-012412-DR-031
Date Collected: 01/24/12 09:35
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			01/27/12 17:42	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 17:42	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 17:42	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 17:42	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 17:42	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 17:42	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 17:42	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 17:42	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 17:42	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 17:42	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 17:42	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 17:42	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 17:42	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 17:42	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 17:42	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 17:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 17:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 17:42	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 17:42	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 17:42	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			01/27/12 17:42	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 17:42	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 17:42	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 17:42	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 17:42	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 17:42	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 17:42	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 17:42	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 17:42	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 17:42	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 17:42	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 17:42	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 17:42	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 17:42	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 17:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 17:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 17:42	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 17:42	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 17:42	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 17:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 17:42	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 17:42	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 17:42	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 17:42	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 17:42	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 17:42	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 17:42	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 17:42	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		63 - 129		01/27/12 17:42	1
4-Bromofluorobenzene (Surr)	84		66 - 117		01/27/12 17:42	1
Toluene-d8 (Surr)	87		74 - 115		01/27/12 17:42	1
Dibromofluoromethane (Surr)	87		75 - 121		01/27/12 17:42	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-012412-DR-032
Date Collected: 01/24/12 09:40
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			01/27/12 19:13	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 19:13	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 19:13	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 19:13	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 19:13	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 19:13	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 19:13	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 19:13	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 19:13	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 19:13	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 19:13	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 19:13	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 19:13	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 19:13	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 19:13	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 19:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 19:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 19:13	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 19:13	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 19:13	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			01/27/12 19:13	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 19:13	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 19:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 19:13	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 19:13	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 19:13	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 19:13	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 19:13	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 19:13	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 19:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 19:13	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 19:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 19:13	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 19:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 19:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 19:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 19:13	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 19:13	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 19:13	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 19:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 19:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 19:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 19:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 19:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 19:13	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 19:13	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 19:13	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 19:13	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129		01/27/12 19:13	1
4-Bromofluorobenzene (Surr)	86		66 - 117		01/27/12 19:13	1
Toluene-d8 (Surr)	88		74 - 115		01/27/12 19:13	1
Dibromofluoromethane (Surr)	90		75 - 121		01/27/12 19:13	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-012412-DR-033
Date Collected: 01/24/12 10:15
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			01/27/12 19:35	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 19:35	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 19:35	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 19:35	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 19:35	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 19:35	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 19:35	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 19:35	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 19:35	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 19:35	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 19:35	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 19:35	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 19:35	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 19:35	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 19:35	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 19:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 19:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 19:35	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 19:35	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 19:35	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			01/27/12 19:35	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 19:35	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 19:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 19:35	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 19:35	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 19:35	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 19:35	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 19:35	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 19:35	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 19:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 19:35	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 19:35	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 19:35	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 19:35	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 19:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 19:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 19:35	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 19:35	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 19:35	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 19:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 19:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 19:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 19:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 19:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 19:35	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 19:35	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 19:35	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 19:35	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		63 - 129		01/27/12 19:35	1
4-Bromofluorobenzene (Surr)	91		66 - 117		01/27/12 19:35	1
Toluene-d8 (Surr)	91		74 - 115		01/27/12 19:35	1
Dibromofluoromethane (Surr)	93		75 - 121		01/27/12 19:35	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17358-012412
Date Collected: 01/24/12 00:00
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.1**	**J**	10	1.1	ug/L			01/27/12 18:50	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 18:50	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 18:50	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 18:50	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 18:50	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 18:50	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 18:50	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 18:50	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 18:50	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 18:50	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 18:50	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 18:50	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 18:50	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 18:50	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 18:50	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 18:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 18:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 18:50	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 18:50	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 18:50	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			01/27/12 18:50	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 18:50	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 18:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 18:50	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 18:50	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 18:50	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 18:50	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 18:50	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 18:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 18:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 18:50	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 18:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 18:50	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 18:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 18:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 18:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 18:50	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 18:50	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 18:50	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 18:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 18:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 18:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 18:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 18:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 18:50	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 18:50	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 18:50	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 18:50	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		63 - 129		01/27/12 18:50	1
4-Bromofluorobenzene (Surr)	92		66 - 117		01/27/12 18:50	1
Toluene-d8 (Surr)	97		74 - 115		01/27/12 18:50	1
Dibromofluoromethane (Surr)	100		75 - 121		01/27/12 18:50	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-012312-DR-023
Date Collected: 01/23/12 09:10
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.41	ug/L		01/26/12 08:02	01/30/12 16:55	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.31	ug/L		01/26/12 08:02	01/30/12 16:55	1
2,4,6-Trichlorophenol	4.1	U	4.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
2,4-Dichlorophenol	10	U	10	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
2,4-Dimethylphenol	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 16:55	1
2,4-Dinitrotoluene	5.1	U	5.1	0.28	ug/L		01/26/12 08:02	01/30/12 16:55	1
2,6-Dinitrotoluene	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
2-Chlorophenol	5.1	U	5.1	0.30	ug/L		01/26/12 08:02	01/30/12 16:55	1
2-Methylnaphthalene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
2-Methylphenol	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
2-Nitroaniline	20	U	20	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
2-Nitrophenol	5.1	U	5.1	0.29	ug/L		01/26/12 08:02	01/30/12 16:55	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.38	ug/L		01/26/12 08:02	01/30/12 16:55	1
3-Nitroaniline	20	U	20	0.29	ug/L		01/26/12 08:02	01/30/12 16:55	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 16:55	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
4-Chloroaniline	10	U	10	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.31	ug/L		01/26/12 08:02	01/30/12 16:55	1
4-Nitroaniline	20	U	20	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
4-Nitrophenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 16:55	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Acetophenone	5.1	U	5.1	0.35	ug/L		01/26/12 08:02	01/30/12 16:55	1
Anthracene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Atrazine	3.1	U	3.1	0.35	ug/L		01/26/12 08:02	01/30/12 16:55	1
Benzaldehyde	5.1	U	5.1	0.40	ug/L		01/26/12 08:02	01/30/12 16:55	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.33	ug/L		01/26/12 08:02	01/30/12 16:55	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Bis(2-ethylhexyl) phthalate	**1.1**	**J B**	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
Butyl benzyl phthalate	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
Caprolactam	10	U	10	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
Carbazole	10	U	10	0.29	ug/L		01/26/12 08:02	01/30/12 16:55	1
Chrysene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Dibenzofuran	4.1	U	4.1	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		01/26/12 08:02	01/30/12 16:55	1
Dimethyl phthalate	5.1	U	5.1	0.30	ug/L		01/26/12 08:02	01/30/12 16:55	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		01/26/12 08:02	01/30/12 16:55	1
Di-n-octyl phthalate	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-012312-DR-023
Date Collected: 01/23/12 09:10
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		01/26/12 08:02	01/30/12 16:55	1
Hexachlorocyclopentadiene	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
Hexachloroethane	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Isophorone	5.1	U	5.1	0.28	ug/L		01/26/12 08:02	01/30/12 16:55	1
Naphthalene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Nitrobenzene	3.1	U	3.1	0.041	ug/L		01/26/12 08:02	01/30/12 16:55	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 16:55	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.32	ug/L		01/26/12 08:02	01/30/12 16:55	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		01/26/12 08:02	01/30/12 16:55	1
Phenol	5.1	U	5.1	0.61	ug/L		01/26/12 08:02	01/30/12 16:55	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
Pyrene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 16:55	1
3 & 4 Methylphenol	5.1	U	5.1	0.77	ug/L		01/26/12 08:02	01/30/12 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*28 - 110*	*01/26/12 08:02*	*01/30/12 16:55*	*1*
2-Fluorophenol (Surr)	*59*		*10 - 110*	*01/26/12 08:02*	*01/30/12 16:55*	*1*
2,4,6-Tribromophenol (Surr)	*77*		*22 - 120*	*01/26/12 08:02*	*01/30/12 16:55*	*1*
Nitrobenzene-d5 (Surr)	*59*		*27 - 111*	*01/26/12 08:02*	*01/30/12 16:55*	*1*
Phenol-d5 (Surr)	*66*		*10 - 110*	*01/26/12 08:02*	*01/30/12 16:55*	*1*
Terphenyl-d14 (Surr)	*64*		*37 - 119*	*01/26/12 08:02*	*01/30/12 16:55*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-012312-DR-024
Date Collected: 01/23/12 09:35
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.2	U	5.2	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
2,2'-oxybis[1-chloropropane]	5.2	U	5.2	0.41	ug/L		01/26/12 08:02	01/30/12 17:13	1
2,4,5-Trichlorophenol	5.2	U	5.2	0.31	ug/L		01/26/12 08:02	01/30/12 17:13	1
2,4,6-Trichlorophenol	4.1	U	4.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
2,4-Dichlorophenol	10	U	10	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
2,4-Dimethylphenol	5.2	U	5.2	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		01/26/12 08:02	01/30/12 17:13	1
2,4-Dinitrotoluene	5.2	U	5.2	0.28	ug/L		01/26/12 08:02	01/30/12 17:13	1
2,6-Dinitrotoluene	5.2	U	5.2	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
2-Chloronaphthalene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
2-Chlorophenol	5.2	U	5.2	0.30	ug/L		01/26/12 08:02	01/30/12 17:13	1
2-Methylnaphthalene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
2-Methylphenol	5.2	U	5.2	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
2-Nitroaniline	21	U	21	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
2-Nitrophenol	5.2	U	5.2	0.29	ug/L		01/26/12 08:02	01/30/12 17:13	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.38	ug/L		01/26/12 08:02	01/30/12 17:13	1
3-Nitroaniline	21	U	21	0.29	ug/L		01/26/12 08:02	01/30/12 17:13	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		01/26/12 08:02	01/30/12 17:13	1
4-Bromophenyl phenyl ether	5.2	U	5.2	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
4-Chloro-3-methylphenol	5.2	U	5.2	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
4-Chloroaniline	10	U	10	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
4-Chlorophenyl phenyl ether	5.2	U	5.2	0.31	ug/L		01/26/12 08:02	01/30/12 17:13	1
4-Nitroaniline	21	U	21	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
4-Nitrophenol	21	U	21	2.5	ug/L		01/26/12 08:02	01/30/12 17:13	1
Acenaphthene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Acenaphthylene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Acetophenone	5.2	U	5.2	0.35	ug/L		01/26/12 08:02	01/30/12 17:13	1
Anthracene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Atrazine	3.1	U	3.1	0.35	ug/L		01/26/12 08:02	01/30/12 17:13	1
Benzaldehyde	5.2	U	5.2	0.40	ug/L		01/26/12 08:02	01/30/12 17:13	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Bis(2-chloroethoxy)methane	5.2	U	5.2	0.33	ug/L		01/26/12 08:02	01/30/12 17:13	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Bis(2-ethylhexyl) phthalate	**0.97**	**J B**	5.2	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
Butyl benzyl phthalate	5.2	U	5.2	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
Caprolactam	10	U	10	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
Carbazole	10	U	10	0.29	ug/L		01/26/12 08:02	01/30/12 17:13	1
Chrysene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Dibenzofuran	4.1	U	4.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Diethyl phthalate	5.2	U	5.2	0.62	ug/L		01/26/12 08:02	01/30/12 17:13	1
Dimethyl phthalate	5.2	U	5.2	0.30	ug/L		01/26/12 08:02	01/30/12 17:13	1
Di-n-butyl phthalate	5.2	U	5.2	0.69	ug/L		01/26/12 08:02	01/30/12 17:13	1
Di-n-octyl phthalate	5.2	U	5.2	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-012312-DR-024
Date Collected: 01/23/12 09:35
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Hexachlorobenzene	0.21	U	0.21	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		01/26/12 08:02	01/30/12 17:13	1
Hexachlorocyclopentadiene	5.2	U	5.2	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
Hexachloroethane	5.2	U	5.2	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Isophorone	5.2	U	5.2	0.28	ug/L		01/26/12 08:02	01/30/12 17:13	1
Naphthalene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Nitrobenzene	3.1	U	3.1	0.041	ug/L		01/26/12 08:02	01/30/12 17:13	1
N-Nitrosodi-n-propylamine	5.2	U	5.2	0.82	ug/L		01/26/12 08:02	01/30/12 17:13	1
N-Nitrosodiphenylamine	5.2	U	5.2	0.32	ug/L		01/26/12 08:02	01/30/12 17:13	1
Pentachlorophenol	5.2	U	5.2	2.5	ug/L		01/26/12 08:02	01/30/12 17:13	1
Phenol	5.2	U	5.2	0.62	ug/L		01/26/12 08:02	01/30/12 17:13	1
Phenanthrene	2.1	U	2.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
Pyrene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 17:13	1
3 & 4 Methylphenol	5.2	U	5.2	0.77	ug/L		01/26/12 08:02	01/30/12 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*28 - 110*	*01/26/12 08:02*	*01/30/12 17:13*	*1*
2-Fluorophenol (Surr)	*62*		*10 - 110*	*01/26/12 08:02*	*01/30/12 17:13*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*22 - 120*	*01/26/12 08:02*	*01/30/12 17:13*	*1*
Nitrobenzene-d5 (Surr)	*58*		*27 - 111*	*01/26/12 08:02*	*01/30/12 17:13*	*1*
Phenol-d5 (Surr)	*65*		*10 - 110*	*01/26/12 08:02*	*01/30/12 17:13*	*1*
Terphenyl-d14 (Surr)	*79*		*37 - 119*	*01/26/12 08:02*	*01/30/12 17:13*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-012312-DR-025
Date Collected: 01/23/12 13:15
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.41	ug/L		01/26/12 08:02	01/30/12 17:31	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.31	ug/L		01/26/12 08:02	01/30/12 17:31	1
2,4,6-Trichlorophenol	4.1	U	4.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
2,4-Dichlorophenol	10	U	10	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
2,4-Dimethylphenol	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 17:31	1
2,4-Dinitrotoluene	5.1	U	5.1	0.28	ug/L		01/26/12 08:02	01/30/12 17:31	1
2,6-Dinitrotoluene	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
2-Chlorophenol	5.1	U	5.1	0.30	ug/L		01/26/12 08:02	01/30/12 17:31	1
2-Methylnaphthalene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
2-Methylphenol	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
2-Nitroaniline	20	U	20	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
2-Nitrophenol	5.1	U	5.1	0.29	ug/L		01/26/12 08:02	01/30/12 17:31	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.38	ug/L		01/26/12 08:02	01/30/12 17:31	1
3-Nitroaniline	20	U	20	0.29	ug/L		01/26/12 08:02	01/30/12 17:31	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 17:31	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
4-Chloroaniline	10	U	10	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.31	ug/L		01/26/12 08:02	01/30/12 17:31	1
4-Nitroaniline	20	U	20	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
4-Nitrophenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 17:31	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Acetophenone	5.1	U	5.1	0.35	ug/L		01/26/12 08:02	01/30/12 17:31	1
Anthracene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Atrazine	3.1	U	3.1	0.35	ug/L		01/26/12 08:02	01/30/12 17:31	1
Benzaldehyde	5.1	U	5.1	0.40	ug/L		01/26/12 08:02	01/30/12 17:31	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.33	ug/L		01/26/12 08:02	01/30/12 17:31	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
Butyl benzyl phthalate	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
Caprolactam	10	U	10	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
Carbazole	10	U	10	0.29	ug/L		01/26/12 08:02	01/30/12 17:31	1
Chrysene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Dibenzofuran	4.1	U	4.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		01/26/12 08:02	01/30/12 17:31	1
Dimethyl phthalate	5.1	U	5.1	0.30	ug/L		01/26/12 08:02	01/30/12 17:31	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		01/26/12 08:02	01/30/12 17:31	1
Di-n-octyl phthalate	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-012312-DR-025
Date Collected: 01/23/12 13:15
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		01/26/12 08:02	01/30/12 17:31	1
Hexachlorocyclopentadiene	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
Hexachloroethane	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Isophorone	5.1	U	5.1	0.28	ug/L		01/26/12 08:02	01/30/12 17:31	1
Naphthalene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Nitrobenzene	3.1	U	3.1	0.041	ug/L		01/26/12 08:02	01/30/12 17:31	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 17:31	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.32	ug/L		01/26/12 08:02	01/30/12 17:31	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		01/26/12 08:02	01/30/12 17:31	1
Phenol	5.1	U	5.1	0.61	ug/L		01/26/12 08:02	01/30/12 17:31	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
Pyrene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 17:31	1
3 & 4 Methylphenol	5.1	U	5.1	0.77	ug/L		01/26/12 08:02	01/30/12 17:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*28 - 110*	*01/26/12 08:02*	*01/30/12 17:31*	*1*
2-Fluorophenol (Surr)	*63*		*10 - 110*	*01/26/12 08:02*	*01/30/12 17:31*	*1*
2,4,6-Tribromophenol (Surr)	*75*		*22 - 120*	*01/26/12 08:02*	*01/30/12 17:31*	*1*
Nitrobenzene-d5 (Surr)	*60*		*27 - 111*	*01/26/12 08:02*	*01/30/12 17:31*	*1*
Phenol-d5 (Surr)	*64*		*10 - 110*	*01/26/12 08:02*	*01/30/12 17:31*	*1*
Terphenyl-d14 (Surr)	*68*		*37 - 119*	*01/26/12 08:02*	*01/30/12 17:31*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-012312-DR-026
Date Collected: 01/23/12 11:15
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
2,2'-oxybis[1-chloropropane]	5.2	U	5.2	0.42	ug/L		01/26/12 08:02	01/30/12 15:43	1
2,4,5-Trichlorophenol	5.2	U	5.2	0.31	ug/L		01/26/12 08:02	01/30/12 15:43	1
2,4,6-Trichlorophenol	4.2	U	4.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
2,4-Dichlorophenol	10	U	10	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
2,4-Dimethylphenol	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		01/26/12 08:02	01/30/12 15:43	1
2,4-Dinitrotoluene	5.2	U	5.2	0.28	ug/L		01/26/12 08:02	01/30/12 15:43	1
2,6-Dinitrotoluene	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
2-Chloronaphthalene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
2-Chlorophenol	5.2	U	5.2	0.30	ug/L		01/26/12 08:02	01/30/12 15:43	1
2-Methylnaphthalene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
2-Methylphenol	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
2-Nitroaniline	21	U	21	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
2-Nitrophenol	5.2	U	5.2	0.29	ug/L		01/26/12 08:02	01/30/12 15:43	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.39	ug/L		01/26/12 08:02	01/30/12 15:43	1
3-Nitroaniline	21	U	21	0.29	ug/L		01/26/12 08:02	01/30/12 15:43	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		01/26/12 08:02	01/30/12 15:43	1
4-Bromophenyl phenyl ether	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
4-Chloro-3-methylphenol	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
4-Chloroaniline	10	U	10	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
4-Chlorophenyl phenyl ether	5.2	U	5.2	0.31	ug/L		01/26/12 08:02	01/30/12 15:43	1
4-Nitroaniline	21	U	21	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
4-Nitrophenol	21	U	21	2.5	ug/L		01/26/12 08:02	01/30/12 15:43	1
Acenaphthene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Acenaphthylene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Acetophenone	5.2	U	5.2	0.35	ug/L		01/26/12 08:02	01/30/12 15:43	1
Anthracene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Atrazine	3.1	U	3.1	0.35	ug/L		01/26/12 08:02	01/30/12 15:43	1
Benzaldehyde	5.2	U	5.2	0.41	ug/L		01/26/12 08:02	01/30/12 15:43	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Bis(2-chloroethoxy)methane	5.2	U	5.2	0.33	ug/L		01/26/12 08:02	01/30/12 15:43	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Bis(2-ethylhexyl) phthalate	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
Butyl benzyl phthalate	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
Caprolactam	10	U	10	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
Carbazole	10	U	10	0.29	ug/L		01/26/12 08:02	01/30/12 15:43	1
Chrysene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Dibenzofuran	4.2	U	4.2	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Diethyl phthalate	5.2	U	5.2	0.62	ug/L		01/26/12 08:02	01/30/12 15:43	1
Dimethyl phthalate	5.2	U	5.2	0.30	ug/L		01/26/12 08:02	01/30/12 15:43	1
Di-n-butyl phthalate	5.2	U	5.2	0.70	ug/L		01/26/12 08:02	01/30/12 15:43	1
Di-n-octyl phthalate	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-012312-DR-026
Date Collected: 01/23/12 11:15
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Hexachlorobenzene	0.21	U	0.21	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		01/26/12 08:02	01/30/12 15:43	1
Hexachlorocyclopentadiene	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
Hexachloroethane	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Isophorone	5.2	U	5.2	0.28	ug/L		01/26/12 08:02	01/30/12 15:43	1
Naphthalene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Nitrobenzene	3.1	U	3.1	0.042	ug/L		01/26/12 08:02	01/30/12 15:43	1
N-Nitrosodi-n-propylamine	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 15:43	1
N-Nitrosodiphenylamine	5.2	U	5.2	0.32	ug/L		01/26/12 08:02	01/30/12 15:43	1
Pentachlorophenol	5.2	U	5.2	2.5	ug/L		01/26/12 08:02	01/30/12 15:43	1
Phenol	5.2	U	5.2	0.62	ug/L		01/26/12 08:02	01/30/12 15:43	1
Phenanthrene	2.1	U	2.1	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
Pyrene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 15:43	1
3 & 4 Methylphenol	5.2	U	5.2	0.78	ug/L		01/26/12 08:02	01/30/12 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*55*		*28 - 110*	*01/26/12 08:02*	*01/30/12 15:43*	*1*
2-Fluorophenol (Surr)	*56*		*10 - 110*	*01/26/12 08:02*	*01/30/12 15:43*	*1*
2,4,6-Tribromophenol (Surr)	*65*		*22 - 120*	*01/26/12 08:02*	*01/30/12 15:43*	*1*
Nitrobenzene-d5 (Surr)	*50*		*27 - 111*	*01/26/12 08:02*	*01/30/12 15:43*	*1*
Phenol-d5 (Surr)	*59*		*10 - 110*	*01/26/12 08:02*	*01/30/12 15:43*	*1*
Terphenyl-d14 (Surr)	*68*		*37 - 119*	*01/26/12 08:02*	*01/30/12 15:43*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-012312-DR-027
Date Collected: 01/23/12 14:20
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.4	U	5.4	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
2,2'-oxybis[1-chloropropane]	5.4	U	5.4	0.43	ug/L		01/26/12 08:02	01/30/12 16:01	1
2,4,5-Trichlorophenol	5.4	U	5.4	0.32	ug/L		01/26/12 08:02	01/30/12 16:01	1
2,4,6-Trichlorophenol	4.3	U	4.3	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
2,4-Dichlorophenol	11	U	11	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
2,4-Dimethylphenol	5.4	U	5.4	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
2,4-Dinitrophenol	22	U	22	2.6	ug/L		01/26/12 08:02	01/30/12 16:01	1
2,4-Dinitrotoluene	5.4	U	5.4	0.29	ug/L		01/26/12 08:02	01/30/12 16:01	1
2,6-Dinitrotoluene	5.4	U	5.4	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
2-Chloronaphthalene	5.4	U	5.4	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
2-Chlorophenol	5.4	U	5.4	0.31	ug/L		01/26/12 08:02	01/30/12 16:01	1
2-Methylnaphthalene	5.4	U	5.4	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
2-Methylphenol	5.4	U	5.4	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
2-Nitroaniline	22	U	22	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
2-Nitrophenol	5.4	U	5.4	0.30	ug/L		01/26/12 08:02	01/30/12 16:01	1
3,3'-Dichlorobenzidine	1.1	U	1.1	0.40	ug/L		01/26/12 08:02	01/30/12 16:01	1
3-Nitroaniline	22	U	22	0.30	ug/L		01/26/12 08:02	01/30/12 16:01	1
4,6-Dinitro-2-methylphenol	22	U	22	2.6	ug/L		01/26/12 08:02	01/30/12 16:01	1
4-Bromophenyl phenyl ether	5.4	U	5.4	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
4-Chloro-3-methylphenol	5.4	U	5.4	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
4-Chloroaniline	11	U	11	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
4-Chlorophenyl phenyl ether	5.4	U	5.4	0.32	ug/L		01/26/12 08:02	01/30/12 16:01	1
4-Nitroaniline	22	U	22	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
4-Nitrophenol	22	U	22	2.6	ug/L		01/26/12 08:02	01/30/12 16:01	1
Acenaphthene	5.4	U	5.4	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Acenaphthylene	5.4	U	5.4	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Acetophenone	5.4	U	5.4	0.37	ug/L		01/26/12 08:02	01/30/12 16:01	1
Anthracene	5.4	U	5.4	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Atrazine	3.2	U	3.2	0.37	ug/L		01/26/12 08:02	01/30/12 16:01	1
Benzaldehyde	5.4	U	5.4	0.42	ug/L		01/26/12 08:02	01/30/12 16:01	1
Benzo[a]anthracene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Benzo[a]pyrene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Benzo[b]fluoranthene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Benzo[g,h,i]perylene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Benzo[k]fluoranthene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Bis(2-chloroethoxy)methane	5.4	U	5.4	0.34	ug/L		01/26/12 08:02	01/30/12 16:01	1
Bis(2-chloroethyl)ether	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Bis(2-ethylhexyl) phthalate	5.4	U	5.4	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
Butyl benzyl phthalate	5.4	U	5.4	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
Caprolactam	11	U	11	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
Carbazole	11	U	11	0.30	ug/L		01/26/12 08:02	01/30/12 16:01	1
Chrysene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Dibenz(a,h)anthracene	2.2	U	2.2	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Dibenzofuran	4.3	U	4.3	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Diethyl phthalate	5.4	U	5.4	0.65	ug/L		01/26/12 08:02	01/30/12 16:01	1
Dimethyl phthalate	5.4	U	5.4	0.31	ug/L		01/26/12 08:02	01/30/12 16:01	1
Di-n-butyl phthalate	5.4	U	5.4	0.72	ug/L		01/26/12 08:02	01/30/12 16:01	1
Di-n-octyl phthalate	5.4	U	5.4	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
Fluoranthene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-012312-DR-027
Date Collected: 01/23/12 14:20
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.4	U	5.4	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Hexachlorobenzene	0.22	U	0.22	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Hexachlorobutadiene	1.1	U	1.1	0.29	ug/L		01/26/12 08:02	01/30/12 16:01	1
Hexachlorocyclopentadiene	5.4	U	5.4	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
Hexachloroethane	5.4	U	5.4	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
Indeno[1,2,3-cd]pyrene	2.2	U	2.2	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Isophorone	5.4	U	5.4	0.29	ug/L		01/26/12 08:02	01/30/12 16:01	1
Naphthalene	5.4	U	5.4	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Nitrobenzene	3.2	U	3.2	0.043	ug/L		01/26/12 08:02	01/30/12 16:01	1
N-Nitrosodi-n-propylamine	5.4	U	5.4	0.86	ug/L		01/26/12 08:02	01/30/12 16:01	1
N-Nitrosodiphenylamine	5.4	U	5.4	0.33	ug/L		01/26/12 08:02	01/30/12 16:01	1
Pentachlorophenol	5.4	U	5.4	2.6	ug/L		01/26/12 08:02	01/30/12 16:01	1
Phenol	5.4	U	5.4	0.65	ug/L		01/26/12 08:02	01/30/12 16:01	1
Phenanthrene	2.2	U	2.2	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
Pyrene	5.4	U	5.4	0.11	ug/L		01/26/12 08:02	01/30/12 16:01	1
3 & 4 Methylphenol	5.4	U	5.4	0.81	ug/L		01/26/12 08:02	01/30/12 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*28 - 110*	*01/26/12 08:02*	*01/30/12 16:01*	*1*
2-Fluorophenol (Surr)	*62*		*10 - 110*	*01/26/12 08:02*	*01/30/12 16:01*	*1*
2,4,6-Tribromophenol (Surr)	*71*		*22 - 120*	*01/26/12 08:02*	*01/30/12 16:01*	*1*
Nitrobenzene-d5 (Surr)	*62*		*27 - 111*	*01/26/12 08:02*	*01/30/12 16:01*	*1*
Phenol-d5 (Surr)	*63*		*10 - 110*	*01/26/12 08:02*	*01/30/12 16:01*	*1*
Terphenyl-d14 (Surr)	*77*		*37 - 119*	*01/26/12 08:02*	*01/30/12 16:01*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-012312-DR-028
Date Collected: 01/23/12 14:30
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.3	U	5.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
2,2'-oxybis[1-chloropropane]	5.3	U	5.3	0.43	ug/L		01/26/12 08:02	01/30/12 16:19	1
2,4,5-Trichlorophenol	5.3	U	5.3	0.32	ug/L		01/26/12 08:02	01/30/12 16:19	1
2,4,6-Trichlorophenol	4.3	U	4.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
2,4-Dichlorophenol	11	U	11	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
2,4-Dimethylphenol	5.3	U	5.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
2,4-Dinitrophenol	21	U	21	2.6	ug/L		01/26/12 08:02	01/30/12 16:19	1
2,4-Dinitrotoluene	5.3	U	5.3	0.29	ug/L		01/26/12 08:02	01/30/12 16:19	1
2,6-Dinitrotoluene	5.3	U	5.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
2-Chloronaphthalene	5.3	U	5.3	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
2-Chlorophenol	5.3	U	5.3	0.31	ug/L		01/26/12 08:02	01/30/12 16:19	1
2-Methylnaphthalene	5.3	U	5.3	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
2-Methylphenol	5.3	U	5.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
2-Nitroaniline	21	U	21	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
2-Nitrophenol	5.3	U	5.3	0.30	ug/L		01/26/12 08:02	01/30/12 16:19	1
3,3'-Dichlorobenzidine	1.1	U	1.1	0.39	ug/L		01/26/12 08:02	01/30/12 16:19	1
3-Nitroaniline	21	U	21	0.30	ug/L		01/26/12 08:02	01/30/12 16:19	1
4,6-Dinitro-2-methylphenol	21	U	21	2.6	ug/L		01/26/12 08:02	01/30/12 16:19	1
4-Bromophenyl phenyl ether	5.3	U	5.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
4-Chloro-3-methylphenol	5.3	U	5.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
4-Chloroaniline	11	U	11	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
4-Chlorophenyl phenyl ether	5.3	U	5.3	0.32	ug/L		01/26/12 08:02	01/30/12 16:19	1
4-Nitroaniline	21	U	21	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
4-Nitrophenol	21	U	21	2.6	ug/L		01/26/12 08:02	01/30/12 16:19	1
Acenaphthene	5.3	U	5.3	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Acenaphthylene	5.3	U	5.3	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Acetophenone	5.3	U	5.3	0.36	ug/L		01/26/12 08:02	01/30/12 16:19	1
Anthracene	5.3	U	5.3	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Atrazine	3.2	U	3.2	0.36	ug/L		01/26/12 08:02	01/30/12 16:19	1
Benzaldehyde	5.3	U	5.3	0.41	ug/L		01/26/12 08:02	01/30/12 16:19	1
Benzo[a]anthracene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Benzo[a]pyrene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Benzo[b]fluoranthene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Benzo[g,h,i]perylene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Benzo[k]fluoranthene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Bis(2-chloroethoxy)methane	5.3	U	5.3	0.34	ug/L		01/26/12 08:02	01/30/12 16:19	1
Bis(2-chloroethyl)ether	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Bis(2-ethylhexyl) phthalate	5.3	U	5.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
Butyl benzyl phthalate	5.3	U	5.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
Caprolactam	11	U	11	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
Carbazole	11	U	11	0.30	ug/L		01/26/12 08:02	01/30/12 16:19	1
Chrysene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Dibenzofuran	4.3	U	4.3	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Diethyl phthalate	5.3	U	5.3	0.64	ug/L		01/26/12 08:02	01/30/12 16:19	1
Dimethyl phthalate	5.3	U	5.3	0.31	ug/L		01/26/12 08:02	01/30/12 16:19	1
Di-n-butyl phthalate	5.3	U	5.3	0.71	ug/L		01/26/12 08:02	01/30/12 16:19	1
Di-n-octyl phthalate	5.3	U	5.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
Fluoranthene	1.1	U	1.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-012312-DR-028
Date Collected: 01/23/12 14:30
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.3	U	5.3	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Hexachlorobenzene	0.21	U	0.21	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Hexachlorobutadiene	1.1	U	1.1	0.29	ug/L		01/26/12 08:02	01/30/12 16:19	1
Hexachlorocyclopentadiene	5.3	U	5.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
Hexachloroethane	5.3	U	5.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Isophorone	5.3	U	5.3	0.29	ug/L		01/26/12 08:02	01/30/12 16:19	1
Naphthalene	5.3	U	5.3	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Nitrobenzene	3.2	U	3.2	0.043	ug/L		01/26/12 08:02	01/30/12 16:19	1
N-Nitrosodi-n-propylamine	5.3	U	5.3	0.85	ug/L		01/26/12 08:02	01/30/12 16:19	1
N-Nitrosodiphenylamine	5.3	U	5.3	0.33	ug/L		01/26/12 08:02	01/30/12 16:19	1
Pentachlorophenol	5.3	U	5.3	2.6	ug/L		01/26/12 08:02	01/30/12 16:19	1
Phenol	5.3	U	5.3	0.64	ug/L		01/26/12 08:02	01/30/12 16:19	1
Phenanthrene	2.1	U	2.1	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
Pyrene	5.3	U	5.3	0.11	ug/L		01/26/12 08:02	01/30/12 16:19	1
3 & 4 Methylphenol	5.3	U	5.3	0.80	ug/L		01/26/12 08:02	01/30/12 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*28 - 110*	*01/26/12 08:02*	*01/30/12 16:19*	*1*
2-Fluorophenol (Surr)	*63*		*10 - 110*	*01/26/12 08:02*	*01/30/12 16:19*	*1*
2,4,6-Tribromophenol (Surr)	*71*		*22 - 120*	*01/26/12 08:02*	*01/30/12 16:19*	*1*
Nitrobenzene-d5 (Surr)	*58*		*27 - 111*	*01/26/12 08:02*	*01/30/12 16:19*	*1*
Phenol-d5 (Surr)	*65*		*10 - 110*	*01/26/12 08:02*	*01/30/12 16:19*	*1*
Terphenyl-d14 (Surr)	*73*		*37 - 119*	*01/26/12 08:02*	*01/30/12 16:19*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-012312-DR-029
Date Collected: 01/23/12 14:40
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
2,2'-oxybis[1-chloropropane]	5.2	U	5.2	0.42	ug/L		01/26/12 08:02	01/30/12 16:37	1
2,4,5-Trichlorophenol	5.2	U	5.2	0.31	ug/L		01/26/12 08:02	01/30/12 16:37	1
2,4,6-Trichlorophenol	4.2	U	4.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
2,4-Dichlorophenol	10	U	10	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
2,4-Dimethylphenol	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		01/26/12 08:02	01/30/12 16:37	1
2,4-Dinitrotoluene	5.2	U	5.2	0.28	ug/L		01/26/12 08:02	01/30/12 16:37	1
2,6-Dinitrotoluene	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
2-Chloronaphthalene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
2-Chlorophenol	5.2	U	5.2	0.30	ug/L		01/26/12 08:02	01/30/12 16:37	1
2-Methylnaphthalene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
2-Methylphenol	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
2-Nitroaniline	21	U	21	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
2-Nitrophenol	5.2	U	5.2	0.29	ug/L		01/26/12 08:02	01/30/12 16:37	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.39	ug/L		01/26/12 08:02	01/30/12 16:37	1
3-Nitroaniline	21	U	21	0.29	ug/L		01/26/12 08:02	01/30/12 16:37	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		01/26/12 08:02	01/30/12 16:37	1
4-Bromophenyl phenyl ether	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
4-Chloro-3-methylphenol	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
4-Chloroaniline	10	U	10	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
4-Chlorophenyl phenyl ether	5.2	U	5.2	0.31	ug/L		01/26/12 08:02	01/30/12 16:37	1
4-Nitroaniline	21	U	21	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
4-Nitrophenol	21	U	21	2.5	ug/L		01/26/12 08:02	01/30/12 16:37	1
Acenaphthene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Acenaphthylene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Acetophenone	5.2	U	5.2	0.35	ug/L		01/26/12 08:02	01/30/12 16:37	1
Anthracene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Atrazine	3.1	U	3.1	0.35	ug/L		01/26/12 08:02	01/30/12 16:37	1
Benzaldehyde	5.2	U	5.2	0.41	ug/L		01/26/12 08:02	01/30/12 16:37	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Bis(2-chloroethoxy)methane	5.2	U	5.2	0.33	ug/L		01/26/12 08:02	01/30/12 16:37	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Bis(2-ethylhexyl) phthalate	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
Butyl benzyl phthalate	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
Caprolactam	10	U	10	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
Carbazole	10	U	10	0.29	ug/L		01/26/12 08:02	01/30/12 16:37	1
Chrysene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Dibenzofuran	4.2	U	4.2	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Diethyl phthalate	5.2	U	5.2	0.62	ug/L		01/26/12 08:02	01/30/12 16:37	1
Dimethyl phthalate	5.2	U	5.2	0.30	ug/L		01/26/12 08:02	01/30/12 16:37	1
Di-n-butyl phthalate	5.2	U	5.2	0.70	ug/L		01/26/12 08:02	01/30/12 16:37	1
Di-n-octyl phthalate	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-012312-DR-029
Date Collected: 01/23/12 14:40
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Hexachlorobenzene	0.21	U	0.21	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		01/26/12 08:02	01/30/12 16:37	1
Hexachlorocyclopentadiene	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
Hexachloroethane	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Isophorone	5.2	U	5.2	0.28	ug/L		01/26/12 08:02	01/30/12 16:37	1
Naphthalene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Nitrobenzene	3.1	U	3.1	0.042	ug/L		01/26/12 08:02	01/30/12 16:37	1
N-Nitrosodi-n-propylamine	5.2	U	5.2	0.83	ug/L		01/26/12 08:02	01/30/12 16:37	1
N-Nitrosodiphenylamine	5.2	U	5.2	0.32	ug/L		01/26/12 08:02	01/30/12 16:37	1
Pentachlorophenol	5.2	U	5.2	2.5	ug/L		01/26/12 08:02	01/30/12 16:37	1
Phenol	5.2	U	5.2	0.62	ug/L		01/26/12 08:02	01/30/12 16:37	1
Phenanthrene	2.1	U	2.1	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
Pyrene	5.2	U	5.2	0.10	ug/L		01/26/12 08:02	01/30/12 16:37	1
3 & 4 Methylphenol	5.2	U	5.2	0.78	ug/L		01/26/12 08:02	01/30/12 16:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*28 - 110*	*01/26/12 08:02*	*01/30/12 16:37*	*1*
2-Fluorophenol (Surr)	*63*		*10 - 110*	*01/26/12 08:02*	*01/30/12 16:37*	*1*
2,4,6-Tribromophenol (Surr)	*69*		*22 - 120*	*01/26/12 08:02*	*01/30/12 16:37*	*1*
Nitrobenzene-d5 (Surr)	*59*		*27 - 111*	*01/26/12 08:02*	*01/30/12 16:37*	*1*
Phenol-d5 (Surr)	*63*		*10 - 110*	*01/26/12 08:02*	*01/30/12 16:37*	*1*
Terphenyl-d14 (Surr)	*78*		*37 - 119*	*01/26/12 08:02*	*01/30/12 16:37*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-012412-DR-030
Date Collected: 01/24/12 09:00
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.41	ug/L		01/26/12 08:02	01/30/12 14:48	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.31	ug/L		01/26/12 08:02	01/30/12 14:48	1
2,4,6-Trichlorophenol	4.1	U	4.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
2,4-Dichlorophenol	10	U	10	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
2,4-Dimethylphenol	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 14:48	1
2,4-Dinitrotoluene	5.1	U	5.1	0.28	ug/L		01/26/12 08:02	01/30/12 14:48	1
2,6-Dinitrotoluene	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
2-Chlorophenol	5.1	U	5.1	0.30	ug/L		01/26/12 08:02	01/30/12 14:48	1
2-Methylnaphthalene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
2-Methylphenol	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
2-Nitroaniline	20	U	20	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
2-Nitrophenol	5.1	U	5.1	0.29	ug/L		01/26/12 08:02	01/30/12 14:48	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.38	ug/L		01/26/12 08:02	01/30/12 14:48	1
3-Nitroaniline	20	U	20	0.29	ug/L		01/26/12 08:02	01/30/12 14:48	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 14:48	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
4-Chloroaniline	10	U	10	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.31	ug/L		01/26/12 08:02	01/30/12 14:48	1
4-Nitroaniline	20	U	20	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
4-Nitrophenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 14:48	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Acetophenone	5.1	U	5.1	0.35	ug/L		01/26/12 08:02	01/30/12 14:48	1
Anthracene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Atrazine	3.1	U	3.1	0.35	ug/L		01/26/12 08:02	01/30/12 14:48	1
Benzaldehyde	5.1	U	5.1	0.40	ug/L		01/26/12 08:02	01/30/12 14:48	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.33	ug/L		01/26/12 08:02	01/30/12 14:48	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
Butyl benzyl phthalate	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
Caprolactam	10	U	10	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
Carbazole	10	U	10	0.29	ug/L		01/26/12 08:02	01/30/12 14:48	1
Chrysene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Dibenzofuran	4.1	U	4.1	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		01/26/12 08:02	01/30/12 14:48	1
Dimethyl phthalate	5.1	U	5.1	0.30	ug/L		01/26/12 08:02	01/30/12 14:48	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		01/26/12 08:02	01/30/12 14:48	1
Di-n-octyl phthalate	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-012412-DR-030
Date Collected: 01/24/12 09:00
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		01/26/12 08:02	01/30/12 14:48	1
Hexachlorocyclopentadiene	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
Hexachloroethane	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Isophorone	5.1	U	5.1	0.28	ug/L		01/26/12 08:02	01/30/12 14:48	1
Naphthalene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Nitrobenzene	3.1	U	3.1	0.041	ug/L		01/26/12 08:02	01/30/12 14:48	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.82	ug/L		01/26/12 08:02	01/30/12 14:48	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.32	ug/L		01/26/12 08:02	01/30/12 14:48	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		01/26/12 08:02	01/30/12 14:48	1
Phenol	5.1	U	5.1	0.61	ug/L		01/26/12 08:02	01/30/12 14:48	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
Pyrene	5.1	U	5.1	0.10	ug/L		01/26/12 08:02	01/30/12 14:48	1
3 & 4 Methylphenol	5.1	U	5.1	0.77	ug/L		01/26/12 08:02	01/30/12 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*28 - 110*	*01/26/12 08:02*	*01/30/12 14:48*	*1*
2-Fluorophenol (Surr)	*52*		*10 - 110*	*01/26/12 08:02*	*01/30/12 14:48*	*1*
2,4,6-Tribromophenol (Surr)	*53*		*22 - 120*	*01/26/12 08:02*	*01/30/12 14:48*	*1*
Nitrobenzene-d5 (Surr)	*48*		*27 - 111*	*01/26/12 08:02*	*01/30/12 14:48*	*1*
Phenol-d5 (Surr)	*53*		*10 - 110*	*01/26/12 08:02*	*01/30/12 14:48*	*1*
Terphenyl-d14 (Surr)	*61*		*37 - 119*	*01/26/12 08:02*	*01/30/12 14:48*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-012412-DR-031
Date Collected: 01/24/12 09:35
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		01/26/12 08:02	01/30/12 13:36	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		01/26/12 08:02	01/30/12 13:36	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 13:36	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		01/26/12 08:02	01/30/12 13:36	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		01/26/12 08:02	01/30/12 13:36	1
2-Methylnaphthalene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
2-Nitroaniline	20	U	20	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		01/26/12 08:02	01/30/12 13:36	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		01/26/12 08:02	01/30/12 13:36	1
3-Nitroaniline	20	U	20	0.28	ug/L		01/26/12 08:02	01/30/12 13:36	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 13:36	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
4-Chloroaniline	10	U	10	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		01/26/12 08:02	01/30/12 13:36	1
4-Nitroaniline	20	U	20	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
4-Nitrophenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 13:36	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Acetophenone	5.0	U	5.0	0.34	ug/L		01/26/12 08:02	01/30/12 13:36	1
Anthracene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Atrazine	3.0	U	3.0	0.34	ug/L		01/26/12 08:02	01/30/12 13:36	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		01/26/12 08:02	01/30/12 13:36	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		01/26/12 08:02	01/30/12 13:36	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
Caprolactam	10	U	10	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
Carbazole	10	U	10	0.28	ug/L		01/26/12 08:02	01/30/12 13:36	1
Chrysene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		01/26/12 08:02	01/30/12 13:36	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		01/26/12 08:02	01/30/12 13:36	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		01/26/12 08:02	01/30/12 13:36	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-012412-DR-031
Date Collected: 01/24/12 09:35
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		01/26/12 08:02	01/30/12 13:36	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
Hexachloroethane	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Isophorone	5.0	U	5.0	0.27	ug/L		01/26/12 08:02	01/30/12 13:36	1
Naphthalene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		01/26/12 08:02	01/30/12 13:36	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 13:36	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		01/26/12 08:02	01/30/12 13:36	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		01/26/12 08:02	01/30/12 13:36	1
Phenol	5.0	U	5.0	0.60	ug/L		01/26/12 08:02	01/30/12 13:36	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
Pyrene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 13:36	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		01/26/12 08:02	01/30/12 13:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*28 - 110*	*01/26/12 08:02*	*01/30/12 13:36*	*1*
2-Fluorophenol (Surr)	*56*		*10 - 110*	*01/26/12 08:02*	*01/30/12 13:36*	*1*
2,4,6-Tribromophenol (Surr)	*60*		*22 - 120*	*01/26/12 08:02*	*01/30/12 13:36*	*1*
Nitrobenzene-d5 (Surr)	*53*		*27 - 111*	*01/26/12 08:02*	*01/30/12 13:36*	*1*
Phenol-d5 (Surr)	*57*		*10 - 110*	*01/26/12 08:02*	*01/30/12 13:36*	*1*
Terphenyl-d14 (Surr)	*69*		*37 - 119*	*01/26/12 08:02*	*01/30/12 13:36*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-012412-DR-032
Date Collected: 01/24/12 09:40
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		01/26/12 08:02	01/30/12 15:06	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		01/26/12 08:02	01/30/12 15:06	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
2,4-Dichlorophenol	9.9	U	9.9	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
2,4-Dimethylphenol	5.0	U	5.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 15:06	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		01/26/12 08:02	01/30/12 15:06	1
2,6-Dinitrotoluene	5.0	U	5.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
2-Chloronaphthalene	5.0	U	5.0	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		01/26/12 08:02	01/30/12 15:06	1
2-Methylnaphthalene	5.0	U	5.0	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
2-Methylphenol	5.0	U	5.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
2-Nitroaniline	20	U	20	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		01/26/12 08:02	01/30/12 15:06	1
3,3'-Dichlorobenzidine	0.99	U	0.99	0.37	ug/L		01/26/12 08:02	01/30/12 15:06	1
3-Nitroaniline	20	U	20	0.28	ug/L		01/26/12 08:02	01/30/12 15:06	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 15:06	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
4-Chloroaniline	9.9	U	9.9	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		01/26/12 08:02	01/30/12 15:06	1
4-Nitroaniline	20	U	20	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
4-Nitrophenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 15:06	1
Acenaphthene	5.0	U	5.0	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Acenaphthylene	5.0	U	5.0	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Acetophenone	5.0	U	5.0	0.34	ug/L		01/26/12 08:02	01/30/12 15:06	1
Anthracene	5.0	U	5.0	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Atrazine	3.0	U	3.0	0.34	ug/L		01/26/12 08:02	01/30/12 15:06	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		01/26/12 08:02	01/30/12 15:06	1
Benzo[a]anthracene	0.99	U	0.99	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Benzo[a]pyrene	0.99	U	0.99	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Benzo[b]fluoranthene	0.99	U	0.99	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Benzo[g,h,i]perylene	0.99	U	0.99	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Benzo[k]fluoranthene	0.99	U	0.99	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		01/26/12 08:02	01/30/12 15:06	1
Bis(2-chloroethyl)ether	0.99	U	0.99	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
Butyl benzyl phthalate	5.0	U	5.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
Caprolactam	9.9	U	9.9	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
Carbazole	9.9	U	9.9	0.28	ug/L		01/26/12 08:02	01/30/12 15:06	1
Chrysene	0.99	U	0.99	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Dibenzofuran	4.0	U	4.0	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Diethyl phthalate	5.0	U	5.0	0.59	ug/L		01/26/12 08:02	01/30/12 15:06	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		01/26/12 08:02	01/30/12 15:06	1
Di-n-butyl phthalate	5.0	U	5.0	0.66	ug/L		01/26/12 08:02	01/30/12 15:06	1
Di-n-octyl phthalate	5.0	U	5.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
Fluoranthene	0.99	U	0.99	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-012412-DR-032
Date Collected: 01/24/12 09:40
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.0	U	5.0	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Hexachlorobenzene	0.20	U	0.20	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Hexachlorobutadiene	0.99	U	0.99	0.27	ug/L		01/26/12 08:02	01/30/12 15:06	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
Hexachloroethane	5.0	U	5.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Isophorone	5.0	U	5.0	0.27	ug/L		01/26/12 08:02	01/30/12 15:06	1
Naphthalene	5.0	U	5.0	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		01/26/12 08:02	01/30/12 15:06	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.79	ug/L		01/26/12 08:02	01/30/12 15:06	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		01/26/12 08:02	01/30/12 15:06	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		01/26/12 08:02	01/30/12 15:06	1
Phenol	5.0	U	5.0	0.59	ug/L		01/26/12 08:02	01/30/12 15:06	1
Phenanthrene	2.0	U	2.0	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
Pyrene	5.0	U	5.0	0.099	ug/L		01/26/12 08:02	01/30/12 15:06	1
3 & 4 Methylphenol	5.0	U	5.0	0.74	ug/L		01/26/12 08:02	01/30/12 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*63*		*28 - 110*	*01/26/12 08:02*	*01/30/12 15:06*	*1*
2-Fluorophenol (Surr)	*65*		*10 - 110*	*01/26/12 08:02*	*01/30/12 15:06*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*22 - 120*	*01/26/12 08:02*	*01/30/12 15:06*	*1*
Nitrobenzene-d5 (Surr)	*61*		*27 - 111*	*01/26/12 08:02*	*01/30/12 15:06*	*1*
Phenol-d5 (Surr)	*65*		*10 - 110*	*01/26/12 08:02*	*01/30/12 15:06*	*1*
Terphenyl-d14 (Surr)	*76*		*37 - 119*	*01/26/12 08:02*	*01/30/12 15:06*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-012412-DR-033
Date Collected: 01/24/12 10:15
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		01/26/12 08:02	01/30/12 15:24	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		01/26/12 08:02	01/30/12 15:24	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		01/26/12 08:02	01/30/12 15:24	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		01/26/12 08:02	01/30/12 15:24	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		01/26/12 08:02	01/30/12 15:24	1
2-Methylnaphthalene	4.8	U	4.8	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
2-Nitroaniline	19	U	19	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		01/26/12 08:02	01/30/12 15:24	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		01/26/12 08:02	01/30/12 15:24	1
3-Nitroaniline	19	U	19	0.27	ug/L		01/26/12 08:02	01/30/12 15:24	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		01/26/12 08:02	01/30/12 15:24	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		01/26/12 08:02	01/30/12 15:24	1
4-Nitroaniline	19	U	19	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
4-Nitrophenol	19	U	19	2.3	ug/L		01/26/12 08:02	01/30/12 15:24	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Acetophenone	4.8	U	4.8	0.32	ug/L		01/26/12 08:02	01/30/12 15:24	1
Anthracene	4.8	U	4.8	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Atrazine	2.9	U	2.9	0.32	ug/L		01/26/12 08:02	01/30/12 15:24	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		01/26/12 08:02	01/30/12 15:24	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		01/26/12 08:02	01/30/12 15:24	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
Caprolactam	9.5	U	9.5	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
Carbazole	9.5	U	9.5	0.27	ug/L		01/26/12 08:02	01/30/12 15:24	1
Chrysene	0.95	U	0.95	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		01/26/12 08:02	01/30/12 15:24	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		01/26/12 08:02	01/30/12 15:24	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		01/26/12 08:02	01/30/12 15:24	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-012412-DR-033
Date Collected: 01/24/12 10:15
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		01/26/12 08:02	01/30/12 15:24	1
Hexachlorocyclopentadiene	4.8	U	4.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Isophorone	4.8	U	4.8	0.26	ug/L		01/26/12 08:02	01/30/12 15:24	1
Naphthalene	4.8	U	4.8	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		01/26/12 08:02	01/30/12 15:24	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		01/26/12 08:02	01/30/12 15:24	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		01/26/12 08:02	01/30/12 15:24	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		01/26/12 08:02	01/30/12 15:24	1
Phenol	4.8	U	4.8	0.57	ug/L		01/26/12 08:02	01/30/12 15:24	1
Phenanthrene	1.9	U	1.9	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
Pyrene	4.8	U	4.8	0.095	ug/L		01/26/12 08:02	01/30/12 15:24	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		01/26/12 08:02	01/30/12 15:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*64*		*28 - 110*	*01/26/12 08:02*	*01/30/12 15:24*	*1*
2-Fluorophenol (Surr)	*64*		*10 - 110*	*01/26/12 08:02*	*01/30/12 15:24*	*1*
2,4,6-Tribromophenol (Surr)	*76*		*22 - 120*	*01/26/12 08:02*	*01/30/12 15:24*	*1*
Nitrobenzene-d5 (Surr)	*60*		*27 - 111*	*01/26/12 08:02*	*01/30/12 15:24*	*1*
Phenol-d5 (Surr)	*65*		*10 - 110*	*01/26/12 08:02*	*01/30/12 15:24*	*1*
Terphenyl-d14 (Surr)	*78*		*37 - 119*	*01/26/12 08:02*	*01/30/12 15:24*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-012312-DR-026
Date Collected: 01/23/12 11:15
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		01/26/12 10:17	01/26/12 21:00	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		01/26/12 10:17	01/26/12 21:00	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		01/26/12 10:17	01/26/12 21:00	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		01/26/12 10:17	01/26/12 21:00	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		01/26/12 10:17	01/26/12 21:00	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		01/26/12 10:17	01/26/12 21:00	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		01/26/12 10:17	01/26/12 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*35 - 137*	*01/26/12 10:17*	*01/26/12 21:00*	*1*
DCB Decachlorobiphenyl	*73*		*10 - 140*	*01/26/12 10:17*	*01/26/12 21:00*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-012312-DR-027
Date Collected: 01/23/12 14:20
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.11	U	0.11	0.047	ug/L		01/26/12 10:17	01/26/12 21:15	1
Aroclor-1221	0.11	U	0.11	0.048	ug/L		01/26/12 10:17	01/26/12 21:15	1
Aroclor-1232	0.11	U	0.11	0.078	ug/L		01/26/12 10:17	01/26/12 21:15	1
Aroclor-1242	0.11	U	0.11	0.065	ug/L		01/26/12 10:17	01/26/12 21:15	1
Aroclor-1248	0.11	U	0.11	0.066	ug/L		01/26/12 10:17	01/26/12 21:15	1
Aroclor-1254	0.11	U	0.11	0.034	ug/L		01/26/12 10:17	01/26/12 21:15	1
Aroclor-1260	0.11	U	0.11	0.041	ug/L		01/26/12 10:17	01/26/12 21:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*35 - 137*	*01/26/12 10:17*	*01/26/12 21:15*	*1*
DCB Decachlorobiphenyl	*77*		*10 - 140*	*01/26/12 10:17*	*01/26/12 21:15*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-012312-DR-028
Date Collected: 01/23/12 14:30
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.046	ug/L		01/26/12 10:17	01/26/12 21:29	1
Aroclor-1221	0.10	U	0.10	0.047	ug/L		01/26/12 10:17	01/26/12 21:29	1
Aroclor-1232	0.10	U	0.10	0.076	ug/L		01/26/12 10:17	01/26/12 21:29	1
Aroclor-1242	0.10	U	0.10	0.063	ug/L		01/26/12 10:17	01/26/12 21:29	1
Aroclor-1248	0.10	U	0.10	0.064	ug/L		01/26/12 10:17	01/26/12 21:29	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		01/26/12 10:17	01/26/12 21:29	1
Aroclor-1260	0.10	U	0.10	0.040	ug/L		01/26/12 10:17	01/26/12 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*80*		*35 - 137*	*01/26/12 10:17*	*01/26/12 21:29*	*1*
DCB Decachlorobiphenyl	*79*		*10 - 140*	*01/26/12 10:17*	*01/26/12 21:29*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-012312-DR-029
Date Collected: 01/23/12 14:40
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.099	U	0.099	0.044	ug/L		01/26/12 10:17	01/26/12 21:44	1
Aroclor-1221	0.099	U	0.099	0.045	ug/L		01/26/12 10:17	01/26/12 21:44	1
Aroclor-1232	0.099	U	0.099	0.072	ug/L		01/26/12 10:17	01/26/12 21:44	1
Aroclor-1242	0.099	U	0.099	0.059	ug/L		01/26/12 10:17	01/26/12 21:44	1
Aroclor-1248	0.099	U	0.099	0.060	ug/L		01/26/12 10:17	01/26/12 21:44	1
Aroclor-1254	0.099	U	0.099	0.032	ug/L		01/26/12 10:17	01/26/12 21:44	1
Aroclor-1260	0.099	U	0.099	0.038	ug/L		01/26/12 10:17	01/26/12 21:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*35 - 137*	*01/26/12 10:17*	*01/26/12 21:44*	*1*
DCB Decachlorobiphenyl	*71*		*10 - 140*	*01/26/12 10:17*	*01/26/12 21:44*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-012412-DR-030
Date Collected: 01/24/12 09:00
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.045	ug/L		01/26/12 10:17	01/26/12 21:58	1
Aroclor-1221	0.10	U	0.10	0.046	ug/L		01/26/12 10:17	01/26/12 21:58	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		01/26/12 10:17	01/26/12 21:58	1
Aroclor-1242	0.10	U	0.10	0.061	ug/L		01/26/12 10:17	01/26/12 21:58	1
Aroclor-1248	0.10	U	0.10	0.062	ug/L		01/26/12 10:17	01/26/12 21:58	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		01/26/12 10:17	01/26/12 21:58	1
Aroclor-1260	0.10	U	0.10	0.039	ug/L		01/26/12 10:17	01/26/12 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*35 - 137*	*01/26/12 10:17*	*01/26/12 21:58*	*1*
DCB Decachlorobiphenyl	*65*		*10 - 140*	*01/26/12 10:17*	*01/26/12 21:58*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-012412-DR-031
Date Collected: 01/24/12 09:35
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.045	ug/L		01/26/12 10:17	01/26/12 22:13	1
Aroclor-1221	0.10	U	0.10	0.046	ug/L		01/26/12 10:17	01/26/12 22:13	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		01/26/12 10:17	01/26/12 22:13	1
Aroclor-1242	0.10	U	0.10	0.061	ug/L		01/26/12 10:17	01/26/12 22:13	1
Aroclor-1248	0.10	U	0.10	0.062	ug/L		01/26/12 10:17	01/26/12 22:13	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		01/26/12 10:17	01/26/12 22:13	1
Aroclor-1260	0.10	U	0.10	0.039	ug/L		01/26/12 10:17	01/26/12 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*35 - 137*	*01/26/12 10:17*	*01/26/12 22:13*	*1*
DCB Decachlorobiphenyl	*76*		*10 - 140*	*01/26/12 10:17*	*01/26/12 22:13*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-012412-DR-032
Date Collected: 01/24/12 09:40
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		01/26/12 10:17	01/26/12 22:56	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		01/26/12 10:17	01/26/12 22:56	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		01/26/12 10:17	01/26/12 22:56	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		01/26/12 10:17	01/26/12 22:56	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		01/26/12 10:17	01/26/12 22:56	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		01/26/12 10:17	01/26/12 22:56	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		01/26/12 10:17	01/26/12 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*35 - 137*	*01/26/12 10:17*	*01/26/12 22:56*	*1*
DCB Decachlorobiphenyl	*69*		*10 - 140*	*01/26/12 10:17*	*01/26/12 22:56*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-012412-DR-033
Date Collected: 01/24/12 10:15
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		01/26/12 10:17	01/26/12 23:11	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		01/26/12 10:17	01/26/12 23:11	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		01/26/12 10:17	01/26/12 23:11	1
Aroclor-1242	0.10	U	0.10	0.061	ug/L		01/26/12 10:17	01/26/12 23:11	1
Aroclor-1248	0.10	U	0.10	0.062	ug/L		01/26/12 10:17	01/26/12 23:11	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		01/26/12 10:17	01/26/12 23:11	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		01/26/12 10:17	01/26/12 23:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*78*		*35 - 137*	*01/26/12 10:17*	*01/26/12 23:11*	*1*
DCB Decachlorobiphenyl	*55*		*10 - 140*	*01/26/12 10:17*	*01/26/12 23:11*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-17358-012412-DR-030
Date Collected: 01/24/12 09:00
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	40000		5000	590	ug/L		01/27/12 09:03	01/30/12 13:47	1
Potassium	1400	J B	5000	72	ug/L		01/27/12 09:03	01/30/12 13:47	1
Calcium	92000	B	5000	130	ug/L		01/27/12 09:03	01/30/12 13:47	1
Magnesium	18000	B	5000	34	ug/L		01/27/12 09:03	01/30/12 13:47	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6010B - Metals (ICP) - Total Recoverable

Client Sample ID: GW-17358-012412-DR-031
Date Collected: 01/24/12 09:35
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	34000		5000	590	ug/L		01/27/12 09:03	01/30/12 13:23	1
Potassium	1200	J B	5000	72	ug/L		01/27/12 09:03	01/30/12 13:23	1
Calcium	85000	B	5000	130	ug/L		01/27/12 09:03	01/30/12 13:23	1
Magnesium	16000	B	5000	34	ug/L		01/27/12 09:03	01/30/12 13:23	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-012312-DR-023
Date Collected: 01/23/12 09:10
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1400**		50	19	ug/L		01/27/12 09:03	01/30/12 15:51	1
Antimony	**0.42**	**J**	2.0	0.13	ug/L		01/27/12 09:03	01/30/12 15:51	1
Arsenic	**1.6**	**J**	5.0	0.40	ug/L		01/27/12 09:03	01/30/12 15:51	1
Barium	**79**	**J B**	100	0.19	ug/L		01/27/12 09:03	01/30/12 15:51	1
Beryllium	1.0	U	1.0	0.20	ug/L		01/27/12 09:03	01/30/12 15:51	1
Cadmium	1.0	U	1.0	0.13	ug/L		01/27/12 09:03	01/30/12 15:51	1
Cobalt	**1.2**	**J**	20	0.058	ug/L		01/27/12 09:03	01/30/12 15:51	1
Chromium	**2.1**	**J**	10	0.71	ug/L		01/27/12 09:03	01/30/12 15:51	1
Copper	**2.5**	**J B**	4.0	0.29	ug/L		01/27/12 09:03	01/30/12 15:51	1
Iron	**1100**		200	26	ug/L		01/27/12 09:03	01/30/12 15:51	1
Manganese	**100**		50	0.83	ug/L		01/27/12 09:03	01/30/12 15:51	1
Nickel	**11**	**J**	20	0.20	ug/L		01/27/12 09:03	01/30/12 15:51	1
Lead	**0.69**	**J**	3.0	0.18	ug/L		01/27/12 09:03	01/30/12 15:51	1
Selenium	**0.80**	**J**	5.0	0.57	ug/L		01/27/12 09:03	01/30/12 15:51	1
Thallium	**0.69**	**J**	2.0	0.14	ug/L		01/27/12 09:03	01/30/12 15:51	1
Vanadium	**3.3**	**J**	4.0	0.44	ug/L		01/27/12 09:03	01/30/12 15:51	1
Zinc	**7.6**	**J B**	50	2.3	ug/L		01/27/12 09:03	01/30/12 15:51	1
Silver	0.20	U	0.20	0.080	ug/L		01/27/12 09:03	01/30/12 15:51	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-012312-DR-024
Date Collected: 01/23/12 09:35
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**350**		50	19	ug/L		01/27/12 09:03	01/30/12 15:56	1
Antimony	**0.20**	**J**	2.0	0.13	ug/L		01/27/12 09:03	01/30/12 15:56	1
Arsenic	**1.2**	**J**	5.0	0.40	ug/L		01/27/12 09:03	01/30/12 15:56	1
Barium	**75**	**J B**	100	0.19	ug/L		01/27/12 09:03	01/30/12 15:56	1
Beryllium	1.0	U	1.0	0.20	ug/L		01/27/12 09:03	01/30/12 15:56	1
Cadmium	1.0	U	1.0	0.13	ug/L		01/27/12 09:03	01/30/12 15:56	1
Cobalt	**0.99**	**J**	20	0.058	ug/L		01/27/12 09:03	01/30/12 15:56	1
Chromium	10	U	10	0.71	ug/L		01/27/12 09:03	01/30/12 15:56	1
Copper	**0.75**	**J B**	4.0	0.29	ug/L		01/27/12 09:03	01/30/12 15:56	1
Iron	**460**		200	26	ug/L		01/27/12 09:03	01/30/12 15:56	1
Manganese	**230**		50	0.83	ug/L		01/27/12 09:03	01/30/12 15:56	1
Nickel	**2.1**	**J**	20	0.20	ug/L		01/27/12 09:03	01/30/12 15:56	1
Lead	**0.32**	**J**	3.0	0.18	ug/L		01/27/12 09:03	01/30/12 15:56	1
Selenium	5.0	U	5.0	0.57	ug/L		01/27/12 09:03	01/30/12 15:56	1
Thallium	**0.36**	**J**	2.0	0.14	ug/L		01/27/12 09:03	01/30/12 15:56	1
Vanadium	**1.1**	**J**	4.0	0.44	ug/L		01/27/12 09:03	01/30/12 15:56	1
Zinc	**3.3**	**J B**	50	2.3	ug/L		01/27/12 09:03	01/30/12 15:56	1
Silver	0.20	U	0.20	0.080	ug/L		01/27/12 09:03	01/30/12 15:56	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-012312-DR-025
Date Collected: 01/23/12 13:15
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	35000		50	19	ug/L		01/27/12 09:03	01/30/12 16:02	1
Antimony	2.2		2.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:02	1
Arsenic	17		5.0	0.40	ug/L		01/27/12 09:03	01/30/12 16:02	1
Barium	290	B	100	0.19	ug/L		01/27/12 09:03	01/30/12 16:02	1
Beryllium	2.0		1.0	0.20	ug/L		01/27/12 09:03	01/30/12 16:02	1
Cadmium	0.20	J	1.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:02	1
Cobalt	7.1	J	20	0.058	ug/L		01/27/12 09:03	01/30/12 16:02	1
Chromium	21		10	0.71	ug/L		01/27/12 09:03	01/30/12 16:02	1
Copper	33	B	4.0	0.29	ug/L		01/27/12 09:03	01/30/12 16:02	1
Iron	24000		200	26	ug/L		01/27/12 09:03	01/30/12 16:02	1
Manganese	250		50	0.83	ug/L		01/27/12 09:03	01/30/12 16:02	1
Nickel	20		20	0.20	ug/L		01/27/12 09:03	01/30/12 16:02	1
Lead	27		3.0	0.18	ug/L		01/27/12 09:03	01/30/12 16:02	1
Selenium	4.6	J	5.0	0.57	ug/L		01/27/12 09:03	01/30/12 16:02	1
Thallium	0.61	J	2.0	0.14	ug/L		01/27/12 09:03	01/30/12 16:02	1
Vanadium	47		4.0	0.44	ug/L		01/27/12 09:03	01/30/12 16:02	1
Zinc	81	B	50	2.3	ug/L		01/27/12 09:03	01/30/12 16:02	1
Silver	0.20	U	0.20	0.080	ug/L		01/27/12 09:03	01/30/12 16:02	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-012312-DR-026
Date Collected: 01/23/12 11:15
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**330**		50	19	ug/L		01/27/12 09:03	01/30/12 16:07	1
Antimony	**0.29**	**J**	2.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:07	1
Arsenic	**2.6**	**J**	5.0	0.40	ug/L		01/27/12 09:03	01/30/12 16:07	1
Barium	**140**	**B**	100	0.19	ug/L		01/27/12 09:03	01/30/12 16:07	1
Beryllium	1.0	U	1.0	0.20	ug/L		01/27/12 09:03	01/30/12 16:07	1
Cadmium	1.0	U	1.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:07	1
Cobalt	**1.9**	**J**	20	0.058	ug/L		01/27/12 09:03	01/30/12 16:07	1
Chromium	10	U	10	0.71	ug/L		01/27/12 09:03	01/30/12 16:07	1
Copper	**1.1**	**J B**	4.0	0.29	ug/L		01/27/12 09:03	01/30/12 16:07	1
Iron	**840**		200	26	ug/L		01/27/12 09:03	01/30/12 16:07	1
Manganese	**280**		50	0.83	ug/L		01/27/12 09:03	01/30/12 16:07	1
Nickel	**2.6**	**J**	20	0.20	ug/L		01/27/12 09:03	01/30/12 16:07	1
Lead	**0.36**	**J**	3.0	0.18	ug/L		01/27/12 09:03	01/30/12 16:07	1
Selenium	5.0	U	5.0	0.57	ug/L		01/27/12 09:03	01/30/12 16:07	1
Thallium	**0.18**	**J**	2.0	0.14	ug/L		01/27/12 09:03	01/30/12 16:07	1
Vanadium	**1.0**	**J**	4.0	0.44	ug/L		01/27/12 09:03	01/30/12 16:07	1
Zinc	**4.4**	**J B**	50	2.3	ug/L		01/27/12 09:03	01/30/12 16:07	1
Silver	0.20	U	0.20	0.080	ug/L		01/27/12 09:03	01/30/12 16:07	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-012312-DR-027
Date Collected: 01/23/12 14:20
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**27**	**J**	50	19	ug/L		01/27/12 09:03	01/30/12 16:13	1
Antimony	**0.14**	**J**	2.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:13	1
Arsenic	**0.88**	**J**	5.0	0.40	ug/L		01/27/12 09:03	01/30/12 16:13	1
Barium	**58**	**J B**	100	0.19	ug/L		01/27/12 09:03	01/30/12 16:13	1
Beryllium	1.0	U	1.0	0.20	ug/L		01/27/12 09:03	01/30/12 16:13	1
Cadmium	1.0	U	1.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:13	1
Cobalt	**0.40**	**J**	20	0.058	ug/L		01/27/12 09:03	01/30/12 16:13	1
Chromium	10	U	10	0.71	ug/L		01/27/12 09:03	01/30/12 16:13	1
Copper	**0.51**	**J B**	4.0	0.29	ug/L		01/27/12 09:03	01/30/12 16:13	1
Iron	**540**		200	26	ug/L		01/27/12 09:03	01/30/12 16:13	1
Manganese	**200**		50	0.83	ug/L		01/27/12 09:03	01/30/12 16:13	1
Nickel	**1.2**	**J**	20	0.20	ug/L		01/27/12 09:03	01/30/12 16:13	1
Lead	3.0	U	3.0	0.18	ug/L		01/27/12 09:03	01/30/12 16:13	1
Selenium	**1.4**	**J**	5.0	0.57	ug/L		01/27/12 09:03	01/30/12 16:13	1
Thallium	**0.16**	**J**	2.0	0.14	ug/L		01/27/12 09:03	01/30/12 16:13	1
Vanadium	4.0	U	4.0	0.44	ug/L		01/27/12 09:03	01/30/12 16:13	1
Zinc	**2.5**	**J B**	50	2.3	ug/L		01/27/12 09:03	01/30/12 16:13	1
Silver	0.20	U	0.20	0.080	ug/L		01/27/12 09:03	01/30/12 16:13	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-012312-DR-028
Date Collected: 01/23/12 14:30
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**20**	**J**	50	19	ug/L		01/27/12 09:03	01/30/12 16:18	1
Antimony	**0.13**	**J**	2.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:18	1
Arsenic	**0.81**	**J**	5.0	0.40	ug/L		01/27/12 09:03	01/30/12 16:18	1
Barium	**64**	**J B**	100	0.19	ug/L		01/27/12 09:03	01/30/12 16:18	1
Beryllium	1.0	U	1.0	0.20	ug/L		01/27/12 09:03	01/30/12 16:18	1
Cadmium	1.0	U	1.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:18	1
Cobalt	**0.40**	**J**	20	0.058	ug/L		01/27/12 09:03	01/30/12 16:18	1
Chromium	10	U	10	0.71	ug/L		01/27/12 09:03	01/30/12 16:18	1
Copper	**0.44**	**J B**	4.0	0.29	ug/L		01/27/12 09:03	01/30/12 16:18	1
Iron	**540**		200	26	ug/L		01/27/12 09:03	01/30/12 16:18	1
Manganese	**200**		50	0.83	ug/L		01/27/12 09:03	01/30/12 16:18	1
Nickel	**1.2**	**J**	20	0.20	ug/L		01/27/12 09:03	01/30/12 16:18	1
Lead	3.0	U	3.0	0.18	ug/L		01/27/12 09:03	01/30/12 16:18	1
Selenium	**0.97**	**J**	5.0	0.57	ug/L		01/27/12 09:03	01/30/12 16:18	1
Thallium	**0.14**	**J**	2.0	0.14	ug/L		01/27/12 09:03	01/30/12 16:18	1
Vanadium	4.0	U	4.0	0.44	ug/L		01/27/12 09:03	01/30/12 16:18	1
Zinc	50	U	50	2.3	ug/L		01/27/12 09:03	01/30/12 16:18	1
Silver	0.20	U	0.20	0.080	ug/L		01/27/12 09:03	01/30/12 16:18	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-012312-DR-029
Date Collected: 01/23/12 14:40
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**42**	**J**	50	19	ug/L		01/27/12 09:03	01/30/12 16:24	1
Antimony	**0.19**	**J**	2.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:24	1
Arsenic	**4.5**	**J**	5.0	0.40	ug/L		01/27/12 09:03	01/30/12 16:24	1
Barium	**23**	**J B**	100	0.19	ug/L		01/27/12 09:03	01/30/12 16:24	1
Beryllium	1.0	U	1.0	0.20	ug/L		01/27/12 09:03	01/30/12 16:24	1
Cadmium	1.0	U	1.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:24	1
Cobalt	**0.17**	**J**	20	0.058	ug/L		01/27/12 09:03	01/30/12 16:24	1
Chromium	10	U	10	0.71	ug/L		01/27/12 09:03	01/30/12 16:24	1
Copper	**0.72**	**J B**	4.0	0.29	ug/L		01/27/12 09:03	01/30/12 16:24	1
Iron	**150**	**J**	200	26	ug/L		01/27/12 09:03	01/30/12 16:24	1
Manganese	**60**		50	0.83	ug/L		01/27/12 09:03	01/30/12 16:24	1
Nickel	**1.6**	**J**	20	0.20	ug/L		01/27/12 09:03	01/30/12 16:24	1
Lead	3.0	U	3.0	0.18	ug/L		01/27/12 09:03	01/30/12 16:24	1
Selenium	5.0	U	5.0	0.57	ug/L		01/27/12 09:03	01/30/12 16:24	1
Thallium	2.0	U	2.0	0.14	ug/L		01/27/12 09:03	01/30/12 16:24	1
Vanadium	4.0	U	4.0	0.44	ug/L		01/27/12 09:03	01/30/12 16:24	1
Zinc	**3.0**	**J B**	50	2.3	ug/L		01/27/12 09:03	01/30/12 16:24	1
Silver	0.20	U	0.20	0.080	ug/L		01/27/12 09:03	01/30/12 16:24	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-012412-DR-030
Date Collected: 01/24/12 09:00
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**440**		50	19	ug/L		01/27/12 09:03	01/30/12 16:29	1
Antimony	**0.40**	**J**	2.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:29	1
Arsenic	**1.1**	**J**	5.0	0.40	ug/L		01/27/12 09:03	01/30/12 16:29	1
Barium	**66**	**J B**	100	0.19	ug/L		01/27/12 09:03	01/30/12 16:29	1
Beryllium	1.0	U	1.0	0.20	ug/L		01/27/12 09:03	01/30/12 16:29	1
Cadmium	1.0	U	1.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:29	1
Cobalt	**0.61**	**J**	20	0.058	ug/L		01/27/12 09:03	01/30/12 16:29	1
Chromium	10	U	10	0.71	ug/L		01/27/12 09:03	01/30/12 16:29	1
Copper	**1.6**	**J B**	4.0	0.29	ug/L		01/27/12 09:03	01/30/12 16:29	1
Iron	**600**		200	26	ug/L		01/27/12 09:03	01/30/12 16:29	1
Manganese	**110**		50	0.83	ug/L		01/27/12 09:03	01/30/12 16:29	1
Nickel	**2.4**	**J**	20	0.20	ug/L		01/27/12 09:03	01/30/12 16:29	1
Lead	**0.43**	**J**	3.0	0.18	ug/L		01/27/12 09:03	01/30/12 16:29	1
Selenium	5.0	U	5.0	0.57	ug/L		01/27/12 09:03	01/30/12 16:29	1
Thallium	2.0	U	2.0	0.14	ug/L		01/27/12 09:03	01/30/12 16:29	1
Vanadium	**1.4**	**J**	4.0	0.44	ug/L		01/27/12 09:03	01/30/12 16:29	1
Zinc	**4.5**	**J B**	50	2.3	ug/L		01/27/12 09:03	01/30/12 16:29	1
Silver	0.20	U	0.20	0.080	ug/L		01/27/12 09:03	01/30/12 16:29	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-012412-DR-031
Date Collected: 01/24/12 09:35
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**420**		50	19	ug/L		01/27/12 09:03	01/30/12 15:14	1
Antimony	**0.56**	**J**	2.0	0.13	ug/L		01/27/12 09:03	01/30/12 15:14	1
Arsenic	**1.1**	**J**	5.0	0.40	ug/L		01/27/12 09:03	01/30/12 15:14	1
Barium	**47**	**J B**	100	0.19	ug/L		01/27/12 09:03	01/30/12 15:14	1
Beryllium	1.0	U	1.0	0.20	ug/L		01/27/12 09:03	01/30/12 15:14	1
Cadmium	1.0	U	1.0	0.13	ug/L		01/27/12 09:03	01/30/12 15:14	1
Cobalt	**0.57**	**J**	20	0.058	ug/L		01/27/12 09:03	01/30/12 15:14	1
Chromium	10	U	10	0.71	ug/L		01/27/12 09:03	01/30/12 15:14	1
Copper	**1.1**	**J B**	4.0	0.29	ug/L		01/27/12 09:03	01/30/12 15:14	1
Iron	**450**		200	26	ug/L		01/27/12 09:03	01/30/12 15:14	1
Manganese	**59**		50	0.83	ug/L		01/27/12 09:03	01/30/12 15:14	1
Nickel	**2.6**	**J**	20	0.20	ug/L		01/27/12 09:03	01/30/12 15:14	1
Lead	**0.32**	**J**	3.0	0.18	ug/L		01/27/12 09:03	01/30/12 15:14	1
Selenium	**1.1**	**J**	5.0	0.57	ug/L		01/27/12 09:03	01/30/12 15:14	1
Thallium	**0.54**	**J**	2.0	0.14	ug/L		01/27/12 09:03	01/30/12 15:14	1
Vanadium	**1.3**	**J**	4.0	0.44	ug/L		01/27/12 09:03	01/30/12 15:14	1
Zinc	**3.8**	**J B**	50	2.3	ug/L		01/27/12 09:03	01/30/12 15:14	1
Silver	0.20	U	0.20	0.080	ug/L		01/27/12 09:03	01/30/12 15:14	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-012412-DR-032
Date Collected: 01/24/12 09:40
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**430**		50	19	ug/L		01/27/12 09:03	01/30/12 16:46	1
Antimony	**0.28**	**J**	2.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:46	1
Arsenic	**3.8**	**J**	5.0	0.40	ug/L		01/27/12 09:03	01/30/12 16:46	1
Barium	**110**	**B**	100	0.19	ug/L		01/27/12 09:03	01/30/12 16:46	1
Beryllium	1.0	U	1.0	0.20	ug/L		01/27/12 09:03	01/30/12 16:46	1
Cadmium	1.0	U	1.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:46	1
Cobalt	**0.47**	**J**	20	0.058	ug/L		01/27/12 09:03	01/30/12 16:46	1
Chromium	10	U	10	0.71	ug/L		01/27/12 09:03	01/30/12 16:46	1
Copper	**0.84**	**J B**	4.0	0.29	ug/L		01/27/12 09:03	01/30/12 16:46	1
Iron	**760**		200	26	ug/L		01/27/12 09:03	01/31/12 09:37	1
Manganese	**190**		50	0.83	ug/L		01/27/12 09:03	01/30/12 16:46	1
Nickel	**1.4**	**J**	20	0.20	ug/L		01/27/12 09:03	01/30/12 16:46	1
Lead	**0.35**	**J**	3.0	0.18	ug/L		01/27/12 09:03	01/30/12 16:46	1
Selenium	5.0	U	5.0	0.57	ug/L		01/27/12 09:03	01/30/12 16:46	1
Thallium	**0.17**	**J**	2.0	0.14	ug/L		01/27/12 09:03	01/30/12 16:46	1
Vanadium	**1.2**	**J**	4.0	0.44	ug/L		01/27/12 09:03	01/30/12 16:46	1
Zinc	**3.6**	**J B**	50	2.3	ug/L		01/27/12 09:03	01/30/12 16:46	1
Silver	0.20	U	0.20	0.080	ug/L		01/27/12 09:03	01/30/12 16:46	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-012412-DR-033
Date Collected: 01/24/12 10:15
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**100**		50	19	ug/L		01/27/12 09:03	01/30/12 16:52	1
Antimony	**0.84**	**J**	2.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:52	1
Arsenic	**3.0**	**J**	5.0	0.40	ug/L		01/27/12 09:03	01/30/12 16:52	1
Barium	**62**	**J B**	100	0.19	ug/L		01/27/12 09:03	01/30/12 16:52	1
Beryllium	1.0	U	1.0	0.20	ug/L		01/27/12 09:03	01/30/12 16:52	1
Cadmium	1.0	U	1.0	0.13	ug/L		01/27/12 09:03	01/30/12 16:52	1
Cobalt	**0.55**	**J**	20	0.058	ug/L		01/27/12 09:03	01/30/12 16:52	1
Chromium	10	U	10	0.71	ug/L		01/27/12 09:03	01/30/12 16:52	1
Copper	**0.82**	**J B**	4.0	0.29	ug/L		01/27/12 09:03	01/30/12 16:52	1
Iron	**150**	**J**	200	26	ug/L		01/27/12 09:03	01/31/12 09:43	1
Manganese	**51**		50	0.83	ug/L		01/27/12 09:03	01/30/12 16:52	1
Nickel	**2.9**	**J**	20	0.20	ug/L		01/27/12 09:03	01/30/12 16:52	1
Lead	**0.33**	**J**	3.0	0.18	ug/L		01/27/12 09:03	01/30/12 16:52	1
Selenium	5.0	U	5.0	0.57	ug/L		01/27/12 09:03	01/30/12 16:52	1
Thallium	2.0	U	2.0	0.14	ug/L		01/27/12 09:03	01/30/12 16:52	1
Vanadium	**1.5**	**J**	4.0	0.44	ug/L		01/27/12 09:03	01/30/12 16:52	1
Zinc	**8.6**	**J B**	50	2.3	ug/L		01/27/12 09:03	01/30/12 16:52	1
Silver	0.20	U	0.20	0.080	ug/L		01/27/12 09:03	01/30/12 16:52	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-012312-DR-023
Date Collected: 01/23/12 09:10
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		01/27/12 14:40	01/31/12 15:45	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-012312-DR-024
Date Collected: 01/23/12 09:35
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		01/27/12 14:40	01/31/12 15:47	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-012312-DR-025
Date Collected: 01/23/12 13:15
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		01/27/12 14:40	01/31/12 15:49	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-012312-DR-026
Date Collected: 01/23/12 11:15
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		01/27/12 14:40	01/31/12 15:52	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-012312-DR-027
Date Collected: 01/23/12 14:20
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		01/27/12 14:40	01/31/12 15:58	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-012312-DR-028
Date Collected: 01/23/12 14:30
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		01/27/12 14:40	01/31/12 16:00	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-012312-DR-029
Date Collected: 01/23/12 14:40
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		01/27/12 14:40	01/31/12 16:02	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-012412-DR-030
Date Collected: 01/24/12 09:00
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		01/27/12 14:40	01/31/12 16:04	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-012412-DR-031
Date Collected: 01/24/12 09:35
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		01/27/12 14:40	01/31/12 15:20	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-012412-DR-032
Date Collected: 01/24/12 09:40
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		01/27/12 14:40	01/31/12 16:05	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-012412-DR-033
Date Collected: 01/24/12 10:15
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		01/27/12 14:40	01/31/12 16:08	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

General Chemistry

Client Sample ID: GW-17358-012312-DR-026
Date Collected: 01/23/12 11:15
Date Received: 01/24/12 09:30

Lab Sample ID: 240-7899-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			01/24/12 11:13	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			02/01/12 06:42	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

General Chemistry

Client Sample ID: GW-17358-012412-DR-031
Date Collected: 01/24/12 09:35
Date Received: 01/25/12 09:30

Lab Sample ID: 240-7932-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U H	0.010	0.0020	mg/L			01/25/12 09:58	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			02/01/12 06:42	1

GC/MS VOA

Analysis Batch: 31710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7899-1	TB-17358-012312	Total/NA	Water	8260B	
240-7899-2	GW-17358-012312-DR-023	Total/NA	Water	8260B	
240-7899-3	GW-17358-012312-DR-024	Total/NA	Water	8260B	
240-7899-4	GW-17358-012312-DR-025	Total/NA	Water	8260B	
240-7899-5	GW-17358-012312-DR-026	Total/NA	Water	8260B	
240-7899-6	GW-17358-012312-DR-027	Total/NA	Water	8260B	
240-7899-7	GW-17358-012312-DR-028	Total/NA	Water	8260B	
240-7899-8	GW-17358-012312-DR-029	Total/NA	Water	8260B	
240-7932-1	GW-17358-012412-DR-030	Total/NA	Water	8260B	
240-7932-2	GW-17358-012412-DR-031	Total/NA	Water	8260B	
240-7932-2 MS	GW-17358-012412-DR-031	Total/NA	Water	8260B	
240-7932-2 MSD	GW-17358-012412-DR-031	Total/NA	Water	8260B	
240-7932-3	GW-17358-012412-DR-032	Total/NA	Water	8260B	
240-7932-4	GW-17358-012412-DR-033	Total/NA	Water	8260B	
240-7932-5	TB-17358-012412	Total/NA	Water	8260B	
LCS 240-31710/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-31710/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 31476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7899-2	GW-17358-012312-DR-023	Total/NA	Water	3520C	
240-7899-3	GW-17358-012312-DR-024	Total/NA	Water	3520C	
240-7899-4	GW-17358-012312-DR-025	Total/NA	Water	3520C	
240-7899-5	GW-17358-012312-DR-026	Total/NA	Water	3520C	
240-7899-6	GW-17358-012312-DR-027	Total/NA	Water	3520C	
240-7899-7	GW-17358-012312-DR-028	Total/NA	Water	3520C	
240-7899-8	GW-17358-012312-DR-029	Total/NA	Water	3520C	
240-7932-1	GW-17358-012412-DR-030	Total/NA	Water	3520C	
240-7932-2	GW-17358-012412-DR-031	Total/NA	Water	3520C	
240-7932-2 MS	GW-17358-012412-DR-031	Total/NA	Water	3520C	
240-7932-2 MSD	GW-17358-012412-DR-031	Total/NA	Water	3520C	
240-7932-3	GW-17358-012412-DR-032	Total/NA	Water	3520C	
240-7932-4	GW-17358-012412-DR-033	Total/NA	Water	3520C	
LCS 240-31476/2-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-31476/1-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 31864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7899-2	GW-17358-012312-DR-023	Total/NA	Water	8270C	31476
240-7899-3	GW-17358-012312-DR-024	Total/NA	Water	8270C	31476
240-7899-4	GW-17358-012312-DR-025	Total/NA	Water	8270C	31476
240-7899-5	GW-17358-012312-DR-026	Total/NA	Water	8270C	31476
240-7899-6	GW-17358-012312-DR-027	Total/NA	Water	8270C	31476
240-7899-7	GW-17358-012312-DR-028	Total/NA	Water	8270C	31476
240-7899-8	GW-17358-012312-DR-029	Total/NA	Water	8270C	31476
240-7932-1	GW-17358-012412-DR-030	Total/NA	Water	8270C	31476
240-7932-2	GW-17358-012412-DR-031	Total/NA	Water	8270C	31476
240-7932-2 MS	GW-17358-012412-DR-031	Total/NA	Water	8270C	31476
240-7932-2 MSD	GW-17358-012412-DR-031	Total/NA	Water	8270C	31476
240-7932-3	GW-17358-012412-DR-032	Total/NA	Water	8270C	31476

GC/MS Semi VOA (Continued)

Analysis Batch: 31864 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7932-4	GW-17358-012412-DR-033	Total/NA	Water	8270C	31476
LCS 240-31476/2-A	Lab Control Sample	Total/NA	Water	8270C	31476
MB 240-31476/1-A	Method Blank	Total/NA	Water	8270C	31476

GC Semi VOA

Prep Batch: 31529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7899-5	GW-17358-012312-DR-026	Total/NA	Water	3510C	
240-7899-6	GW-17358-012312-DR-027	Total/NA	Water	3510C	
240-7899-7	GW-17358-012312-DR-028	Total/NA	Water	3510C	
240-7899-8	GW-17358-012312-DR-029	Total/NA	Water	3510C	
240-7932-1	GW-17358-012412-DR-030	Total/NA	Water	3510C	
240-7932-2	GW-17358-012412-DR-031	Total/NA	Water	3510C	
240-7932-2 MS	GW-17358-012412-DR-031	Total/NA	Water	3510C	
240-7932-2 MSD	GW-17358-012412-DR-031	Total/NA	Water	3510C	
240-7932-3	GW-17358-012412-DR-032	Total/NA	Water	3510C	
240-7932-4	GW-17358-012412-DR-033	Total/NA	Water	3510C	
LCS 240-31529/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-31529/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 31605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7899-5	GW-17358-012312-DR-026	Total/NA	Water	8082	31529
240-7899-6	GW-17358-012312-DR-027	Total/NA	Water	8082	31529
240-7899-7	GW-17358-012312-DR-028	Total/NA	Water	8082	31529
240-7899-8	GW-17358-012312-DR-029	Total/NA	Water	8082	31529
240-7932-1	GW-17358-012412-DR-030	Total/NA	Water	8082	31529
240-7932-2	GW-17358-012412-DR-031	Total/NA	Water	8082	31529
240-7932-2 MS	GW-17358-012412-DR-031	Total/NA	Water	8082	31529
240-7932-2 MSD	GW-17358-012412-DR-031	Total/NA	Water	8082	31529
240-7932-3	GW-17358-012412-DR-032	Total/NA	Water	8082	31529
240-7932-4	GW-17358-012412-DR-033	Total/NA	Water	8082	31529
LCS 240-31529/2-A	Lab Control Sample	Total/NA	Water	8082	31529
MB 240-31529/1-A	Method Blank	Total/NA	Water	8082	31529

Metals

Prep Batch: 31676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7899-2	GW-17358-012312-DR-023	Total Recoverable	Water	3005A	
240-7899-3	GW-17358-012312-DR-024	Total Recoverable	Water	3005A	
240-7899-4	GW-17358-012312-DR-025	Total Recoverable	Water	3005A	
240-7899-5	GW-17358-012312-DR-026	Total Recoverable	Water	3005A	
240-7899-6	GW-17358-012312-DR-027	Total Recoverable	Water	3005A	
240-7899-7	GW-17358-012312-DR-028	Total Recoverable	Water	3005A	
240-7899-8	GW-17358-012312-DR-029	Total Recoverable	Water	3005A	
240-7932-1	GW-17358-012412-DR-030	Total Recoverable	Water	3005A	
240-7932-2	GW-17358-012412-DR-031	Total Recoverable	Water	3005A	
240-7932-2 MS	GW-17358-012412-DR-031	Total Recoverable	Water	3005A	
240-7932-2 MS	GW-17358-012412-DR-031	Total Recoverable	Water	3005A	
240-7932-2 MSD	GW-17358-012412-DR-031	Total Recoverable	Water	3005A	

Metals (Continued)

Prep Batch: 31676 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7932-2 MSD	GW-17358-012412-DR-031	Total Recoverable	Water	3005A	
240-7932-3	GW-17358-012412-DR-032	Total Recoverable	Water	3005A	
240-7932-4	GW-17358-012412-DR-033	Total Recoverable	Water	3005A	
LCS 240-31676/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 240-31676/3-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-31676/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 31701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7899-2	GW-17358-012312-DR-023	Total/NA	Water	7470A	
240-7899-3	GW-17358-012312-DR-024	Total/NA	Water	7470A	
240-7899-4	GW-17358-012312-DR-025	Total/NA	Water	7470A	
240-7899-5	GW-17358-012312-DR-026	Total/NA	Water	7470A	
240-7899-6	GW-17358-012312-DR-027	Total/NA	Water	7470A	
240-7899-7	GW-17358-012312-DR-028	Total/NA	Water	7470A	
240-7899-8	GW-17358-012312-DR-029	Total/NA	Water	7470A	
240-7932-1	GW-17358-012412-DR-030	Total/NA	Water	7470A	
240-7932-2	GW-17358-012412-DR-031	Total/NA	Water	7470A	
240-7932-2 MS	GW-17358-012412-DR-031	Total/NA	Water	7470A	
240-7932-2 MSD	GW-17358-012412-DR-031	Total/NA	Water	7470A	
240-7932-3	GW-17358-012412-DR-032	Total/NA	Water	7470A	
240-7932-4	GW-17358-012412-DR-033	Total/NA	Water	7470A	
LCS 240-31701/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-31701/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 31995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7899-2	GW-17358-012312-DR-023	Total Recoverable	Water	6020	31676
240-7899-3	GW-17358-012312-DR-024	Total Recoverable	Water	6020	31676
240-7899-4	GW-17358-012312-DR-025	Total Recoverable	Water	6020	31676
240-7899-5	GW-17358-012312-DR-026	Total Recoverable	Water	6020	31676
240-7899-6	GW-17358-012312-DR-027	Total Recoverable	Water	6020	31676
240-7899-7	GW-17358-012312-DR-028	Total Recoverable	Water	6020	31676
240-7899-8	GW-17358-012312-DR-029	Total Recoverable	Water	6020	31676
240-7932-1	GW-17358-012412-DR-030	Total Recoverable	Water	6020	31676
240-7932-2	GW-17358-012412-DR-031	Total Recoverable	Water	6020	31676
240-7932-2 MS	GW-17358-012412-DR-031	Total Recoverable	Water	6020	31676
240-7932-2 MSD	GW-17358-012412-DR-031	Total Recoverable	Water	6020	31676
240-7932-3	GW-17358-012412-DR-032	Total Recoverable	Water	6020	31676
240-7932-4	GW-17358-012412-DR-033	Total Recoverable	Water	6020	31676
LCS 240-31676/3-A	Lab Control Sample	Total Recoverable	Water	6020	31676
MB 240-31676/1-A	Method Blank	Total Recoverable	Water	6020	31676

Analysis Batch: 32003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7932-1	GW-17358-012412-DR-030	Total Recoverable	Water	6010B	31676
240-7932-2	GW-17358-012412-DR-031	Total Recoverable	Water	6010B	31676
240-7932-2 MS	GW-17358-012412-DR-031	Total Recoverable	Water	6010B	31676
240-7932-2 MSD	GW-17358-012412-DR-031	Total Recoverable	Water	6010B	31676
LCS 240-31676/2-A	Lab Control Sample	Total Recoverable	Water	6010B	31676
MB 240-31676/1-A	Method Blank	Total Recoverable	Water	6010B	31676

Metals (Continued)

Analysis Batch: 32155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7932-3	GW-17358-012412-DR-032	Total Recoverable	Water	6020	31676
240-7932-4	GW-17358-012412-DR-033	Total Recoverable	Water	6020	31676

Analysis Batch: 32181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7899-2	GW-17358-012312-DR-023	Total/NA	Water	7470A	31701
240-7899-3	GW-17358-012312-DR-024	Total/NA	Water	7470A	31701
240-7899-4	GW-17358-012312-DR-025	Total/NA	Water	7470A	31701
240-7899-5	GW-17358-012312-DR-026	Total/NA	Water	7470A	31701
240-7899-6	GW-17358-012312-DR-027	Total/NA	Water	7470A	31701
240-7899-7	GW-17358-012312-DR-028	Total/NA	Water	7470A	31701
240-7899-8	GW-17358-012312-DR-029	Total/NA	Water	7470A	31701
240-7932-1	GW-17358-012412-DR-030	Total/NA	Water	7470A	31701
240-7932-2	GW-17358-012412-DR-031	Total/NA	Water	7470A	31701
240-7932-2 MS	GW-17358-012412-DR-031	Total/NA	Water	7470A	31701
240-7932-2 MSD	GW-17358-012412-DR-031	Total/NA	Water	7470A	31701
240-7932-3	GW-17358-012412-DR-032	Total/NA	Water	7470A	31701
240-7932-4	GW-17358-012412-DR-033	Total/NA	Water	7470A	31701
LCS 240-31701/2-A	Lab Control Sample	Total/NA	Water	7470A	31701
MB 240-31701/1-A	Method Blank	Total/NA	Water	7470A	31701

General Chemistry

Analysis Batch: 31204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7899-5	GW-17358-012312-DR-026	Total/NA	Water	7196A	
240-7899-5 MS	GW-17358-012312-DR-026	Total/NA	Water	7196A	
240-7899-5 MSD	GW-17358-012312-DR-026	Total/NA	Water	7196A	
LCS 240-31204/4	Lab Control Sample	Total/NA	Water	7196A	
MB 240-31204/3	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 31344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7932-2	GW-17358-012412-DR-031	Total/NA	Water	7196A	
240-7932-2 MS	GW-17358-012412-DR-031	Total/NA	Water	7196A	
240-7932-2 MSD	GW-17358-012412-DR-031	Total/NA	Water	7196A	
LCS 240-31344/4	Lab Control Sample	Total/NA	Water	7196A	
MB 240-31344/3	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 32138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-7899-5	GW-17358-012312-DR-026	Total/NA	Water	7196A	
240-7932-2	GW-17358-012412-DR-031	Total/NA	Water	7196A	

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-31710/5
Matrix: Water
Analysis Batch: 31710

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			01/27/12 12:50	1
Benzene	1.0	U	1.0	0.13	ug/L			01/27/12 12:50	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			01/27/12 12:50	1
Bromoform	1.0	U	1.0	0.64	ug/L			01/27/12 12:50	1
Bromomethane	1.0	U	1.0	0.41	ug/L			01/27/12 12:50	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			01/27/12 12:50	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			01/27/12 12:50	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			01/27/12 12:50	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 12:50	1
Chloroethane	1.0	U	1.0	0.29	ug/L			01/27/12 12:50	1
Chloroform	1.0	U	1.0	0.16	ug/L			01/27/12 12:50	1
Chloromethane	1.0	U	1.0	0.30	ug/L			01/27/12 12:50	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			01/27/12 12:50	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 12:50	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 12:50	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			01/27/12 12:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			01/27/12 12:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			01/27/12 12:50	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			01/27/12 12:50	1
2-Hexanone	10	U	10	0.41	ug/L			01/27/12 12:50	1
Methylene Chloride	0.447	J	5.0	0.33	ug/L			01/27/12 12:50	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			01/27/12 12:50	1
Styrene	1.0	U	1.0	0.11	ug/L			01/27/12 12:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			01/27/12 12:50	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			01/27/12 12:50	1
Toluene	1.0	U	1.0	0.13	ug/L			01/27/12 12:50	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 12:50	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			01/27/12 12:50	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			01/27/12 12:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			01/27/12 12:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			01/27/12 12:50	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			01/27/12 12:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			01/27/12 12:50	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			01/27/12 12:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			01/27/12 12:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			01/27/12 12:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			01/27/12 12:50	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			01/27/12 12:50	1
Methyl acetate	10	U	10	0.38	ug/L			01/27/12 12:50	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			01/27/12 12:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			01/27/12 12:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			01/27/12 12:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 12:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			01/27/12 12:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			01/27/12 12:50	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			01/27/12 12:50	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			01/27/12 12:50	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			01/27/12 12:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-31710/5
Matrix: Water
Analysis Batch: 31710

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 129		01/27/12 12:50	1
4-Bromofluorobenzene (Surr)	93		66 - 117		01/27/12 12:50	1
Toluene-d8 (Surr)	95		74 - 115		01/27/12 12:50	1
Dibromofluoromethane (Surr)	99		75 - 121		01/27/12 12:50	1

Lab Sample ID: LCS 240-31710/4
Matrix: Water
Analysis Batch: 31710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	12.5		ug/L		63	43 - 136
Benzene	10.0	9.56		ug/L		96	83 - 112
Bromodichloromethane	10.0	9.20		ug/L		92	72 - 121
Bromoform	10.0	8.11		ug/L		81	40 - 131
Bromomethane	10.0	16.0		ug/L		160	11 - 185
2-Butanone (MEK)	20.0	12.7		ug/L		64	60 - 126
Carbon disulfide	10.0	9.92		ug/L		99	62 - 142
Carbon tetrachloride	10.0	10.5		ug/L		105	66 - 128
Chlorobenzene	10.0	9.79		ug/L		98	85 - 110
Chloroethane	10.0	13.9		ug/L		139	25 - 153
Chloroform	10.0	10.0		ug/L		100	79 - 117
Chloromethane	10.0	9.26		ug/L		93	44 - 126
1,1-Dichloroethane	10.0	9.71		ug/L		97	82 - 115
1,2-Dichloroethane	10.0	9.21		ug/L		92	71 - 127
1,1-Dichloroethene	10.0	10.6		ug/L		106	78 - 131
1,2-Dichloropropane	10.0	9.01		ug/L		90	81 - 115
cis-1,3-Dichloropropene	10.0	8.40		ug/L		84	61 - 115
trans-1,3-Dichloropropene	10.0	8.85		ug/L		89	58 - 117
Ethylbenzene	10.0	9.68		ug/L		97	83 - 112
2-Hexanone	20.0	15.1		ug/L		76	55 - 133
Methylene Chloride	10.0	9.26		ug/L		93	66 - 131
4-Methyl-2-pentanone (MIBK)	20.0	15.3		ug/L		77	63 - 128
Styrene	10.0	10.3		ug/L		103	79 - 114
1,1,2,2-Tetrachloroethane	10.0	8.15		ug/L		82	68 - 118
Tetrachloroethene	10.0	10.2		ug/L		102	79 - 114
Toluene	10.0	9.40		ug/L		94	84 - 111
Trichloroethene	10.0	10.2		ug/L		102	76 - 117
Vinyl chloride	10.0	10.0		ug/L		100	53 - 127
Xylenes, Total	30.0	30.0		ug/L		100	83 - 112
1,1,1-Trichloroethane	10.0	10.4		ug/L		104	74 - 118
1,1,2-Trichloroethane	10.0	8.76		ug/L		88	80 - 112
Cyclohexane	10.0	9.81		ug/L		98	54 - 121
1,2-Dibromo-3-Chloropropane	10.0	8.97		ug/L		90	42 - 136
1,2-Dibromoethane	10.0	8.75		ug/L		88	79 - 113
Dichlorodifluoromethane	10.0	9.36		ug/L		94	19 - 129
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	80 - 113
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	83 - 117
Isopropylbenzene	10.0	10.1		ug/L		101	75 - 114
Methyl acetate	10.0	6.61	J	ug/L		66	58 - 131

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-31710/4
Matrix: Water
Analysis Batch: 31710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methyl tert-butyl ether			10.0	9.47		ug/L		95	52 - 144		
1,1,2-Trichloro-1,2,2-trifluoroethane			10.0	12.8		ug/L		128	74 - 151		
1,2,4-Trichlorobenzene			10.0	9.67		ug/L		97	48 - 135		
1,2-Dichlorobenzene			10.0	9.67		ug/L		97	81 - 110		
1,3-Dichlorobenzene			10.0	9.68		ug/L		97	80 - 110		
1,4-Dichlorobenzene			10.0	9.55		ug/L		96	82 - 110		
Trichlorofluoromethane			10.0	14.6		ug/L		146	49 - 157		
Dibromochloromethane			10.0	9.16		ug/L		92	64 - 119		
Methylcyclohexane			10.0	10.9		ug/L		109	56 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*63 - 129*
4-Bromofluorobenzene (Surr)	*98*		*66 - 117*
Toluene-d8 (Surr)	*95*		*74 - 115*
Dibromofluoromethane (Surr)	*96*		*75 - 121*

Lab Sample ID: 240-7932-2 MS
Matrix: Water
Analysis Batch: 31710

Client Sample ID: GW-17358-012412-DR-031
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acetone	10	U	20.0	11.3		ug/L		57	33 - 145		
Benzene	1.0	U	10.0	8.66		ug/L		87	72 - 121		
Bromodichloromethane	1.0	U	10.0	8.31		ug/L		83	67 - 120		
Bromoform	1.0	U	10.0	7.64		ug/L		76	32 - 128		
Bromomethane	1.0	U	10.0	11.7		ug/L		117	10 - 186		
2-Butanone (MEK)	10	U	20.0	12.5		ug/L		63	54 - 129		
Carbon disulfide	5.0	U	10.0	9.04		ug/L		90	57 - 147		
Carbon tetrachloride	1.0	U	10.0	9.82		ug/L		98	59 - 129		
Chlorobenzene	1.0	U	10.0	9.14		ug/L		91	80 - 110		
Chloroethane	1.0	U	10.0	10.8		ug/L		108	21 - 165		
Chloroform	1.0	U	10.0	9.28		ug/L		93	76 - 118		
Chloromethane	1.0	U	10.0	7.89		ug/L		79	33 - 132		
1,1-Dichloroethane	1.0	U	10.0	8.80		ug/L		88	79 - 116		
1,2-Dichloroethane	1.0	U	10.0	8.66		ug/L		87	68 - 129		
1,1-Dichloroethene	1.0	U	10.0	9.90		ug/L		99	74 - 135		
1,2-Dichloropropane	1.0	U	10.0	8.37		ug/L		84	78 - 115		
cis-1,3-Dichloropropene	1.0	U	10.0	7.75		ug/L		78	51 - 110		
trans-1,3-Dichloropropene	1.0	U	10.0	7.86		ug/L		79	46 - 116		
Ethylbenzene	1.0	U	10.0	8.98		ug/L		90	75 - 116		
2-Hexanone	10	U	20.0	13.9		ug/L		70	47 - 139		
Methylene Chloride	5.0	U	10.0	8.26		ug/L		83	63 - 128		
4-Methyl-2-pentanone (MIBK)	10	U	20.0	14.7		ug/L		74	56 - 131		
Styrene	1.0	U	10.0	9.25		ug/L		93	71 - 117		
1,1,2,2-Tetrachloroethane	1.0	U	10.0	7.72		ug/L		77	63 - 122		
Tetrachloroethene	1.0	U	10.0	9.15		ug/L		92	70 - 117		
Toluene	1.0	U	10.0	8.74		ug/L		87	78 - 114		
Trichloroethene	1.0	U	10.0	9.03		ug/L		90	66 - 120		
Vinyl chloride	1.0	U	10.0	9.17		ug/L		92	49 - 130		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-7932-2 MS
Matrix: Water
Analysis Batch: 31710

Client Sample ID: GW-17358-012412-DR-031
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Xylenes, Total	2.0	U	30.0	27.4		ug/L		91	76 - 116
1,1,1-Trichloroethane	1.0	U	10.0	9.48		ug/L		95	68 - 121
1,1,2-Trichloroethane	1.0	U	10.0	8.37		ug/L		84	75 - 115
Cyclohexane	1.0	U	10.0	9.08		ug/L		91	49 - 123
1,2-Dibromo-3-Chloropropane	1.0	U	10.0	8.01		ug/L		80	32 - 139
1,2-Dibromoethane	1.0	U	10.0	8.42		ug/L		84	74 - 113
Dichlorodifluoromethane	1.0	U	10.0	8.70		ug/L		87	17 - 128
cis-1,2-Dichloroethene	1.0	U	10.0	9.30		ug/L		93	70 - 120
trans-1,2-Dichloroethene	1.0	U	10.0	9.49		ug/L		95	80 - 119
Isopropylbenzene	1.0	U	10.0	8.97		ug/L		90	68 - 116
Methyl acetate	10	U	10.0	6.22	J	ug/L		62	47 - 130
Methyl tert-butyl ether	5.0	U	10.0	8.69		ug/L		87	46 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	10.0	12.1		ug/L		121	70 - 152
1,2,4-Trichlorobenzene	1.0	U	10.0	8.47		ug/L		85	38 - 138
1,2-Dichlorobenzene	1.0	U	10.0	9.13		ug/L		91	75 - 111
1,3-Dichlorobenzene	1.0	U	10.0	9.11		ug/L		91	73 - 110
1,4-Dichlorobenzene	1.0	U	10.0	8.87		ug/L		89	75 - 110
Trichlorofluoromethane	1.0	U	10.0	11.4		ug/L		114	46 - 157
Dibromochloromethane	1.0	U	10.0	8.66		ug/L		87	56 - 118
Methylcyclohexane	1.0	U	10.0	9.64		ug/L		96	49 - 127

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*63 - 129*
4-Bromofluorobenzene (Surr)	*93*		*66 - 117*
Toluene-d8 (Surr)	*93*		*74 - 115*
Dibromofluoromethane (Surr)	*90*		*75 - 121*

Lab Sample ID: 240-7932-2 MSD
Matrix: Water
Analysis Batch: 31710

Client Sample ID: GW-17358-012412-DR-031
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	10	U	20.0	10.3		ug/L		52	33 - 145	9	30
Benzene	1.0	U	10.0	8.47		ug/L		85	72 - 121	2	30
Bromodichloromethane	1.0	U	10.0	7.99		ug/L		80	67 - 120	4	30
Bromoform	1.0	U	10.0	7.24		ug/L		72	32 - 128	5	30
Bromomethane	1.0	U	10.0	12.3		ug/L		123	10 - 186	5	30
2-Butanone (MEK)	10	U	20.0	11.6		ug/L		58	54 - 129	7	30
Carbon disulfide	5.0	U	10.0	8.90		ug/L		89	57 - 147	2	30
Carbon tetrachloride	1.0	U	10.0	9.48		ug/L		95	59 - 129	4	30
Chlorobenzene	1.0	U	10.0	9.01		ug/L		90	80 - 110	1	30
Chloroethane	1.0	U	10.0	10.8		ug/L		108	21 - 165	0	30
Chloroform	1.0	U	10.0	9.23		ug/L		92	76 - 118	1	30
Chloromethane	1.0	U	10.0	7.35		ug/L		74	33 - 132	7	30
1,1-Dichloroethane	1.0	U	10.0	8.62		ug/L		86	79 - 116	2	30
1,2-Dichloroethane	1.0	U	10.0	8.12		ug/L		81	68 - 129	6	30
1,1-Dichloroethene	1.0	U	10.0	9.63		ug/L		96	74 - 135	3	30
1,2-Dichloropropane	1.0	U	10.0	7.96		ug/L		80	78 - 115	5	30
cis-1,3-Dichloropropene	1.0	U	10.0	7.20		ug/L		72	51 - 110	7	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-7932-2 MSD
Matrix: Water
Analysis Batch: 31710

Client Sample ID: GW-17358-012412-DR-031
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,3-Dichloropropene	1.0	U	10.0	7.77		ug/L		78	46 - 116	1	30
Ethylbenzene	1.0	U	10.0	8.94		ug/L		89	75 - 116	0	30
2-Hexanone	10	U	20.0	14.2		ug/L		71	47 - 139	2	30
Methylene Chloride	5.0	U	10.0	7.87		ug/L		79	63 - 128	5	30
4-Methyl-2-pentanone (MIBK)	10	U	20.0	14.0		ug/L		70	56 - 131	5	30
Styrene	1.0	U	10.0	9.19		ug/L		92	71 - 117	1	30
1,1,2,2-Tetrachloroethane	1.0	U	10.0	7.02		ug/L		70	63 - 122	9	30
Tetrachloroethene	1.0	U	10.0	9.21		ug/L		92	70 - 117	1	30
Toluene	1.0	U	10.0	8.60		ug/L		86	78 - 114	2	30
Trichloroethene	1.0	U	10.0	8.72		ug/L		87	66 - 120	3	30
Vinyl chloride	1.0	U	10.0	8.99		ug/L		90	49 - 130	2	30
Xylenes, Total	2.0	U	30.0	27.5		ug/L		92	76 - 116	0	30
1,1,1-Trichloroethane	1.0	U	10.0	9.29		ug/L		93	68 - 121	2	30
1,1,2-Trichloroethane	1.0	U	10.0	8.30		ug/L		83	75 - 115	1	30
Cyclohexane	1.0	U	10.0	8.73		ug/L		87	49 - 123	4	30
1,2-Dibromo-3-Chloropropane	1.0	U	10.0	7.45		ug/L		75	32 - 139	7	30
1,2-Dibromoethane	1.0	U	10.0	8.21		ug/L		82	74 - 113	3	30
Dichlorodifluoromethane	1.0	U	10.0	8.06		ug/L		81	17 - 128	8	30
cis-1,2-Dichloroethene	1.0	U	10.0	8.96		ug/L		90	70 - 120	4	30
trans-1,2-Dichloroethene	1.0	U	10.0	9.36		ug/L		94	80 - 119	1	30
Isopropylbenzene	1.0	U	10.0	9.17		ug/L		92	68 - 116	2	30
Methyl acetate	10	U	10.0	5.84	J	ug/L		58	47 - 130	6	30
Methyl tert-butyl ether	5.0	U	10.0	8.40		ug/L		84	46 - 144	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	10.0	11.3		ug/L		113	70 - 152	7	30
1,2,4-Trichlorobenzene	1.0	U	10.0	8.62		ug/L		86	38 - 138	2	30
1,2-Dichlorobenzene	1.0	U	10.0	8.83		ug/L		88	75 - 111	3	30
1,3-Dichlorobenzene	1.0	U	10.0	8.52		ug/L		85	73 - 110	7	30
1,4-Dichlorobenzene	1.0	U	10.0	8.54		ug/L		85	75 - 110	4	30
Trichlorofluoromethane	1.0	U	10.0	12.2		ug/L		122	46 - 157	7	30
Dibromochloromethane	1.0	U	10.0	8.16		ug/L		82	56 - 118	6	30
Methylcyclohexane	1.0	U	10.0	9.63		ug/L		96	49 - 127	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*63 - 129*
4-Bromofluorobenzene (Surr)	*94*		*66 - 117*
Toluene-d8 (Surr)	*92*		*74 - 115*
Dibromofluoromethane (Surr)	*93*		*75 - 121*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Lab Sample ID: MB 240-31476/1-A
Matrix: Water
Analysis Batch: 31864

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31476

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		01/26/12 08:02	01/30/12 11:35	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		01/26/12 08:02	01/30/12 11:35	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-31476/1-A
Matrix: Water
Analysis Batch: 31864

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 31476

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 11:35	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		01/26/12 08:02	01/30/12 11:35	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		01/26/12 08:02	01/30/12 11:35	1
2-Methylnaphthalene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
2-Nitroaniline	20	U	20	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		01/26/12 08:02	01/30/12 11:35	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		01/26/12 08:02	01/30/12 11:35	1
3-Nitroaniline	20	U	20	0.28	ug/L		01/26/12 08:02	01/30/12 11:35	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 11:35	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
4-Chloroaniline	10	U	10	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		01/26/12 08:02	01/30/12 11:35	1
4-Nitroaniline	20	U	20	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
4-Nitrophenol	20	U	20	2.4	ug/L		01/26/12 08:02	01/30/12 11:35	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Acetophenone	5.0	U	5.0	0.34	ug/L		01/26/12 08:02	01/30/12 11:35	1
Anthracene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Atrazine	3.0	U	3.0	0.34	ug/L		01/26/12 08:02	01/30/12 11:35	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		01/26/12 08:02	01/30/12 11:35	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		01/26/12 08:02	01/30/12 11:35	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Bis(2-ethylhexyl) phthalate	0.804	J	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
Caprolactam	10	U	10	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
Carbazole	10	U	10	0.28	ug/L		01/26/12 08:02	01/30/12 11:35	1
Chrysene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		01/26/12 08:02	01/30/12 11:35	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		01/26/12 08:02	01/30/12 11:35	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		01/26/12 08:02	01/30/12 11:35	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Fluorene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		01/26/12 08:02	01/30/12 11:35	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-31476/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31864 — **Prep Batch: 31476**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Isophorone	5.0	U	5.0	0.27	ug/L		01/26/12 08:02	01/30/12 11:35	1
Naphthalene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		01/26/12 08:02	01/30/12 11:35	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		01/26/12 08:02	01/30/12 11:35	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		01/26/12 08:02	01/30/12 11:35	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		01/26/12 08:02	01/30/12 11:35	1
Phenol	5.0	U	5.0	0.60	ug/L		01/26/12 08:02	01/30/12 11:35	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
Pyrene	5.0	U	5.0	0.10	ug/L		01/26/12 08:02	01/30/12 11:35	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		01/26/12 08:02	01/30/12 11:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*81*		*28 - 110*	*01/26/12 08:02*	*01/30/12 11:35*	*1*
2-Fluorophenol (Surr)	*79*		*10 - 110*	*01/26/12 08:02*	*01/30/12 11:35*	*1*
2,4,6-Tribromophenol (Surr)	*77*		*22 - 120*	*01/26/12 08:02*	*01/30/12 11:35*	*1*
Nitrobenzene-d5 (Surr)	*78*		*27 - 111*	*01/26/12 08:02*	*01/30/12 11:35*	*1*
Phenol-d5 (Surr)	*82*		*10 - 110*	*01/26/12 08:02*	*01/30/12 11:35*	*1*
Terphenyl-d14 (Surr)	*93*		*37 - 119*	*01/26/12 08:02*	*01/30/12 11:35*	*1*

Lab Sample ID: LCS 240-31476/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31864 — **Prep Batch: 31476**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	20.0	15.8		ug/L		79	50 - 130
2,2'-oxybis[1-chloropropane]	20.0	17.4		ug/L		87	25 - 128
2,4,5-Trichlorophenol	20.0	17.6		ug/L		88	39 - 110
2,4,6-Trichlorophenol	20.0	17.8		ug/L		89	35 - 110
2,4-Dichlorophenol	20.0	18.4		ug/L		92	33 - 110
2,4-Dimethylphenol	20.0	13.3		ug/L		67	12 - 110
2,4-Dinitrophenol	20.0	11.7	J	ug/L		59	17 - 112
2,4-Dinitrotoluene	20.0	18.7		ug/L		94	52 - 123
2,6-Dinitrotoluene	20.0	18.6		ug/L		93	52 - 119
2-Chloronaphthalene	20.0	17.1		ug/L		85	39 - 110
2-Chlorophenol	20.0	18.6		ug/L		93	27 - 110
2-Methylnaphthalene	20.0	18.1		ug/L		90	35 - 110
2-Methylphenol	20.0	17.9		ug/L		89	30 - 110
2-Nitroaniline	20.0	17.0	J	ug/L		85	43 - 130
2-Nitrophenol	20.0	18.2		ug/L		91	29 - 110
3,3'-Dichlorobenzidine	20.0	10.8		ug/L		54	19 - 110
3-Nitroaniline	20.0	16.1	J	ug/L		81	45 - 116
4,6-Dinitro-2-methylphenol	20.0	16.2	J	ug/L		81	28 - 112
4-Bromophenyl phenyl ether	20.0	17.9		ug/L		90	51 - 114
4-Chloro-3-methylphenol	20.0	18.9		ug/L		95	39 - 110
4-Chloroaniline	20.0	15.1		ug/L		75	10 - 110
4-Chlorophenyl phenyl ether	20.0	17.7		ug/L		88	50 - 115
4-Nitroaniline	20.0	16.9	J	ug/L		84	45 - 120

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-31476/2-A
Matrix: Water
Analysis Batch: 31864

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31476

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitrophenol	20.0	18.7	J	ug/L		94	12 - 130
Acenaphthene	20.0	16.7		ug/L		83	40 - 110
Acenaphthylene	20.0	17.1		ug/L		86	43 - 110
Acetophenone	20.0	18.4		ug/L		92	50 - 130
Anthracene	20.0	17.5		ug/L		87	54 - 114
Atrazine	20.0	19.5		ug/L		98	50 - 130
Benzaldehyde	20.0	17.7		ug/L		88	10 - 130
Benzo[a]anthracene	20.0	17.4		ug/L		87	55 - 115
Benzo[a]pyrene	20.0	15.6		ug/L		78	43 - 116
Benzo[b]fluoranthene	20.0	17.2		ug/L		86	43 - 122
Benzo[g,h,i]perylene	20.0	17.4		ug/L		87	45 - 120
Benzo[k]fluoranthene	20.0	17.7		ug/L		89	43 - 124
Bis(2-chloroethoxy)methane	20.0	17.8		ug/L		89	39 - 110
Bis(2-chloroethyl)ether	20.0	19.3		ug/L		97	34 - 113
Bis(2-ethylhexyl) phthalate	20.0	13.4		ug/L		67	36 - 163
Butyl benzyl phthalate	20.0	17.5		ug/L		88	53 - 126
Caprolactam	20.0	18.3		ug/L		91	50 - 130
Carbazole	20.0	17.3		ug/L		87	53 - 120
Chrysene	20.0	17.7		ug/L		88	55 - 115
Dibenz(a,h)anthracene	20.0	17.7		ug/L		88	46 - 122
Dibenzofuran	20.0	17.1		ug/L		85	46 - 111
Diethyl phthalate	20.0	17.8		ug/L		89	33 - 134
Dimethyl phthalate	20.0	18.0		ug/L		90	15 - 143
Di-n-butyl phthalate	20.0	18.2		ug/L		91	55 - 122
Di-n-octyl phthalate	20.0	13.4		ug/L		67	44 - 128
Fluoranthene	20.0	18.0		ug/L		90	54 - 122
Fluorene	20.0	17.6		ug/L		88	47 - 112
Hexachlorobenzene	20.0	17.3		ug/L		87	51 - 112
Hexachlorobutadiene	20.0	17.7		ug/L		88	13 - 110
Hexachlorocyclopentadiene	20.0	5.70		ug/L		29	10 - 110
Hexachloroethane	20.0	16.6		ug/L		83	12 - 110
Indeno[1,2,3-cd]pyrene	20.0	16.5		ug/L		83	46 - 121
Isophorone	20.0	18.0		ug/L		90	44 - 128
Naphthalene	20.0	17.2		ug/L		86	31 - 110
Nitrobenzene	20.0	17.8		ug/L		89	37 - 115
N-Nitrosodi-n-propylamine	20.0	18.5		ug/L		92	37 - 121
N-Nitrosodiphenylamine	20.0	16.1		ug/L		81	53 - 113
Pentachlorophenol	20.0	11.6		ug/L		58	26 - 110
Phenol	20.0	18.4		ug/L		92	14 - 112
Phenanthrene	20.0	17.8		ug/L		89	52 - 114
Pyrene	20.0	16.6		ug/L		83	55 - 120
3 & 4 Methylphenol	40.0	36.8		ug/L		92	32 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*81*		*28 - 110*
2-Fluorophenol (Surr)	*91*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*87*		*22 - 120*
Nitrobenzene-d5 (Surr)	*80*		*27 - 111*
Phenol-d5 (Surr)	*91*		*10 - 110*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-31476/2-A
Matrix: Water
Analysis Batch: 31864

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 31476

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14 (Surr)	*94*		*37 - 119*

Lab Sample ID: 240-7932-2 MS
Matrix: Water
Analysis Batch: 31864

Client Sample ID: GW-17358-012412-DR-031
Prep Type: Total/NA
Prep Batch: 31476

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	5.0	U	20.2	12.8		ug/L		63	50 - 130
2,2'-oxybis[1-chloropropane]	5.0	U	20.2	12.1		ug/L		60	25 - 128
2,4,5-Trichlorophenol	5.0	U	20.2	13.9		ug/L		69	36 - 110
2,4,6-Trichlorophenol	4.0	U	20.2	14.2		ug/L		70	34 - 110
2,4-Dichlorophenol	10	U	20.2	14.2		ug/L		70	30 - 110
2,4-Dimethylphenol	5.0	U	20.2	11.1		ug/L		55	11 - 110
2,4-Dinitrophenol	20	U	20.2	10.1	J	ug/L		50	11 - 119
2,4-Dinitrotoluene	5.0	U	20.2	15.7		ug/L		78	46 - 119
2,6-Dinitrotoluene	5.0	U	20.2	15.5		ug/L		77	48 - 115
2-Chloronaphthalene	5.0	U	20.2	13.3		ug/L		66	34 - 110
2-Chlorophenol	5.0	U	20.2	13.2		ug/L		66	26 - 110
2-Methylnaphthalene	5.0	U	20.2	13.4		ug/L		67	35 - 110
2-Methylphenol	5.0	U	20.2	12.6		ug/L		63	26 - 110
2-Nitroaniline	20	U	20.2	13.8	J	ug/L		68	31 - 129
2-Nitrophenol	5.0	U	20.2	13.5		ug/L		67	30 - 110
3,3'-Dichlorobenzidine	1.0	U	20.2	8.20		ug/L		41	10 - 110
3-Nitroaniline	20	U	20.2	13.0	J	ug/L		64	23 - 112
4,6-Dinitro-2-methylphenol	20	U	20.2	12.8	J	ug/L		63	25 - 110
4-Bromophenyl phenyl ether	5.0	U	20.2	14.6		ug/L		72	42 - 113
4-Chloro-3-methylphenol	5.0	U	20.2	14.5		ug/L		72	33 - 110
4-Chloroaniline	10	U	20.2	11.3		ug/L		56	10 - 110
4-Chlorophenyl phenyl ether	5.0	U	20.2	14.3		ug/L		71	43 - 113
4-Nitroaniline	20	U	20.2	14.0	J	ug/L		69	26 - 115
4-Nitrophenol	20	U	20.2	16.3	J	ug/L		81	13 - 127
Acenaphthene	5.0	U	20.2	13.3		ug/L		66	36 - 110
Acenaphthylene	5.0	U	20.2	13.3		ug/L		66	39 - 110
Acetophenone	5.0	U	20.2	12.8		ug/L		64	50 - 130
Anthracene	5.0	U	20.2	13.9		ug/L		69	46 - 110
Atrazine	3.0	U	20.2	16.5		ug/L		82	50 - 130
Benzaldehyde	5.0	U	20.2	12.3		ug/L		61	10 - 130
Benzo[a]anthracene	1.0	U	20.2	13.8		ug/L		68	52 - 110
Benzo[a]pyrene	1.0	U	20.2	10.9		ug/L		54	33 - 110
Benzo[b]fluoranthene	1.0	U	20.2	13.5		ug/L		67	33 - 114
Benzo[g,h,i]perylene	1.0	U	20.2	12.3		ug/L		61	34 - 116
Benzo[k]fluoranthene	1.0	U	20.2	12.4		ug/L		61	32 - 121
Bis(2-chloroethoxy)methane	5.0	U	20.2	13.4		ug/L		66	35 - 110
Bis(2-chloroethyl)ether	1.0	U	20.2	13.3		ug/L		66	27 - 110
Bis(2-ethylhexyl) phthalate	5.0	U	20.2	12.8		ug/L		64	40 - 140
Butyl benzyl phthalate	5.0	U	20.2	14.5		ug/L		72	51 - 121
Caprolactam	10	U	20.2	14.8		ug/L		74	50 - 130
Carbazole	10	U	20.2	14.4		ug/L		71	49 - 114
Chrysene	1.0	U	20.2	14.2		ug/L		71	52 - 111

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: 240-7932-2 MS — **Client Sample ID: GW-17358-012412-DR-031**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31864 — **Prep Batch: 31476**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenz(a,h)anthracene	2.0	U	20.2	12.3		ug/L		61	35 - 118
Dibenzofuran	4.0	U	20.2	13.7		ug/L		68	41 - 110
Diethyl phthalate	5.0	U	20.2	14.9		ug/L		74	33 - 130
Dimethyl phthalate	5.0	U	20.2	14.7		ug/L		73	36 - 124
Di-n-butyl phthalate	5.0	U	20.2	14.7		ug/L		73	50 - 117
Di-n-octyl phthalate	5.0	U	20.2	11.5		ug/L		57	36 - 124
Fluoranthene	1.0	U	20.2	14.5		ug/L		72	53 - 111
Fluorene	5.0	U	20.2	14.1		ug/L		70	43 - 110
Hexachlorobenzene	0.20	U	20.2	13.3		ug/L		66	40 - 113
Hexachlorobutadiene	1.0	U	20.2	12.7		ug/L		63	14 - 110
Hexachlorocyclopentadiene	5.0	U	20.2	3.86	J	ug/L		19	10 - 110
Hexachloroethane	5.0	U	20.2	11.8		ug/L		58	10 - 110
Indeno[1,2,3-cd]pyrene	2.0	U	20.2	12.0		ug/L		60	36 - 116
Isophorone	5.0	U	20.2	13.7		ug/L		68	34 - 125
Naphthalene	5.0	U	20.2	13.0		ug/L		64	32 - 110
Nitrobenzene	3.0	U	20.2	13.2		ug/L		65	26 - 118
N-Nitrosodi-n-propylamine	5.0	U	20.2	13.0		ug/L		65	25 - 119
N-Nitrosodiphenylamine	5.0	U	20.2	13.4		ug/L		66	28 - 118
Pentachlorophenol	5.0	U	20.2	10.6		ug/L		52	23 - 110
Phenol	5.0	U	20.2	12.9		ug/L		64	16 - 110
Phenanthrene	2.0	U	20.2	14.4		ug/L		71	47 - 110
Pyrene	5.0	U	20.2	14.0		ug/L		69	54 - 115
3 & 4 Methylphenol	5.0	U	40.4	26.5		ug/L		66	25 - 110

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*66*		*28 - 110*
2-Fluorophenol (Surr)	*67*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*73*		*22 - 120*
Nitrobenzene-d5 (Surr)	*63*		*27 - 111*
Phenol-d5 (Surr)	*67*		*10 - 110*
Terphenyl-d14 (Surr)	*74*		*37 - 119*

Lab Sample ID: 240-7932-2 MSD — **Client Sample ID: GW-17358-012412-DR-031**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31864 — **Prep Batch: 31476**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	5.0	U	20.4	11.0		ug/L		54	50 - 130	15	30
2,2'-oxybis[1-chloropropane]	5.0	U	20.4	10.7		ug/L		52	25 - 128	13	30
2,4,5-Trichlorophenol	5.0	U	20.4	11.9		ug/L		59	36 - 110	15	30
2,4,6-Trichlorophenol	4.0	U	20.4	11.8		ug/L		58	34 - 110	18	30
2,4-Dichlorophenol	10	U	20.4	12.2		ug/L		60	30 - 110	15	30
2,4-Dimethylphenol	5.0	U	20.4	9.27		ug/L		45	11 - 110	18	30
2,4-Dinitrophenol	20	U	20.4	8.61	J	ug/L		42	11 - 119	16	30
2,4-Dinitrotoluene	5.0	U	20.4	12.8		ug/L		63	46 - 119	20	30
2,6-Dinitrotoluene	5.0	U	20.4	12.7		ug/L		62	48 - 115	20	30
2-Chloronaphthalene	5.0	U	20.4	11.5		ug/L		56	34 - 110	15	30
2-Chlorophenol	5.0	U	20.4	11.4		ug/L		56	26 - 110	15	30
2-Methylnaphthalene	5.0	U	20.4	12.1		ug/L		59	35 - 110	11	30

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: 240-7932-2 MSD | **Client Sample ID: GW-17358-012412-DR-031**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 31864 | **Prep Batch: 31476**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Methylphenol	5.0	U	20.4	10.3		ug/L		50	26 - 110	21	30
2-Nitroaniline	20	U	20.4	11.7	J	ug/L		57	31 - 129	17	30
2-Nitrophenol	5.0	U	20.4	11.7		ug/L		57	30 - 110	14	30
3,3'-Dichlorobenzidine	1.0	U	20.4	7.51		ug/L		37	10 - 110	9	30
3-Nitroaniline	20	U	20.4	11.3	J	ug/L		56	23 - 112	14	30
4,6-Dinitro-2-methylphenol	20	U	20.4	11.3	J	ug/L		55	25 - 110	13	30
4-Bromophenyl phenyl ether	5.0	U	20.4	12.6		ug/L		62	42 - 113	15	30
4-Chloro-3-methylphenol	5.0	U	20.4	12.4		ug/L		61	33 - 110	15	30
4-Chloroaniline	10	U	20.4	9.78	J	ug/L		48	10 - 110	14	30
4-Chlorophenyl phenyl ether	5.0	U	20.4	11.9		ug/L		59	43 - 113	18	30
4-Nitroaniline	20	U	20.4	11.7	J	ug/L		57	26 - 115	18	30
4-Nitrophenol	20	U	20.4	13.2	J	ug/L		65	13 - 127	21	30
Acenaphthene	5.0	U	20.4	11.3		ug/L		55	36 - 110	16	30
Acenaphthylene	5.0	U	20.4	11.2		ug/L		55	39 - 110	17	30
Acetophenone	5.0	U	20.4	11.1		ug/L		55	50 - 130	14	30
Anthracene	5.0	U	20.4	11.6		ug/L		57	46 - 110	17	30
Atrazine	3.0	U	20.4	13.4		ug/L		66	50 - 130	21	30
Benzaldehyde	5.0	U	20.4	10.6		ug/L		52	10 - 130	15	30
Benzo[a]anthracene	1.0	U	20.4	11.2		ug/L		55	52 - 110	21	30
Benzo[a]pyrene	1.0	U	20.4	8.04		ug/L		39	33 - 110	30	30
Benzo[b]fluoranthene	1.0	U	20.4	10.9		ug/L		53	33 - 114	22	30
Benzo[g,h,i]perylene	1.0	U	20.4	9.10		ug/L		45	34 - 116	30	30
Benzo[k]fluoranthene	1.0	U	20.4	9.20		ug/L		45	32 - 121	29	30
Bis(2-chloroethoxy)methane	5.0	U	20.4	11.3		ug/L		56	35 - 110	17	30
Bis(2-chloroethyl)ether	1.0	U	20.4	11.6		ug/L		57	27 - 110	14	30
Bis(2-ethylhexyl) phthalate	5.0	U	20.4	8.33	F	ug/L		41	40 - 140	43	30
Butyl benzyl phthalate	5.0	U	20.4	11.6		ug/L		57	51 - 121	22	30
Caprolactam	10	U	20.4	11.7		ug/L		57	50 - 130	24	30
Carbazole	10	U	20.4	11.9		ug/L		59	49 - 114	19	30
Chrysene	1.0	U	20.4	11.1		ug/L		54	52 - 111	25	30
Dibenz(a,h)anthracene	2.0	U	20.4	9.41		ug/L		46	35 - 118	27	30
Dibenzofuran	4.0	U	20.4	11.4		ug/L		56	41 - 110	18	30
Diethyl phthalate	5.0	U	20.4	12.3		ug/L		61	33 - 130	19	30
Dimethyl phthalate	5.0	U	20.4	12.6		ug/L		62	36 - 124	15	30
Di-n-butyl phthalate	5.0	U	20.4	11.8		ug/L		58	50 - 117	22	30
Di-n-octyl phthalate	5.0	U	20.4	8.78		ug/L		43	36 - 124	27	30
Fluoranthene	1.0	U	20.4	12.1		ug/L		59	53 - 111	19	30
Fluorene	5.0	U	20.4	12.1		ug/L		59	43 - 110	15	30
Hexachlorobenzene	0.20	U	20.4	11.5		ug/L		56	40 - 113	15	30
Hexachlorobutadiene	1.0	U	20.4	11.7		ug/L		57	14 - 110	9	30
Hexachlorocyclopentadiene	5.0	U	20.4	3.51	J	ug/L		17	10 - 110	9	30
Hexachloroethane	5.0	U	20.4	10.1		ug/L		50	10 - 110	15	30
Indeno[1,2,3-cd]pyrene	2.0	U	20.4	8.78	F	ug/L		43	36 - 116	31	30
Isophorone	5.0	U	20.4	11.9		ug/L		58	34 - 125	14	30
Naphthalene	5.0	U	20.4	11.4		ug/L		56	32 - 110	13	30
Nitrobenzene	3.0	U	20.4	11.6		ug/L		57	26 - 118	13	30
N-Nitrosodi-n-propylamine	5.0	U	20.4	10.9		ug/L		53	25 - 119	18	30
N-Nitrosodiphenylamine	5.0	U	20.4	11.3		ug/L		55	28 - 118	17	30
Pentachlorophenol	5.0	U	20.4	8.73		ug/L		43	23 - 110	19	30
Phenol	5.0	U	20.4	11.3		ug/L		55	16 - 110	14	30

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: 240-7932-2 MSD — **Client Sample ID: GW-17358-012412-DR-031**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31864 — **Prep Batch: 31476**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenanthrene	2.0	U	20.4	12.2		ug/L		60	47 - 110	17	30
Pyrene	5.0	U	20.4	11.6		ug/L		57	54 - 115	19	30
3 & 4 Methylphenol	5.0	U	40.8	21.8		ug/L		53	25 - 110	19	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*53*		*28 - 110*
2-Fluorophenol (Surr)	*56*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*60*		*22 - 120*
Nitrobenzene-d5 (Surr)	*53*		*27 - 111*
Phenol-d5 (Surr)	*54*		*10 - 110*
Terphenyl-d14 (Surr)	*56*		*37 - 119*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-31529/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31605 — **Prep Batch: 31529**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		01/26/12 10:17	01/27/12 01:21	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		01/26/12 10:17	01/27/12 01:21	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		01/26/12 10:17	01/27/12 01:21	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		01/26/12 10:17	01/27/12 01:21	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		01/26/12 10:17	01/27/12 01:21	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		01/26/12 10:17	01/27/12 01:21	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		01/26/12 10:17	01/27/12 01:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*35 - 137*	*01/26/12 10:17*	*01/27/12 01:21*	*1*
DCB Decachlorobiphenyl	*99*		*10 - 140*	*01/26/12 10:17*	*01/27/12 01:21*	*1*

Lab Sample ID: LCS 240-31529/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31605 — **Prep Batch: 31529**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	10.0	8.43		ug/L		84	56 - 130
Aroclor-1260	10.0	10.1		ug/L		101	43 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*84*		*35 - 137*
DCB Decachlorobiphenyl	*101*		*10 - 140*

Lab Sample ID: 240-7932-2 MS — **Client Sample ID: GW-17358-012412-DR-031**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31605 — **Prep Batch: 31529**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	0.10	U	10.0	8.64		ug/L		86	58 - 126

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 240-7932-2 MS — **Client Sample ID: GW-17358-012412-DR-031**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31605 — **Prep Batch: 31529**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1260	0.10	U	10.0	9.13		ug/L		91	14 - 141

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*35 - 137*
DCB Decachlorobiphenyl	*81*		*10 - 140*

Lab Sample ID: 240-7932-2 MSD — **Client Sample ID: GW-17358-012412-DR-031**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31605 — **Prep Batch: 31529**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	0.10	U	10.5	9.12		ug/L		87	58 - 126	5	30
Aroclor-1260	0.10	U	10.5	9.90		ug/L		94	14 - 141	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*35 - 137*
DCB Decachlorobiphenyl	*82*		*10 - 140*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-31676/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 32003 — **Prep Batch: 31676**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	5000	U	5000	590	ug/L		01/27/12 09:03	01/30/12 13:12	1
Potassium	179	J	5000	72	ug/L		01/27/12 09:03	01/30/12 13:12	1
Calcium	228	J	5000	130	ug/L		01/27/12 09:03	01/30/12 13:12	1
Magnesium	59.2	J	5000	34	ug/L		01/27/12 09:03	01/30/12 13:12	1

Lab Sample ID: LCS 240-31676/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 32003 — **Prep Batch: 31676**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	50000	49000		ug/L		98	80 - 120
Potassium	50000	51900		ug/L		104	80 - 120
Calcium	50000	49200		ug/L		98	80 - 120
Magnesium	50000	49100		ug/L		98	80 - 120

Lab Sample ID: 240-7932-2 MS — **Client Sample ID: GW-17358-012412-DR-031**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 32003 — **Prep Batch: 31676**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	34000		50000	86500		ug/L		104	75 - 125
Potassium	1200	J B	50000	57300		ug/L		112	75 - 125
Calcium	85000	B	50000	134000		ug/L		99	75 - 125
Magnesium	16000	B	50000	68100		ug/L		104	75 - 125

Method: 6010B - Metals (ICP) (Continued)

Lab Sample ID: 240-7932-2 MSD
Matrix: Water
Analysis Batch: 32003

Client Sample ID: GW-17358-012412-DR-031
Prep Type: Total Recoverable
Prep Batch: 31676

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sodium	34000		50000	86000		ug/L		103	75 - 125	1	20
Potassium	1200	J B	50000	57000		ug/L		112	75 - 125	0	20
Calcium	85000	B	50000	134000		ug/L		98	75 - 125	0	20
Magnesium	16000	B	50000	67800		ug/L		104	75 - 125	1	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-31676/1-A
Matrix: Water
Analysis Batch: 31995

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 31676

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		01/27/12 09:03	01/30/12 15:02	1
Antimony	2.0	U	2.0	0.13	ug/L		01/27/12 09:03	01/30/12 15:02	1
Arsenic	5.0	U	5.0	0.40	ug/L		01/27/12 09:03	01/30/12 15:02	1
Barium	0.804	J	100	0.19	ug/L		01/27/12 09:03	01/30/12 15:02	1
Beryllium	1.0	U	1.0	0.20	ug/L		01/27/12 09:03	01/30/12 15:02	1
Cadmium	1.0	U	1.0	0.13	ug/L		01/27/12 09:03	01/30/12 15:02	1
Cobalt	20	U	20	0.058	ug/L		01/27/12 09:03	01/30/12 15:02	1
Chromium	10	U	10	0.71	ug/L		01/27/12 09:03	01/30/12 15:02	1
Copper	0.455	J	4.0	0.29	ug/L		01/27/12 09:03	01/30/12 15:02	1
Iron	200	U	200	26	ug/L		01/27/12 09:03	01/30/12 15:02	1
Manganese	50	U	50	0.83	ug/L		01/27/12 09:03	01/30/12 15:02	1
Nickel	20	U	20	0.20	ug/L		01/27/12 09:03	01/30/12 15:02	1
Lead	3.0	U	3.0	0.18	ug/L		01/27/12 09:03	01/30/12 15:02	1
Selenium	5.0	U	5.0	0.57	ug/L		01/27/12 09:03	01/30/12 15:02	1
Thallium	2.0	U	2.0	0.14	ug/L		01/27/12 09:03	01/30/12 15:02	1
Vanadium	4.0	U	4.0	0.44	ug/L		01/27/12 09:03	01/30/12 15:02	1
Zinc	9.07	J	50	2.3	ug/L		01/27/12 09:03	01/30/12 15:02	1
Silver	0.20	U	0.20	0.080	ug/L		01/27/12 09:03	01/30/12 15:02	1

Lab Sample ID: LCS 240-31676/3-A
Matrix: Water
Analysis Batch: 31995

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 31676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9870		ug/L		99	80 - 120
Antimony	100	99.1		ug/L		99	80 - 120
Arsenic	1000	1090		ug/L		109	80 - 120
Barium	1000	1060		ug/L		106	80 - 120
Beryllium	1000	1100		ug/L		110	80 - 120
Cadmium	1000	1100		ug/L		110	80 - 120
Cobalt	1000	1080		ug/L		108	80 - 120
Chromium	1000	1080		ug/L		108	80 - 120
Copper	1000	1140		ug/L		114	80 - 120
Iron	10000	10400		ug/L		104	80 - 120
Manganese	1000	1080		ug/L		108	80 - 120
Nickel	1000	1110		ug/L		111	80 - 120
Lead	1000	1170		ug/L		117	80 - 120
Selenium	1000	1100		ug/L		110	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-31676/3-A
Matrix: Water
Analysis Batch: 31995

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 31676

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	250	293		ug/L		117	80 - 120
Vanadium	1000	1060		ug/L		106	80 - 120
Zinc	1000	1160		ug/L		116	80 - 120
Silver	100	105		ug/L		105	80 - 120

Lab Sample ID: 240-7932-2 MS
Matrix: Water
Analysis Batch: 31995

Client Sample ID: GW-17358-012412-DR-031
Prep Type: Total Recoverable
Prep Batch: 31676

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	420		10000	10300		ug/L		99	63 - 128
Antimony	0.56	J	100	102		ug/L		101	44 - 153
Arsenic	1.1	J	1000	1080		ug/L		108	82 - 123
Barium	47	J B	1000	1140		ug/L		109	45 - 144
Beryllium	1.0	U	1000	1110		ug/L		111	77 - 124
Cadmium	1.0	U	1000	1100		ug/L		110	78 - 117
Cobalt	0.57	J	1000	1080		ug/L		108	67 - 114
Chromium	10	U	1000	1090		ug/L		109	72 - 110
Copper	1.1	J B	1000	1110		ug/L		111	60 - 123
Iron	450		10000	11000		ug/L		105	22 - 169
Manganese	59		1000	1150		ug/L		109	10 - 172
Nickel	2.6	J	1000	1100		ug/L		109	72 - 111
Lead	0.32	J	1000	1180	F	ug/L		118	73 - 115
Selenium	1.1	J	1000	1080		ug/L		107	72 - 148
Thallium	0.54	J	250	300	F	ug/L		120	69 - 117
Vanadium	1.3	J	1000	1090		ug/L		109	70 - 112
Zinc	3.8	J B	1000	1100		ug/L		110	49 - 156
Silver	0.20	U	100	104		ug/L		104	10 - 139

Lab Sample ID: 240-7932-2 MSD
Matrix: Water
Analysis Batch: 31995

Client Sample ID: GW-17358-012412-DR-031
Prep Type: Total Recoverable
Prep Batch: 31676

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	420		10000	10100		ug/L		97	63 - 128	2	20
Antimony	0.56	J	100	100		ug/L		100	44 - 153	1	20
Arsenic	1.1	J	1000	948		ug/L		95	82 - 123	13	20
Barium	47	J B	1000	1010		ug/L		96	45 - 144	12	20
Beryllium	1.0	U	1000	971		ug/L		97	77 - 124	14	20
Cadmium	1.0	U	1000	961		ug/L		96	78 - 117	13	20
Cobalt	0.57	J	1000	948		ug/L		95	67 - 114	13	20
Chromium	10	U	1000	961		ug/L		96	72 - 110	13	20
Copper	1.1	J B	1000	972		ug/L		97	60 - 123	13	20
Iron	450		10000	10800		ug/L		103	22 - 169	2	20
Manganese	59		1000	1020		ug/L		96	10 - 172	12	20
Nickel	2.6	J	1000	964		ug/L		96	72 - 111	13	20
Lead	0.32	J	1000	1040		ug/L		104	73 - 115	13	20
Selenium	1.1	J	1000	938		ug/L		94	72 - 148	14	20
Thallium	0.54	J	250	265		ug/L		106	69 - 117	13	20
Vanadium	1.3	J	1000	959		ug/L		96	70 - 112	13	20

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-7932-2 MSD — **Client Sample ID: GW-17358-012412-DR-031**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 31995 — **Prep Batch: 31676**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	3.8	J B	1000	960		ug/L		96	49 - 156	14	20
Silver	0.20	U	100	103		ug/L		103	10 - 139	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-31701/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 32181 — **Prep Batch: 31701**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		01/27/12 14:40	01/31/12 15:16	1

Lab Sample ID: LCS 240-31701/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 32181 — **Prep Batch: 31701**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.92	J	ug/L		98	81 - 123

Lab Sample ID: 240-7932-2 MS — **Client Sample ID: GW-17358-012412-DR-031**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 32181 — **Prep Batch: 31701**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	40	U	1.00	1.04	J	ug/L		104	69 - 134

Lab Sample ID: 240-7932-2 MSD — **Client Sample ID: GW-17358-012412-DR-031**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 32181 — **Prep Batch: 31701**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	40	U	1.00	1.05	J	ug/L		105	69 - 134	2	20

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-31204/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31204

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			01/24/12 11:12	1

Lab Sample ID: LCS 240-31204/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 31204

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.266		mg/L		107	80 - 118

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 240-7899-5 MS
Matrix: Water
Analysis Batch: 31204

Client Sample ID: GW-17358-012312-DR-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.010	U	0.250	0.254		mg/L		102	41 - 136

Lab Sample ID: 240-7899-5 MSD
Matrix: Water
Analysis Batch: 31204

Client Sample ID: GW-17358-012312-DR-026
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	0.010	U	0.250	0.255		mg/L		102	41 - 136	0	20

Lab Sample ID: MB 240-31344/3
Matrix: Water
Analysis Batch: 31344

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			01/25/12 09:55	1

Lab Sample ID: LCS 240-31344/4
Matrix: Water
Analysis Batch: 31344

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.250	0.248		mg/L		99	80 - 118

Lab Sample ID: 240-7932-2 MS
Matrix: Water
Analysis Batch: 31344

Client Sample ID: GW-17358-012412-DR-031
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cr (VI)	0.010	U H	0.250	0.248	H	mg/L		99	41 - 136

Lab Sample ID: 240-7932-2 MSD
Matrix: Water
Analysis Batch: 31344

Client Sample ID: GW-17358-012412-DR-031
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	0.010	U H	0.250	0.253	H	mg/L		101	41 - 136	2	20

Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(63-129)	(66-117)	(74-115)	(75-121)
240-7899-1	TB-17358-012312	94	96	96	102
240-7899-2	GW-17358-012312-DR-023	91	90	95	96
240-7899-3	GW-17358-012312-DR-024	91	94	95	95
240-7899-4	GW-17358-012312-DR-025	83	85	86	87
240-7899-5	GW-17358-012312-DR-026	86	88	88	89
240-7899-6	GW-17358-012312-DR-027	86	83	88	88
240-7899-7	GW-17358-012312-DR-028	84	82	85	89
240-7899-8	GW-17358-012312-DR-029	85	84	87	87
240-7932-1	GW-17358-012412-DR-030	96	93	96	100
240-7932-2	GW-17358-012412-DR-031	86	84	87	87
240-7932-2 MS	GW-17358-012412-DR-031	86	93	93	90
240-7932-2 MSD	GW-17358-012412-DR-031	85	94	92	93
240-7932-3	GW-17358-012412-DR-032	87	86	88	90
240-7932-4	GW-17358-012412-DR-033	94	91	91	93
240-7932-5	TB-17358-012412	97	92	97	100
LCS 240-31710/4	Lab Control Sample	88	98	95	96
MB 240-31710/5	Method Blank	93	93	95	99

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(28-110)	(10-110)	(22-120)	(27-111)	(10-110)	(37-119)
240-7899-2	GW-17358-012312-DR-023	65	59	77	59	66	64
240-7899-3	GW-17358-012312-DR-024	60	62	73	58	65	79
240-7899-4	GW-17358-012312-DR-025	61	63	75	60	64	68
240-7899-5	GW-17358-012312-DR-026	55	56	65	50	59	68
240-7899-6	GW-17358-012312-DR-027	61	62	71	62	63	77
240-7899-7	GW-17358-012312-DR-028	62	63	71	58	65	73
240-7899-8	GW-17358-012312-DR-029	58	63	69	59	63	78
240-7932-1	GW-17358-012412-DR-030	48	52	53	48	53	61
240-7932-2	GW-17358-012412-DR-031	57	56	60	53	57	69
240-7932-2 MS	GW-17358-012412-DR-031	66	67	73	63	67	74
240-7932-2 MSD	GW-17358-012412-DR-031	53	56	60	53	54	56
240-7932-3	GW-17358-012412-DR-032	63	65	73	61	65	76
240-7932-4	GW-17358-012412-DR-033	64	64	76	60	65	78
LCS 240-31476/2-A	Lab Control Sample	81	91	87	80	91	94
MB 240-31476/1-A	Method Blank	81	79	77	78	82	93

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)

PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
		TCX2	DCB2										
Lab Sample ID	Client Sample ID	(35-137)	(10-140)										
240-7899-5	GW-17358-012312-DR-026	77	73										
240-7899-6	GW-17358-012312-DR-027	80	77										
240-7899-7	GW-17358-012312-DR-028	80	79										
240-7899-8	GW-17358-012312-DR-029	81	71										
240-7932-1	GW-17358-012412-DR-030	75	65										
240-7932-2	GW-17358-012412-DR-031	82	76										
240-7932-2 MS	GW-17358-012412-DR-031	83	81										
240-7932-2 MSD	GW-17358-012412-DR-031	83	82										
240-7932-3	GW-17358-012412-DR-032	75	69										
240-7932-4	GW-17358-012412-DR-033	78	55										
LCS 240-31529/2-A	Lab Control Sample	84	101										
MB 240-31529/1-A	Method Blank	83	99										

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Client Sample ID: TB-17358-012312

Lab Sample ID: 240-7899-1

Date Collected: 01/23/12 00:00

Matrix: Water

Date Received: 01/24/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 14:19	LW	TAL NC

Client Sample ID: GW-17358-012312-DR-023

Lab Sample ID: 240-7899-2

Date Collected: 01/23/12 09:10

Matrix: Water

Date Received: 01/24/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 14:42	LW	TAL NC
Total/NA	Prep	3520C			31476	01/26/12 08:02	EM	TAL NC
Total/NA	Analysis	8270C		1	31864	01/30/12 16:55	JG	TAL NC
Total Recoverable	Prep	3005A			31676	01/27/12 09:03	AS	TAL NC
Total Recoverable	Analysis	6020		1	31995	01/30/12 15:51	BD	TAL NC
Total/NA	Prep	7470A			31701	01/27/12 14:40	AS	TAL NC
Total/NA	Analysis	7470A		1	32181	01/31/12 15:45	RT	TAL NC

Client Sample ID: GW-17358-012312-DR-024

Lab Sample ID: 240-7899-3

Date Collected: 01/23/12 09:35

Matrix: Water

Date Received: 01/24/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 15:04	LW	TAL NC
Total/NA	Prep	3520C			31476	01/26/12 08:02	EM	TAL NC
Total/NA	Analysis	8270C		1	31864	01/30/12 17:13	JG	TAL NC
Total Recoverable	Prep	3005A			31676	01/27/12 09:03	AS	TAL NC
Total Recoverable	Analysis	6020		1	31995	01/30/12 15:56	BD	TAL NC
Total/NA	Prep	7470A			31701	01/27/12 14:40	AS	TAL NC
Total/NA	Analysis	7470A		1	32181	01/31/12 15:47	RT	TAL NC

Client Sample ID: GW-17358-012312-DR-025

Lab Sample ID: 240-7899-4

Date Collected: 01/23/12 13:15

Matrix: Water

Date Received: 01/24/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 15:27	LW	TAL NC
Total/NA	Prep	3520C			31476	01/26/12 08:02	EM	TAL NC
Total/NA	Analysis	8270C		1	31864	01/30/12 17:31	JG	TAL NC
Total Recoverable	Prep	3005A			31676	01/27/12 09:03	AS	TAL NC
Total Recoverable	Analysis	6020		1	31995	01/30/12 16:02	BD	TAL NC
Total/NA	Prep	7470A			31701	01/27/12 14:40	AS	TAL NC
Total/NA	Analysis	7470A		1	32181	01/31/12 15:49	RT	TAL NC

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Client Sample ID: GW-17358-012312-DR-026

Lab Sample ID: 240-7899-5

Date Collected: 01/23/12 11:15

Matrix: Water

Date Received: 01/24/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 15:50	LW	TAL NC
Total/NA	Prep	3520C			31476	01/26/12 08:02	EM	TAL NC
Total/NA	Analysis	8270C		1	31864	01/30/12 15:43	JG	TAL NC
Total/NA	Prep	3510C			31529	01/26/12 10:17	SE	TAL NC
Total/NA	Analysis	8082		1	31605	01/26/12 21:00	LH	TAL NC
Total Recoverable	Prep	3005A			31676	01/27/12 09:03	AS	TAL NC
Total Recoverable	Analysis	6020		1	31995	01/30/12 16:07	BD	TAL NC
Total/NA	Prep	7470A			31701	01/27/12 14:40	AS	TAL NC
Total/NA	Analysis	7470A		1	32181	01/31/12 15:52	RT	TAL NC
Total/NA	Analysis	7196A		1	31204	01/24/12 11:13	BR	TAL NC
Total/NA	Analysis	7196A		1	32138	02/01/12 06:42	KC	TAL NC

Client Sample ID: GW-17358-012312-DR-027

Lab Sample ID: 240-7899-6

Date Collected: 01/23/12 14:20

Matrix: Water

Date Received: 01/24/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 16:12	LW	TAL NC
Total/NA	Prep	3520C			31476	01/26/12 08:02	EM	TAL NC
Total/NA	Analysis	8270C		1	31864	01/30/12 16:01	JG	TAL NC
Total/NA	Prep	3510C			31529	01/26/12 10:17	SE	TAL NC
Total/NA	Analysis	8082		1	31605	01/26/12 21:15	LH	TAL NC
Total Recoverable	Prep	3005A			31676	01/27/12 09:03	AS	TAL NC
Total Recoverable	Analysis	6020		1	31995	01/30/12 16:13	BD	TAL NC
Total/NA	Prep	7470A			31701	01/27/12 14:40	AS	TAL NC
Total/NA	Analysis	7470A		1	32181	01/31/12 15:58	RT	TAL NC

Client Sample ID: GW-17358-012312-DR-028

Lab Sample ID: 240-7899-7

Date Collected: 01/23/12 14:30

Matrix: Water

Date Received: 01/24/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 16:35	LW	TAL NC
Total/NA	Prep	3520C			31476	01/26/12 08:02	EM	TAL NC
Total/NA	Analysis	8270C		1	31864	01/30/12 16:19	JG	TAL NC
Total/NA	Prep	3510C			31529	01/26/12 10:17	SE	TAL NC
Total/NA	Analysis	8082		1	31605	01/26/12 21:29	LH	TAL NC
Total Recoverable	Prep	3005A			31676	01/27/12 09:03	AS	TAL NC
Total Recoverable	Analysis	6020		1	31995	01/30/12 16:18	BD	TAL NC
Total/NA	Prep	7470A			31701	01/27/12 14:40	AS	TAL NC
Total/NA	Analysis	7470A		1	32181	01/31/12 16:00	RT	TAL NC

Client Sample ID: GW-17358-012312-DR-029

Lab Sample ID: 240-7899-8

Date Collected: 01/23/12 14:40

Matrix: Water

Date Received: 01/24/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 16:57	LW	TAL NC
Total/NA	Prep	3520C			31476	01/26/12 08:02	EM	TAL NC
Total/NA	Analysis	8270C		1	31864	01/30/12 16:37	JG	TAL NC
Total/NA	Prep	3510C			31529	01/26/12 10:17	SE	TAL NC
Total/NA	Analysis	8082		1	31605	01/26/12 21:44	LH	TAL NC
Total Recoverable	Prep	3005A			31676	01/27/12 09:03	AS	TAL NC
Total Recoverable	Analysis	6020		1	31995	01/30/12 16:24	BD	TAL NC
Total/NA	Prep	7470A			31701	01/27/12 14:40	AS	TAL NC
Total/NA	Analysis	7470A		1	32181	01/31/12 16:02	RT	TAL NC

Client Sample ID: GW-17358-012412-DR-030

Lab Sample ID: 240-7932-1

Date Collected: 01/24/12 09:00

Matrix: Water

Date Received: 01/25/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 17:20	LW	TAL NC
Total/NA	Prep	3520C			31476	01/26/12 08:02	EM	TAL NC
Total/NA	Analysis	8270C		1	31864	01/30/12 14:48	JG	TAL NC
Total/NA	Prep	3510C			31529	01/26/12 10:17	SE	TAL NC
Total/NA	Analysis	8082		1	31605	01/26/12 21:58	LH	TAL NC
Total Recoverable	Prep	3005A			31676	01/27/12 09:03	AS	TAL NC
Total Recoverable	Analysis	6020		1	31995	01/30/12 16:29	BD	TAL NC
Total Recoverable	Analysis	6010B		1	32003	01/30/12 13:47	NJM	TAL NC
Total/NA	Prep	7470A			31701	01/27/12 14:40	AS	TAL NC
Total/NA	Analysis	7470A		1	32181	01/31/12 16:04	RT	TAL NC

Client Sample ID: GW-17358-012412-DR-031

Lab Sample ID: 240-7932-2

Date Collected: 01/24/12 09:35

Matrix: Water

Date Received: 01/25/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 17:42	LW	TAL NC
Total/NA	Prep	3520C			31476	01/26/12 08:02	EM	TAL NC
Total/NA	Analysis	8270C		1	31864	01/30/12 13:36	JG	TAL NC
Total/NA	Prep	3510C			31529	01/26/12 10:17	SE	TAL NC
Total/NA	Analysis	8082		1	31605	01/26/12 22:13	LH	TAL NC
Total Recoverable	Prep	3005A			31676	01/27/12 09:03	AS	TAL NC
Total Recoverable	Analysis	6020		1	31995	01/30/12 15:14	BD	TAL NC
Total Recoverable	Analysis	6010B		1	32003	01/30/12 13:23	NJM	TAL NC
Total/NA	Prep	7470A			31701	01/27/12 14:40	AS	TAL NC
Total/NA	Analysis	7470A		1	32181	01/31/12 15:20	RT	TAL NC
Total/NA	Analysis	7196A		1	31344	01/25/12 09:58	BR	TAL NC
Total/NA	Analysis	7196A		1	32138	02/01/12 06:42	KC	TAL NC

Client Sample ID: GW-17358-012412-DR-032

Lab Sample ID: 240-7932-3

Date Collected: 01/24/12 09:40

Matrix: Water

Date Received: 01/25/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 19:13	LW	TAL NC
Total/NA	Prep	3520C			31476	01/26/12 08:02	EM	TAL NC
Total/NA	Analysis	8270C		1	31864	01/30/12 15:06	JG	TAL NC
Total/NA	Prep	3510C			31529	01/26/12 10:17	SE	TAL NC
Total/NA	Analysis	8082		1	31605	01/26/12 22:56	LH	TAL NC
Total Recoverable	Prep	3005A			31676	01/27/12 09:03	AS	TAL NC
Total Recoverable	Analysis	6020		1	31995	01/30/12 16:46	BD	TAL NC
Total Recoverable	Analysis	6020		1	32155	01/31/12 09:37	BD	TAL NC
Total/NA	Prep	7470A			31701	01/27/12 14:40	AS	TAL NC
Total/NA	Analysis	7470A		1	32181	01/31/12 16:05	RT	TAL NC

Client Sample ID: GW-17358-012412-DR-033

Lab Sample ID: 240-7932-4

Date Collected: 01/24/12 10:15

Matrix: Water

Date Received: 01/25/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 19:35	LW	TAL NC
Total/NA	Prep	3520C			31476	01/26/12 08:02	EM	TAL NC
Total/NA	Analysis	8270C		1	31864	01/30/12 15:24	JG	TAL NC
Total/NA	Prep	3510C			31529	01/26/12 10:17	SE	TAL NC
Total/NA	Analysis	8082		1	31605	01/26/12 23:11	LH	TAL NC
Total Recoverable	Prep	3005A			31676	01/27/12 09:03	AS	TAL NC
Total Recoverable	Analysis	6020		1	31995	01/30/12 16:52	BD	TAL NC
Total Recoverable	Analysis	6020		1	32155	01/31/12 09:43	BD	TAL NC
Total/NA	Prep	7470A			31701	01/27/12 14:40	AS	TAL NC
Total/NA	Analysis	7470A		1	32181	01/31/12 16:08	RT	TAL NC

Client Sample ID: TB-17358-012412

Lab Sample ID: 240-7932-5

Date Collected: 01/24/12 00:00

Matrix: Water

Date Received: 01/25/12 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	31710	01/27/12 18:50	LW	TAL NC

Laboratory References:

TAL NC = TestAmerica North Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-7899-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica North Canton	ACLASS	DoD ELAP		ADE-1437
TestAmerica North Canton	California	NELAC	9	01144CA
TestAmerica North Canton	Connecticut	State Program	1	PH-0590
TestAmerica North Canton	Florida	NELAC	4	E87225
TestAmerica North Canton	Georgia	Georgia EPD	4	N/A
TestAmerica North Canton	Illinois	NELAC	5	200004
TestAmerica North Canton	Kansas	NELAC	7	E-10336
TestAmerica North Canton	Kentucky	State Program	4	58
TestAmerica North Canton	Minnesota	NELAC	5	039-999-348
TestAmerica North Canton	Nevada	State Program	9	OH-000482008A
TestAmerica North Canton	New Jersey	NELAC	2	OH001
TestAmerica North Canton	New York	NELAC	2	10975
TestAmerica North Canton	Ohio	OVAP	5	CL0024
TestAmerica North Canton	Pennsylvania	NELAC	3	68-00340
TestAmerica North Canton	USDA	USDA		P330-11-00328
TestAmerica North Canton	Virginia	NELAC Secondary AB	3	460175
TestAmerica North Canton	Washington	State Program	10	C971
TestAmerica North Canton	West Virginia	West Virginia DEP	3	210
TestAmerica North Canton	Wisconsin	State Program	5	999518190

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

CHAIN OF CUSTODY RECORD

COC NO. PL- 08079
PAGE 1 OF 1
(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES
14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170
Phone: (734) 453-5123 Fax: (734) 453-5201

Project No/ Phase/Task Code: 017358-T01-08Y12	Laboratory Name: Test America
Project Name: Willow Run Powertrain	Lab Contact: D. Heckler
Project Location: Ypsilanti, MI	Lab Location: North Canton, OH
Chemistry Contact: P. Wisemar	Lab Quote No:
Sampler(s): D. Rivers	SSOW ID: 11991-T01-008
	Cooler No: 3 coolers
	Carrier: FED EX
	Airbill No: 8694 4903 3373
	Date Shipped: 1-23-12

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	HCl	HNO_3	H_2SO_4	NaOH	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	TCL SVOCs	PCBs	Cr III or VI	Site Specific TAL Metals	MS/MSD Request
1	TB-17358-012312	1/23/12	—	WQ	G	2	1							1	X					
2	GW-17358-012312-DR-023		910	WG	G	2	3	1						6	X	X			X	
3	-024		935			2	3	1						6	X	X			X	
Page 123 of 130	-025		1315			2	3	1						6	X	X			X	
	-026		1115			5	3	1						8	X	X	X	X	X	
	-027		1420			4	3	1						8	X	X	X		X	
	-028		1430			4	3	1						8	X	X	X		X	
	-029		1490			4	3	1						8	X	X	X		X	
9																				
10																				
11																				
12																				
13																				
14																				
15																				

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers: 52

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. D. Rivers	CRA	17:00	1/23/12	1.	TAL	1-24-12	930
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

2/6/2012

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 7899
North Canton Facility

Client CRA Project Willow Run By: (Signature)
Cooler Received on 1-24-12 Opened on 1-24-12
(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# 110410-HNO_3; Sulfuric Acid Lot# 041911-H_2SO_4; Sodium Hydroxide Lot# 121809 -NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot#* 100108-$(CH_3COO)_2ZN$/NaOH. What time was preservative added to sample(s)?

Client ID	pH	Date	Initials
23	≤2	1-24-12	MS
24	≤2		
25	≤2		
26	≤2		
27	≤2		
28	≤2		
29	≤2		

TestAmerica Cooler Receipt Form/Narrative

North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant
241-2530	2.4	TR	ice
No #	1.5	1	1
No #	1.0		

Discrepancies Cont'd:

CHAIN OF CUSTODY RECORD

COC NO.: PL- 08235

PAGE ___ OF ___

(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES
14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170
Phone: (734) 453-5123 Fax: (734) 453-5201

Project No/ Phase/Task Code:	017358-T01-08Y12
Project Name:	Willow Run Powertrain
Project Location:	Ypsilanti, MI
Chemistry Contact:	P. Wiseman
Sampler(s):	D. Rivers
Laboratory Name:	TEST AMERICA
Lab Contact:	D. Heckler
Lab Location:	North Canton, OH
Lab Quote No:	
SSOW ID:	11991-T01-008
Cooler No:	3 coolers
Carrier:	FEDEX
Airbill No:	8694 4903 3340
Date Shipped:	1/24/12

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	TCL SVOCs	PCBs	TAL Metals	Silica Gel Tht	Cr III/Cr VI					MS/MSD Request	Comments/ Special Instructions:
1	GW-17358-012412-DR-030	1/24/12	900	WG	G	4	3	1						8	X	X	X	X								
2	-031		935		G	10	9	2						21	X	X	X	X		X					X	
3	-032		940		G	4	3	1						8	X	X	X		X							
4	-033		1015		G	4	3	1						8	X	X	X		X							
5	TB-17358-012412		—	WQ	—		1							1												
6																										
7																										
8																										
9																										
10																										
11																										
12																										
13																										
14																										
15																										

DC

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers: 46

All Samples in Cooler must be on COC

Notes/ Special Requirements:
END OF BATCH

	Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1.	David Rivers	CRA	1/24/12	1800	Mike Hanlon	TAL	1/25/12	9:30
2.								
3.								

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 7932
North Canton Facility

Client CRA Project _____ By: Mike Gantone
Cooler Received on 1/25/12 Opened on 1/25/12 (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# 110410-HNO_3; Sulfuric Acid Lot# 041911-H_2SO_4; Sodium Hydroxide Lot# 121809 -NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot#* 100108-$(CH_3COO)_2ZN$/NaOH. What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
30	<2	1/25/12	MH
31	<2 <2	↓	↓
32	<2		
33	<2	↓	↓

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 240-7899-1

Login Number: 7899

List Number: 1

Creator: Sutek, Nick

List Source: TestAmerica North Canton

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4/1.5/1.0
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 240-7899-1

Login Number: 7932

List Number: 1

Creator: Gambone, Mike

List Source: TestAmerica North Canton

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.2/0.2/1.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica North Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-8361-1
Client Project/Site: 17358-T01-08, RACER Willow Run

For:
Conestoga-Rovers & Associates, Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Mr. Paul Wiseman

Denise D Heckler

Authorized for release by:
2/16/2012 9:27:40 AM

Denise Heckler
Project Manager II
denise.heckler@testamericainc.com

LINKS

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Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Definitions/Glossary 4
Sample Summary 5
Detection Summary 6
Method Summary 7
Client Sample Results 8
QC Association Summary 11
QC Sample Results 12
Surrogate Summary 13
Lab Chronicle 14
Certification Summary 15
Chain of Custody 16
Receipt Checklists 19

Job ID: 240-8361-1

Laboratory: TestAmerica North Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 17358-T01-08, RACER Willow Run

Report Number: 240-8361-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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 application 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 02/08/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.5 C.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples GW-017358-020712-SK-036 (240-8361-1), GW-017358-020712-SK-037 (240-8361-2) and GW-017358-020712-SK-038 (240-8361-3) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared on 02/08/2012 and analyzed on 02/09/2012.

The closing continuing calibration verification (CCV) associated with these samples passed average. Since the samples were non-detect, no corrective action is required: GW-017358-020712-SK-036 (240-8361-1), GW-017358-020712-SK-037 (240-8361-2), GW-017358-020712-SK-038 (240-8361-3).

No difficulties were encountered during the PCBs analyses.

All quality control parameters were within the acceptance limits.

Definitions/Glossary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-8361-1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-8361-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-8361-1	GW-017358-020712-SK-036	Water	02/07/12 13:50	02/08/12 08:00
240-8361-2	GW-017358-020712-SK-037	Water	02/07/12 14:30	02/08/12 08:00
240-8361-3	GW-017358-020712-SK-038	Water	02/07/12 15:30	02/08/12 08:00

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-8361-1

Client Sample ID: GW-017358-020712-SK-036 — **Lab Sample ID: 240-8361-1**

No Detections

Client Sample ID: GW-017358-020712-SK-037 — **Lab Sample ID: 240-8361-2**

No Detections

Client Sample ID: GW-017358-020712-SK-038 — **Lab Sample ID: 240-8361-3**

No Detections

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-8361-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NC = TestAmerica North Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-8361-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-017358-020712-SK-036
Date Collected: 02/07/12 13:50
Date Received: 02/08/12 08:00

Lab Sample ID: 240-8361-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		02/08/12 12:41	02/09/12 09:39	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		02/08/12 12:41	02/09/12 09:39	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		02/08/12 12:41	02/09/12 09:39	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		02/08/12 12:41	02/09/12 09:39	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		02/08/12 12:41	02/09/12 09:39	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		02/08/12 12:41	02/09/12 09:39	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		02/08/12 12:41	02/09/12 09:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*35 - 137*	*02/08/12 12:41*	*02/09/12 09:39*	*1*
DCB Decachlorobiphenyl	*45*		*10 - 140*	*02/08/12 12:41*	*02/09/12 09:39*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-8361-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-017358-020712-SK-037
Date Collected: 02/07/12 14:30
Date Received: 02/08/12 08:00

Lab Sample ID: 240-8361-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		02/08/12 12:41	02/09/12 09:54	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		02/08/12 12:41	02/09/12 09:54	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		02/08/12 12:41	02/09/12 09:54	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		02/08/12 12:41	02/09/12 09:54	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		02/08/12 12:41	02/09/12 09:54	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		02/08/12 12:41	02/09/12 09:54	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		02/08/12 12:41	02/09/12 09:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*70*		*35 - 137*	*02/08/12 12:41*	*02/09/12 09:54*	*1*
DCB Decachlorobiphenyl	*65*		*10 - 140*	*02/08/12 12:41*	*02/09/12 09:54*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-8361-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-017358-020712-SK-038
Date Collected: 02/07/12 15:30
Date Received: 02/08/12 08:00

Lab Sample ID: 240-8361-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		02/08/12 12:41	02/09/12 10:08	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		02/08/12 12:41	02/09/12 10:08	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		02/08/12 12:41	02/09/12 10:08	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		02/08/12 12:41	02/09/12 10:08	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		02/08/12 12:41	02/09/12 10:08	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		02/08/12 12:41	02/09/12 10:08	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		02/08/12 12:41	02/09/12 10:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*35 - 137*	*02/08/12 12:41*	*02/09/12 10:08*	*1*
DCB Decachlorobiphenyl	*59*		*10 - 140*	*02/08/12 12:41*	*02/09/12 10:08*	*1*

QC Association Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-8361-1

GC Semi VOA

Prep Batch: 33187

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8361-1	GW-017358-020712-SK-036	Total/NA	Water	3510C	
240-8361-2	GW-017358-020712-SK-037	Total/NA	Water	3510C	
240-8361-3	GW-017358-020712-SK-038	Total/NA	Water	3510C	
LCS 240-33187/4-A	Lab Control Sample	Total/NA	Water	3510C	
MB 240-33187/5-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 33247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-8361-1	GW-017358-020712-SK-036	Total/NA	Water	8082	33187
240-8361-2	GW-017358-020712-SK-037	Total/NA	Water	8082	33187
240-8361-3	GW-017358-020712-SK-038	Total/NA	Water	8082	33187
LCS 240-33187/4-A	Lab Control Sample	Total/NA	Water	8082	33187
MB 240-33187/5-A	Method Blank	Total/NA	Water	8082	33187

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-33187/5-A
Matrix: Water
Analysis Batch: 33247

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33187

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		02/08/12 12:41	02/09/12 10:23	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		02/08/12 12:41	02/09/12 10:23	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		02/08/12 12:41	02/09/12 10:23	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		02/08/12 12:41	02/09/12 10:23	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		02/08/12 12:41	02/09/12 10:23	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		02/08/12 12:41	02/09/12 10:23	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		02/08/12 12:41	02/09/12 10:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*84*		*35 - 137*	*02/08/12 12:41*	*02/09/12 10:23*	*1*
DCB Decachlorobiphenyl	*100*		*10 - 140*	*02/08/12 12:41*	*02/09/12 10:23*	*1*

Lab Sample ID: LCS 240-33187/4-A
Matrix: Water
Analysis Batch: 33247

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33187

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			10.0	9.09		ug/L		91	56 - 130		
Aroclor-1260			10.0	11.3		ug/L		113	43 - 126		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*35 - 137*
DCB Decachlorobiphenyl	*109*		*10 - 140*

Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-8361-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		TCX2	DCB2								
Lab Sample ID	Client Sample ID	(35-137)	(10-140)								
240-8361-1	GW-017358-020712-SK-036	83	45								
240-8361-2	GW-017358-020712-SK-037	70	65								
240-8361-3	GW-017358-020712-SK-038	77	59								
LCS 240-33187/4-A	Lab Control Sample	83	109								
MB 240-33187/5-A	Method Blank	84	100								

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-8361-1

Client Sample ID: GW-017358-020712-SK-036

Lab Sample ID: 240-8361-1

Date Collected: 02/07/12 13:50

Matrix: Water

Date Received: 02/08/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			33187	02/08/12 12:41	BM	TAL NC
Total/NA	Analysis	8082		1	33247	02/09/12 09:39	LH	TAL NC

Client Sample ID: GW-017358-020712-SK-037

Lab Sample ID: 240-8361-2

Date Collected: 02/07/12 14:30

Matrix: Water

Date Received: 02/08/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			33187	02/08/12 12:41	BM	TAL NC
Total/NA	Analysis	8082		1	33247	02/09/12 09:54	LH	TAL NC

Client Sample ID: GW-017358-020712-SK-038

Lab Sample ID: 240-8361-3

Date Collected: 02/07/12 15:30

Matrix: Water

Date Received: 02/08/12 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			33187	02/08/12 12:41	BM	TAL NC
Total/NA	Analysis	8082		1	33247	02/09/12 10:08	LH	TAL NC

Laboratory References:

TAL NC = TestAmerica North Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-08, RACER Willow Run

TestAmerica Job ID: 240-8361-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica North Canton	ACLASS	DoD ELAP		ADE-1437
TestAmerica North Canton	California	NELAC	9	01144CA
TestAmerica North Canton	Connecticut	State Program	1	PH-0590
TestAmerica North Canton	Florida	NELAC	4	E87225
TestAmerica North Canton	Georgia	Georgia EPD	4	N/A
TestAmerica North Canton	Illinois	NELAC	5	200004
TestAmerica North Canton	Kansas	NELAC	7	E-10336
TestAmerica North Canton	Kentucky	State Program	4	58
TestAmerica North Canton	Minnesota	NELAC	5	039-999-348
TestAmerica North Canton	Nevada	State Program	9	OH-000482008A
TestAmerica North Canton	New Jersey	NELAC	2	OH001
TestAmerica North Canton	New York	NELAC	2	10975
TestAmerica North Canton	Ohio	OVAP	5	CL0024
TestAmerica North Canton	Pennsylvania	NELAC	3	68-00340
TestAmerica North Canton	USDA	USDA		P330-11-00328
TestAmerica North Canton	Virginia	NELAC Secondary AB	3	460175
TestAmerica North Canton	Washington	State Program	10	C971
TestAmerica North Canton	West Virginia	West Virginia DEP	3	210
TestAmerica North Canton	Wisconsin	State Program	5	999518190

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

CHAIN OF CUSTODY RECORD

COC NO.: PL- 08325

PAGE ___ OF ___

(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES
14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170
Phone: (734) 453-5123 Fax: (734) 453-5201

Project No/ Phase/Task Code:	017358-T01-08412
Project Name:	Willow Run Powertrain
Project Location:	Ypsalanti, M.I.
Chemistry Contact:	P. Wiseman
Sampler(s):	S. Kipper
Laboratory Name:	TEST America
Lab Contact:	D. Heckler
Lab Location:	North Canton, OH
Lab Quote No:	
SSOW ID:	11991-T01-008
Cooler No:	1 cooler
Carrier:	Fed-Ex
Airbill No:	8762 5745 7413
Date Shipped:	2-7-12

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Total PCB's									MS/MSD Request	Comments/ Special Instructions:
1	GW-017358-020712-SK-D36	02/07/12	13:50	WG										2	X										
2	-037	02/07/12	14:30	WG										2	X										
3	-038	02/07/12	15:30	WG										2	X										
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									
13																									
14																									
15																									

Page 16 of 19

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers: 6

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. R. Scott Kipper	CRA	02/07/12	18:15	1.	TEST	2-8-12	800
2.				2.			
3.				3.			

2/16/2012

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 63611
North Canton Facility

Client CKA Project _____ By: _____
Cooler Received on 2-8-12 Opened on 2-8-12 (Signature)
(FedEx) UPS DHL FAS Stetson Client Drop Off TestAmerica Courier Other _____
TestAmerica Cooler # 241.014 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 1.5 °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# 110410-HNO_3; Sulfuric Acid Lot# 041911-H_2SO_4; Sodium Hydroxide Lot# 121809 -NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot#* 100108-*$(CH_3COO)_2ZN$/NaOH.* What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant

Discrepancies Cont'd:

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 240-8361-1

Login Number: 8361

List Source: TestAmerica North Canton

List Number: 1

Creator: Sutek, Nick

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

CONESTOGA-ROVERS
& ASSOCIATES

14496 Sheldon Road, Suite #200
Plymouth, Michigan 48170
Telephone: (734) 453-5123 Fax: (734) 453-5201
www.CRAworld.com

MEMORANDUM

TO:	Beth Landale	REF. NO.:	017358-23
FROM:	Kathy Shaw/Rawa Fleisher/tl/103/Det	DATE:	January 3, 2013
RE:	Data Quality Assessment-Reduced Validation RFI Soil & Groundwater Investigation – January – April 2012 Willow Run Powertrain Site – Ypsilanti, Michigan	SSOW NO:	11991-T01-008

The following details a quality assessment and validation of the analytical data resulting from the April 2012, collection of 111 groundwater samples, 21 soil samples, and 21 quality control samples from the Willow Run Powertrain Site in Ypsilanti, 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) in accordance 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 Organic Data 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), semi-volatile organic compounds (SVOC), polychlorinated biphenyls (PCB) 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"; these concentrations should be qualified as estimated (J) values unless qualified otherwise in this memorandum.

Sample Preservation and Holding Times

Sample holding time periods and preservation requirements are presented in Table 2.

The sample summarized in Table 3 should be qualified due to the violation of sample holding time periods. The remaining samples were prepared and/or analyzed within the specified holding time periods.

Continuing Calibration - Organic Analyses

To ensure that each instrument was capable of producing acceptable quantitative data over the analysis period, continuing calibration standards must be analyzed every 12 hours. The following criteria are employed to evaluate the continuing calibration data:

i. GC/MS (all compounds) - must meet a minimum mean RRF of 0.05

ii. GC/MS (all compounds) - the percent difference between the mean initial calibration RRF and the continuing calibration RRF must not exceed 25 percent

iii. GC/MS (compounds determined by quadratic curve) - the percent drift between the true value and the continuing calibration value must not exceed 25 percent. GC (all compounds using average for multi-response compounds) - the percent difference between mean initial calibration factor and the continuing calibration factor must not exceed 15 percent

iv. GC (compounds determined by linear regression) - the percent drift between the true value and the continuing calibration value must not exceed 15 percent

Calibration standards were analyzed at the required frequency and the results met the above criteria for instrument sensitivity and linearity of response and sensitivity with the exception of the qualified samples presented in the laboratory case narrative and qualified in Table 4.

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 5 should be qualified due to laboratory contamination. The laboratory flagged these concentrations with a "B" 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 that could be evaluated with the exception of the qualified samples presented in Table 6.

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 or the laboratory and the NFG.

The MS/MSD percent recoveries and associated RPD acceptance criteria with the exception of the qualified samples present in Table 7.

Laboratory Control Sample Analyses

The laboratory control sample (LCS) analyses serves as a monitor of the overall performance in all steps of the sample analysis and is analyzed with each sample batch. The LCS percent recoveries were evaluated against method and laboratory established control limits.

The LCS 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 8.

Field Quality Assurance/Quality Control

The field quality assurance/quality control consisted of one (1) equipment blank sample, seven (7) field duplicate sample sets and 13 trip blank samples.

Field Blank Samples

To assess the efficiency of field decontamination procedures and cleanliness of sample containers, the equipment sample identified in Table 1 was collected and analyzed.

The equipment blank sample was reported with parameters detected, there were no associated samples effected since the equipment blank was collected after all of the samples had been collected.

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. 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.

Table 9 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 remainder of the sampling event.

Field Quality Assurance/Quality Control (Cont'd)

Trip Blank Samples

To monitor potential cross-contamination of VOC during 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 10. No additional target analytes were reported as detected in the trip blank samples.

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 with the exception of the following:

- SVOC data were rejected in a number of samples due to MS/MSD violations

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

						Parameters					
Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*QC Samples*	*TCL VOC*	*TCL SVOC*	*PCB*	*Select Metals*	*Cr III, Cr VI*	*Amenable Cyanide*
SO-17358-011712-DR-001	CRA-829M	Soil	1/17/2012	10:10:00 AM		X	X	X	X		
SO-17358-011712-DR-002	CRA-829M	Soil	1/17/2012	10:20:00 AM		X	X	X	X		
SO-17358-011712-DR-003	CRA-828M	Soil	1/17/2012	10:40:00 AM		X	X	X	X		
SO-17358-011712-DR-004	CRA-828M	Soil	1/17/2012	10:45:00 AM		X	X	X	X		
SO-17358-011712-DR-005	CRA-709M	Soil	1/17/2012	1:55:00 PM		X	X	X	X		
SO-17358-011712-DR-006	CRA-709M	Soil	1/17/2012	2:00:00 PM		X	X	X	X		
SO-17358-011812-DR-007	CRA-710M	Soil	1/18/2012	8:45:00 AM		X	X	X	X		
SO-17358-011812-DR-008	CRA-710M	Soil	1/18/2012	8:50:00 AM		X	X	X	X		
SO-17358-011812-DR-009	CRA-705M	Soil	1/18/2012	10:05:00 AM		X	X	X	X		
SO-17358-011812-DR-010	CRA-705M	Soil	1/18/2012	10:10:00 AM	Duplicate (009)	X	X	X	X		
SO-17358-011812-DR-011	CRA-705M	Soil	1/18/2012	10:15:00 AM		X	X	X	X		
SO-17358-011812-DR-012	CRA-706M	Soil	1/18/2012	11:20:00 AM	MS/MSD	X	X	X	X		
SO-17358-011812-DR-013	CRA-708-SB	Soil	1/18/2012	1:20:00 PM		X	X	X	X		
SO-17358-011812-DR-014	CRA-708-SB	Soil	1/18/2012	1:25:00 PM		X	X	X	X		
SO-17358-011812-DR-015	CRA-707-SB	Soil	1/18/2012	1:30:00 PM		X	X	X	X		
SO-17358-011812-DR-016	CRA-707-SB	Soil	1/18/2012	1:35:00 PM		X	X	X	X		
SO-17358-011812-DR-017	CRA-834M	Soil	1/18/2012	2:05:00 PM		X	X	X	X		
SO-17358-011812-DR-018	CRA-834M	Soil	1/18/2012	2:10:00 PM		X	X	X	X		
SO-17358-011912-DR-019	CRA-835-SB	Soil	1/19/2012	8:30:00 AM	MS/MSD-P	X	X	X	X		
SO-17358-011912-DR-020	CRA-835-SB	Soil	1/19/2012	8:35:00 AM		X	X	X	X		
SO-17358-011912-DR-021	CRA-833M	Soil	1/19/2012	8:55:00 AM		X	X	X	X		
SO-17358-011912-DR-022	CRA-833M	Soil	1/19/2012	9:00:00 AM		X	X	X	X		
TB-17358-011712	Trip Blank	Soil	1/17/2012	--	Trip Blank	X					

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

						Parameters					
Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*QC Samples*	*TCL VOC*	*TCL SVOC*	*PCB*	*Select Metals*	*Cr III, Cr VI*	*Amenable Cyanide*
GW-17358-012312-DR-023	CRA-828M	Water	1/23/2012	9:10:00 AM		X	X		X		
GW-17358-012312-DR-024	CRA-829M	Water	1/23/2012	9:35:00 AM		X	X		X		
GW-17358-012312-DR-025	CRA-710M	Water	1/23/2012	1:15:00 PM		X	X		X		
GW-17358-012312-DR-026	CRA-709M	Water	1/23/2012	11:15:00 AM	MS/MSD-P	X	X	X	X	X	
GW-17358-012312-DR-027	CRA-264M	Water	1/23/2012	2:20:00 PM		X	X	X	X		
GW-17358-012312-DR-028	CRA-264M	Water	1/23/2012	2:30:00 PM		X	X	X	X		
GW-17358-012312-DR-029	CRA-266M	Water	1/23/2012	2:40:00 PM		X	X	X	X		
TB-17358-012312	Trip Blank	Water	1/23/2012	--	Trip Blank	X					
GW-17358-012412-DR-030	CRA-706M	Water	1/24/2012	9:00:00 AM		X	X	X	X		
GW-17358-012412-DR-031	CRA-705M	Water	1/24/2012	9:35:00 AM	MS/MSD	X	X	X	X	X	
GW-17358-012412-DR-032	CRA-833M	Water	1/24/2012	9:40:00 AM		X	X	X	X		
GW-17358-012412-DR-033	CRA-834M	Water	1/24/2012	10:15:00 AM		X	X	X	X		
TB-17358-012412	Trip Blank	Water	1/24/2012	--	Trip Blank	X					
GW-017358-020712-SK-036	CRA-828M	Water	2/7/2012	1:50:00 PM				X			
GW-017358-020712-SK-037	CRA-829M	Water	2/7/2012	2:30:00 PM				X			
GW-017358-020712-SK-038	CRA-710M	Water	2/7/2012	3:30:00 PM				X			
GW-17358-041212-DR-1000	CRA-710M	Water	4/12/2012	8:40 AM					X		
GW-17358-041212-DR-1001	CRA-756M	Water	4/12/2012	9:55 AM		X	X	X	X		
GW-17358-041212-DR-1002	CRA-806M	Water	4/12/2012	10:30 AM		X	X	X	X		
GW-17358-041212-DR-1003	CRA-757M	Water	4/12/2012	11:15 AM		X	X	X	X	X	
GW-17358-041212-DR-1004	CRA-757M	Water	4/12/2012	11:45 AM	Duplicate (1003)	X	X	X	X	X	
GW-17358-041212-CB-1005	CRA-804M	Water	4/12/2012	2:20 PM		X	X	X	X	X	
GW-17358-041212-CB-1007	CRA-094M	Water	4/12/2012	2:25 PM		X	X	X	X		
GW-17358-041212-CB-1006	CRA-804I	Water	4/12/2012	2:30 PM		X	X	X	X		
GW-17358-041212-CB-1008	CRA-110M	Water	4/12/2012	3:30 PM		X	X	X	X		
TB-17358-041212	--	Water	4/12/2012	--	Trip Blank	X					

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

						Parameters					
Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*QC Samples*	*TCL VOC*	*TCL SVOC*	*PCB*	*Select Metals*	*Cr III, Cr VI*	*Amenable Cyanide*
GW-17358-041312-CB-1012	CRA-315M	Water	4/13/2012	9:00 AM		X	X	X	X		
GW-17358-041312-DR-1009	CRA-307M	Water	4/13/2012	9:15 AM		X	X	X	X		
GW-17358-041312-CB-1013	CRA-113M	Water	4/13/2012	9:30 AM		X	X	X	X		
GW-17358-041312-DR-1010	CRA-103M	Water	4/13/2012	10:35 AM		X	X	X	X		
GW-17358-041312-CB-1015	CRA-314M	Water	4/13/2012	10:55 AM		X	X	X	X		
GW-17358-041312-DR-1011	CRA-109M	Water	4/13/2012	1:25 PM		X	X	X	X		
GW-17358-041312-CB-1014	CRA-238M	Water	4/13/2012	1:35 PM		X	X	X	X		
TB-17358-041312	--	Water	4/13/2012	--	Trip Blank	X					
GW-17358-041612-CB-1016	CRA-805M	Water	4/16/2012	9:05 AM		X	X	X	X		
GW-17358-041612-DR-1020	CRA-071M	Water	4/16/2012	9:20 AM		X	X	X	X		
GW-17358-041612-DR-1021	CRA-072M	Water	4/16/2012	9:25 AM		X	X	X	X		
GW-17358-041612-CB-1017	CRA-311M	Water	4/16/2012	9:45 AM		X	X	X	X		
GW-17358-041612-JY-1024	CRA-790M	Water	4/16/2012	9:45 AM		X	X	X	X		
GW-17358-041612-DR-1022	CRA-073M	Water	4/16/2012	10:45 AM		X	X	X	X		
GW-17358-041612-DR-1023	CRA-074M	Water	4/16/2012	11:00 AM		X	X	X	X		
GW-17358-041612-CB-1018	CRA-803M	Water	4/16/2012	11:05 AM		X	X	X	X		
GW-17358-041612-JY-1025	CRA-792M	Water	4/16/2012	11:10 AM		X	X	X	X		
GW-17358-041612-JY-1026	CRA-795M	Water	4/16/2012	1:40 PM		X	X	X	X		
GW-17358-041612-DR-1027	CRA-800M	Water	4/16/2012	2:10 PM		X	X	X	X		
GW-17358-041612-CB-1019	CRA-124M	Water	4/16/2012	2:10 PM		X	X	X	X	X	
GW-17358-041612-DR-1028	CRA-799M	Water	4/16/2012	2:20 PM		X	X	X	X		
GW-17358-041612-DR-1030	CRA-801M	Water	4/16/2012	3:00 PM		X	X	X	X	X	
GW-17358-041612-JY-1029	CRA-798M	Water	4/16/2012	3:25 PM		X	X	X	X	X	
TB-17358-041612	--	Water	4/16/2012	--	Trip Blank	X					

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

						Parameters					
Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*QC Samples*	*TCL VOC*	*TCL SVOC*	*PCB*	*Select Metals*	*Cr III, Cr VI*	*Amenable Cyanide*
GW-17358-041712-DR-1041	CRA-739I	Water	4/17/2012	9:00 AM		X	X	X	X		
GW-17358-041712-JY-1031	CRA-750M	Water	4/17/2012	9:10 AM		X	X	X	X		X
GW-17358-041712-JY-1032	CRA-750M	Water	4/17/2012	9:15 AM	Duplicate (1031)	X	X	X	X		X
GW-17358-041712-CB-1037	CRA-133M	Water	4/17/2012	9:25 AM		X	X	X	X		
GW-17358-041712-JY-1033	CRA-751M	Water	4/17/2012	9:55 AM		X	X	X	X		X
GW-17358-041712-DR-1042	CRA-787I	Water	4/17/2012	10:15 AM		X	X	X	X		
GW-17358-041712-DR-1045	CRA-320M	Water	4/17/2012	10:20 AM		X	X	X	X		
GW-17358-041712-DR-1043	CRA-731I	Water	4/17/2012	11:25 AM		X	X	X	X		
GW-17358-041712-JY-1036	CRA-267M	Water	4/17/2012	11:30 AM		X	X	X	X		
GW-17358-041712-CB-1038	CRA-827ML	Water	4/17/2012	11:35 AM		X	X	X	X		
GW-17358-041712-JY-1034	CRA-752M	Water	4/17/2012	11:50 AM		X	X	X	X		
GW-17358-041712-DR-1046	CRA-209M	Water	4/17/2012	12:00 PM		X	X	X	X		
GW-17358-041712-CB-1039	CRA-610M	Water	4/17/2012	1:50 PM		X	X	X	X		
GW-17358-041712-DR-1044	CRA-737M	Water	4/17/2012	2:05 PM		X	X	X	X	X	
GW-17358-041712-JY-1035	CRA-753M	Water	4/17/2012	2:55 PM		X	X	X	X		X
GW-17358-041712-CB-1040	CRA-837ML	Water	4/17/2012	3:05 PM		X	X	X	X		
GW-17358-041712-DR-1048	CRA-717I	Water	4/17/2012	3:10 PM		X	X	X	X	X	
GW-17358-041712-DR-1047	CRA-342M	Water	4/17/2012	3:15 PM		X	X	X	X		
TB-17358-041712	--	Water	4/17/2012	--	Trip Blank	X					
GW-17358-041812-DR-1050	CRA-732I	Water	4/18/2012	9:05 AM		X	X	X	X		
GW-17358-041812-CB-1054	CRA-808M	Water	4/18/2012	9:05 AM		X	X	X	X		
GW-17358-041812-EM-1049	CRA-826ML	Water	4/18/2012	9:30 AM		X	X	X	X		
GW-17358-041812-DR-1051	CRA-732I	Water	4/18/2012	9:35 AM	Duplicate (1050)	X	X	X	X		
GW-17358-041812-CB-1053	CRA-791M	Water	4/18/2012	10:20 AM		X	X	X	X		
GW-17358-041812-DR-1052	CRA-529M	Water	4/18/2012	10:45 AM		X	X	X	X		
GW-17358-041812-CB-1055	CRA-807M	Water	4/18/2012	11:20 AM		X	X	X	X	X	
GW-17358-041812-EM-1056	CRA-325M	Water	4/18/2012	12:15 PM		X	X	X	X		
TB-17358-041812	--	Water	4/18/2012	--	Trip Blank	X					

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*QC Samples*	*Parameters*					
						TCL VOC	*TCL SVOC*	*PCB*	*Select Metals*	*Cr III, Cr VI*	*Amenable Cyanide*
GW-17358-041912-DR-1057	CRA-712I	Water	4/19/2012	8:55 AM		X	X	X	X		
GW-17358-041912-JY-1061	CRA-744M	Water	4/19/2012	9:05 AM		X	X	X	X		X
GW-17358-041912-JY-1062	CRA-749M	Water	4/19/2012	9:15 AM		X	X	X	X		X
GW-17358-041912-DR-1058	CRA-618M	Water	4/19/2012	10:10 AM		X	X	X	X		
GW-17358-041912-DR-1059	CRA-263M	Water	4/19/2012	11:15 AM		X	X	X	X		
GW-17358-041912-JY-1064	CRA-743M	Water	4/19/2012	11:45 AM		X	X	X	X	X	
GW-17358-041912-JY-1063	CRA-745M	Water	4/19/2012	12:00 PM		X	X	X	X	X	X
GW-17358-041912-JY-1065	CRA-784I	Water	4/19/2012	2:00 PM		X	X	X	X		
GW-17358-041912-DR-1060	CRA-711I	Water	4/19/2012	2:05 PM		X	X	X	X		
GW-17358-041912-DR-1066	CRA-609M	Water	4/19/2012	3:15 PM		X	X	X	X		
TB-17358-041912	--	Water	4/19/2012	--	Trip Blank	X					
GW-17358-042012-DR-1071	CRA-137M	Water	4/20/2012	8:45 AM		X	X	X	X		
GW-17358-042012-CB-1077	CRA-729I	Water	4/20/2012	8:50 AM		X	X	X	X		
GW-17358-042012-JY-1067	CRA-703M	Water	4/20/2012	9:10 AM		X	X	X	X		
GW-17358-042012-JY-1068	CRA-703M	Water	4/20/2012	9:15 AM	Duplicate (1067)	X	X	X	X		
GW-17358-042012-CB-1074	CRA-740M	Water	4/20/2012	9:20 AM		X	X	X	X		
GW-17358-042012-JY-1069	CRA-703I	Water	4/20/2012	9:30 AM		X	X	X	X		
GW-17358-042012-DR-1072	CRA-060M	Water	4/20/2012	9:55 AM		X	X	X	X		
GW-17358-042012-CB-1075	CRA-740I	Water	4/20/2012	10:40 AM		X	X	X	X		
GW-17358-042012-JY-1070	CRA-701M	Water	4/20/2012	11:30 AM		X	X	X	X	X	
GW-17358-042012-CB-1078	CRA-740M	Water	4/20/2012	11:35 AM		X	X	X	X	X	
GW-17358-042012-DR-1073	CRA-755M	Water	4/20/2012	11:45 AM		X	X	X	X	X	
GW-17358-042012-CB-1076	CRA-729M	Water	4/20/2012	12:05 PM		X	X	X	X		
GW-17358-042012-CB-1079	CRA-741I	Water	4/20/2012	12:15 PM		X	X	X	X	X	
TB-17358-042012	--	Water	4/20/2012	--	Trip Blank	X					

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

						Parameters					
Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*QC Samples*	*TCL VOC*	*TCL SVOC*	*PCB*	*Select Metals*	*Cr III, Cr VI*	*Amenable Cyanide*
GW-17358-042312-CB-1079	CRA-785I	Water	4/23/2012	9:40 AM		X	X	X	X		
GW-17358-042312-DR-1081	CRA-742I	Water	4/23/2012	9:45 AM		X	X	X	X		X
GW-17358-042312-DR-1083	CRA-742D	Water	4/23/2012	9:50 AM		X	X	X	X		
GW-17358-042312-DR-1082	CRA-742I	Water	4/23/2012	10:15 AM	Duplicate (1081)	X	X	X	X		X
GW-17358-042312-CB-1080	CRA-785D	Water	4/23/2012	10:25 AM		X	X	X	X		
GW-17358-042312-CB-1085	CRA-724I	Water	4/23/2012	2:30 PM		X	X	X	X	X	
GW-17358-042312-DR-1084	CRA-605M	Water	4/23/2012	2:55 PM		X	X	X	X	X	X
TB-17358-042312	--	Water	4/23/2012	--	Trip Blank	X					
GW-17358-042412-DR-1086	CRA-606M	Water	4/24/2012	8:25 AM		X	X	X	X		
GW-17358-042412-DR-1087	CRA-721M	Water	4/24/2012	9:30 AM		X	X	X	X		
GW-17358-042412-DR-1088	CRA-725I	Water	4/24/2012	10:30 AM		X	X	X	X		
GW-17358-042412-DR-1089	CRA-725I	Water	4/24/2012	11:00 AM	Duplicate (1088)	X	X	X	X		
GW-17358-042412-DR-1090	CRA-725M	Water	4/24/2012	12:45 PM		X	X	X	X	X	
GW-17358-042412-DR-1091	CRA-722M	Water	4/24/2012	1:20 PM		X	X	X	X	X	
GW-17358-042412-DR-1092	CRA-720I	Water	4/24/2012	2:00 PM		X	X	X	X	X	
TB-17358-042412	--	Water	4/24/2012	--	Trip Blank	X					
GW-17358-042512-DR-1093	CRA-736I	Water	4/25/2012	8:50 AM		X	X	X	X		
GW-17358-042512-CB-1099	CRA-726I	Water	4/25/2012	9:10 AM		X	X	X	X		
GW-17358-042512-JY-1096	CRA-704M	Water	4/25/2012	9:25 AM		X	X	X	X		
GW-17358-042512-DR-1094	CRA-735I	Water	4/25/2012	9:50 AM		X	X	X	X		
GW-17358-042512-JY-1097	CRA-704D	Water	4/25/2012	9:50 AM		X	X	X	X		
GW-17358-042512-CB-1100	CRA-726D	Water	4/25/2012	10:05 AM		X	X	X	X		
GW-17358-042512-DR-1095	CRA-713M	Water	4/25/2012	11:10 AM		X	X	X	X	X	
GW-17358-042512-CB-1101	CRA-726M	Water	4/25/2012	11:15 AM		X	X	X	X	X	
GW-17358-042512-JY-1098	CRA-704I	Water	4/25/2012	11:35 AM		X	X	X	X		
EB-17358-042512-CB-1102	--	Water	4/25/2012	12:15 PM	Equipment Blank	X	X	X	X		
TB-17358-042512	--	Water	4/25/2012	--	Trip Blank	X					

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*QC Samples*	*Parameters*					
						TCL VOC	*TCL SVOC*	*PCB*	*Select Metals*	*Cr III, Cr VI*	*Amenable Cyanide*

Notes:

MS/MSD - Matrix Spike / Matrix Spike Duplicate
MS/MSD-P - Matrix Spike / Matrix Spike Duplicate - Partial Parameters
PCB - Polychlorinated biphenyls
QC - Quality Control
SVOC - Semivolatile Organic Compounds
TAL - Target Analyte List
TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 2

SUMMARY OF ANALYTICAL METHODS, HOLDING TIME PERIODS, AND PRESERVATIVES
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, 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
TCL VOC	SW-846 8260B	Soil	- 48 hours from sample collection to preservation - 14 days from sample preservation to completion of analysis	Iced, 4 ± 2° C
TCL SVOC	SW-846 8270C	Water	- 7 days from sample collection to extraction - 40 days from extraction to completion of analysis	Iced, 4 ± 2° C
TCL SVOC	SW-846 8270C	Soil	- 14 days from sample collection to extraction - 40 days from extraction to completion of analysis	Iced, 4 ± 2° C
PCB	SW-846 8082	Water	- 7 days from sample collection to extraction - 40 days from extraction to completion of analysis	Iced, 4 ± 2° C
PCB	SW-846 8082	Soil	- 14 days from sample collection to extraction - 40 days from extraction to completion of analysis	Iced, 4 ± 2° C
Select Metals		Water / Soiils	- 180 days from sample collection to completion of analysis	pH < 2 and Iced, 4 ± 2° C
Aluminum	SW-846 6020			
Antimony	SW-846 6020			
Arsenic	SW-846 6020			
Barium	SW-846 6020			
Beryllium	SW-846 6020			
Cadmium	SW-846 6020			
Calcium	SW-846 6010B			
Chromium	SW-846 6020			
Cobalt	SW-846 6020			
Copper	SW-846 6020			
Iron	SW-846 6020			
Lead	SW-846 6020			
Manganese	SW-846 6020			
Magnesium	SW-846 6010B			
Nickel	SW-846 6020			
Potassium	SW-846 6010B			
Selenium	SW-846 6020			
Silver	SW-846 6020			

TABLE 2

SUMMARY OF ANALYTICAL METHODS, HOLDING TIME PERIODS, AND PRESERVATIVES
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Method* [1]	*Matrix*	*Holding Time*	*Preservation*
Select Metals				
Sodium	SW-846 6010B			
Thallium	SW-846 6020			
Vanadium	SW-846 6020			
Zinc	SW-846 6020			
Mercury	SW-846 7470A/7471A	Water/Soil	- 28 days from sample collection to completion of analysis	pH < 2 and Iced, 4 ± 2° C
General Chemistry				
Cyanide (Amenable)	SW-846 9012	Water	- 14 days from sample collection to analysis	Iced, 4 ± 2° C
Cyanide (Amenable)	SW-846 9012	Soil	- 14 days from sample collection to analysis	Iced, 4 ± 2° C
Hexavalent Chromium	SW-846 7196	Water	- 24 hours from sample collection to completion of analysis.	Iced, 4 ± 2° C
	SW-846 3060 / 7196	Soil	- 30 days from sample collection to extraction - 7 days from extraction to completion of analysis	Iced, 4 ± 2° C
Trivalent Chromium	SW-846 7196	Water	- 24 hours from sample collection to completion of analysis.	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

SUMMARY OF QUALIFIED SAMPLE RESULTS DUE TO VIOLATION OF HOLDING TIME PERIOD
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Holding Time*	*Holding Time Criteria*	*Sample ID*	*Qualified Result*	*Units*
General Chemistry	Chromium VI (hexavalent)	26 Hours	24 Hours	GW-17358-042512-CB-1101	0.010 UJ	mg/L
General Chemistry	Chromium VI (hexavalent)	24.5 Hours	24 Hours	GW-17358-012412-DR-031	0.010 UJ	mg/L

Notes:

UJ - Non-detect with an Estimated Report Limit

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO VIOLATION OF CONTINUING CALIBRATION REQUIREMENTS
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Calibration Date*	*% Recovery or %D*	*Associated Sample ID*	*Qualified Result*	*Units*
PCB	PCB-1260	4/17/2012	19.3	GW-17358-041212-CB-1005	0.095 UJ	µg/L
				GW-17358-041212-CB-1006	0.10 UJ	µg/L
				GW-17358-041212-CB-1007	0.099 UJ	µg/L
				GW-17358-041212-CB-1008	0.10 UJ	µg/L
				GW-17358-041212-DR-1001	0.10 UJ	µg/L
				GW-17358-041212-DR-1002	0.10 UJ	µg/L
				GW-17358-041212-DR-1003	0.099 UJ	µg/L
				GW-17358-041212-DR-1004	0.10 UJ	µg/L
PCB	PCB-1260	4/24/2012	16.2	GW-17358-041912-DR-1057	0.10 UJ	µg/L
				GW-17358-041912-JY-1061	0.098 UJ	µg/L
				GW-17358-041912-JY-1062	0.095 UJ	µg/L
				GW-17358-041912-DR-1058	0.098 UJ	µg/L
				GW-17358-041912-DR-1059	0.10 UJ	µg/L
				GW-17358-041912-JY-1064	0.097 UJ	µg/L
				GW-17358-041912-JY-1063	0.095 UJ	µg/L
				GW-17358-041912-JY-1065	0.099 UJ	µg/L
				GW-17358-041912-DR-1060	0.098 UJ	µg/L
				GW-17358-041912-DR-1066	0.10 UJ	µg/L
PCB	PCB-1260	4/24/2012	16.9	GW-17358-042012-CB-1077	0.11 UJ	µg/L
				GW-17358-042012-CB-1074	0.097 UJ	µg/L
				GW-17358-042012-CB-1075	0.095 UJ	µg/L
				GW-17358-042012-CB-1078	0.095 UJ	µg/L
				GW-17358-042012-DR-1073	0.098 UJ	µg/L
				GW-17358-042012-CB-1076	0.11 UJ	µg/L
				GW-17358-042012-CB-1079	0.095 UJ	µg/L

Notes:

UJ - Non-detect with an Estimated Report Limit

%D - Percent Difference

PCB - Polychlorinated Biphenyls

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POERTRAIN SITE
YPSILANTI, MIGHICAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
TCL VOC	Methylene chloride	4/18/2012	0.548	GW-17358-041212-DR-1003	63 U	µg/L
				GW-17358-041212-DR-1004	63 U	µg/L
TCL VOC	1,2,4-Trichlorobenzene	01/27/12	12.6	SO-17358-011712-DR-001	220 U	µg/kg
				SO-17358-011812-DR-013	250 U	µg/kg
TCL VOC	Methyl cyclohexane	01/27/12	12.5	SO-17358-011712-DR-001	1000 U	µg/kg
TCL SVOC	bis(2-Ethylhexyl)phthalate	01/30/12	0.804	GW-17358-012312-DR-023	5.1 U	µg/L
				GW-17358-012312-DR-024	5.2 U	µg/L
Select Metals	Manganese	4/17/2012	45.4	GW-17358-041212-DR-1000	180 U	µg/L
Select Metals	Antimony	4/18/2012	0.13	GW-17358-041212-CB-1005	2.0 U	µg/L
				GW-17358-041212-CB-1006	2.0 U	µg/L
				GW-17358-041212-CB-1008	2.0 U	µg/L
				GW-17358-041212-DR-1004	2.0 U	µg/L
Select Metals	Cadmium	4/18/2012	0.162	GW-17358-041212-CB-1005	1.0 U	µg/L
				GW-17358-041212-CB-1006	1.0 U	µg/L
				GW-17358-041212-CB-1008	1.0 U	µg/L
Select Metals	Cobalt	4/18/2012	0.168	GW-17358-041212-CB-1006	20 U	µg/L
				GW-17358-041212-CB-1007	20 U	µg/L
Select Metals	Copper	4/18/2012	0.787	GW-17358-041212-CB-1005	4.0 U	µg/L
				GW-17358-041212-CB-1006	4.0 U	µg/L
				GW-17358-041212-CB-1007	4.0 U	µg/L
				GW-17358-041212-CB-1008	4.0 U	µg/L
				GW-17358-041212-DR-1004	4.0 U	µg/L
Select Metals	Lead	4/18/2012	0.277	GW-17358-041212-CB-1005	3.0 U	µg/L
				GW-17358-041212-CB-1006	3.0 U	µg/L
				GW-17358-041212-CB-1007	3.0 U	µg/L
				GW-17358-041212-CB-1008	3.0 U	µg/L
				GW-17358-041212-DR-1004	3.0 U	µg/L

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POERTRAIN SITE
YPSILANTI, MIGHICAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
Select Metals	Nickel	4/18/2012	0.322	GW-17358-041212-CB-1006	20 U	µg/L
Select Metals	Thallium	4/18/2012	0.361	GW-17358-041212-CB-1005	2.0 U	µg/L
				GW-17358-041212-CB-1006	2.0 U	µg/L
				GW-17358-041212-CB-1007	2.0 U	µg/L
				GW-17358-041212-CB-1008	2.0 U	µg/L
				GW-17358-041212-DR-1004	2.0 U	µg/L
Select Metals	Zinc	4/18/2012	10.4	GW-17358-041212-CB-1007	50 U	µg/L
				GW-17358-041212-DR-1004	50 U	µg/L
Select Metals	Copper	4/18/2012	0.611	GW-17358-041312-CB-1012	4.0 U	µg/L
				GW-17358-041312-CB-1013	4.0 U	µg/L
				GW-17358-041312-DR-1009	4.0 U	µg/L
				GW-17358-041312-CB-1014	4.0 U	µg/L
				GW-17358-041312-DR-1011	4.0 U	µg/L
Select Metals	Manganese	4/18/2012	1.63	GW-17358-041312-DR-1009	50 U	µg/L
Select Metals	Zinc	4/18/2012	10.7	GW-17358-041312-CB-1012	50 U	µg/L
Select Metals	Copper	4/19/2012	0.641	GW-17358-041612-CB-1016	4.0 U	µg/L
				GW-17358-041612-CB-1018	4.0 U	µg/L
				GW-17358-041612-DR-1020	4.0 U	µg/L
				GW-17358-041612-DR-1021	4.0 U	µg/L
				GW-17358-041612-DR-1022	4.0 U	µg/L
				GW-17358-041612-DR-1023	4.0 U	µg/L
				GW-17358-041612-DR-1027	4.0 U	µg/L
				GW-17358-041612-DR-1028	4.0 U	µg/L
				GW-17358-041612-DR-1030	4.0 U	µg/L
				GW-17358-041612-JY-1024	4.0 U	µg/L
				GW-17358-041612-JY-1025	4.0 U	µg/L
				GW-17358-041612-JY-1026	4.0 U	µg/L
				GW-17358-041612-JY-1029	4.0 U	µg/L

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POERTRAIN SITE
YPSILANTI, MIGHICAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
Select Metals	Thallium	4/19/2012	0.235	GW-17358-041612-CB-1017	2.0 U	µg/L
				GW-17358-041612-CB-1016	2.0 U	µg/L
				GW-17358-041612-CB-1018	2.0 U	µg/L
				GW-17358-041612-DR-1021	2.0 U	µg/L
				GW-17358-041612-DR-1027	2.0 U	µg/L
				GW-17358-041612-DR-1028	2.0 U	µg/L
				GW-17358-041612-DR-1030	2.0 U	µg/L
				GW-17358-041612-JY-1024	2.0 U	µg/L
				GW-17358-041612-JY-1025	2.0 U	µg/L
Select Metals	Thallium	4/19/2012	0.235	GW-17358-041612-JY-1026	2.0 U	µg/L
				GW-17358-041612-JY-1029	2.0 U	µg/L
				GW-17358-041312-CB-1015	2.0 U	µg/L
				GW-17358-041312-DR-1010	2.0 U	µg/L
Select Metals	Zinc	4/19/2012	8.00	GW-17358-041612-CB-1016	50 U	µg/L
				GW-17358-041612-CB-1017	50 U	µg/L
				GW-17358-041612-DR-1020	50 U	µg/L
				GW-17358-041612-DR-1022	50 U	µg/L
				GW-17358-041612-DR-1023	50 U	µg/L
				GW-17358-041612-DR-1027	50 U	µg/L
				GW-17358-041612-DR-1028	50 U	µg/L
				GW-17358-041612-DR-1030	50 U	µg/L
				GW-17358-041612-JY-1026	50 U	µg/L
				GW-17358-041612-JY-1029	50 U	µg/L
Select Metals	Copper	4/20/2012	0.463	GW-17358-041612-CB-1019	4.0 U	µg/L

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POERTRAIN SITE
YPSILANTI, MIGHICAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
Select Metals	Copper	4/23/2012	0.524	GW-17358-041712-CB-1037	4.0 U	µg/L
				GW-17358-041712-CB-1038	4.0 U	µg/L
				GW-17358-041712-CB-1040	4.0 U	µg/L
				GW-17358-041712-DR-1042	4.0 U	µg/L
				GW-17358-041712-DR-1043	4.0 U	µg/L
				GW-17358-041712-DR-1045	4.0 U	µg/L
				GW-17358-041712-DR-1044	4.0 U	µg/L
				GW-17358-041712-DR-1046	4.0 U	µg/L
				GW-17358-041712-DR-1047	4.0 U	µg/L
				GW-17358-041712-DR-1048	4.0 U	µg/L
				GW-17358-041712-JY-1031	4.0 U	µg/L
				GW-17358-041712-JY-1032	4.0 U	µg/L
				GW-17358-041712-JY-1033	4.0 U	µg/L
				GW-17358-041712-JY-1034	4.0 U	µg/L
				GW-17358-041712-JY-1035	4.0 U	µg/L
				GW-17358-041712-JY-1036	4.0 U	µg/L
				GW-17358-041812-DR-1050	4.0 U	µg/L
				GW-17358-041812-EM-1049	4.0 U	µg/L
Select Metals	Thallium	4/23/2012	0.181	GW-17358-041712-CB-1039	2.0 U	µg/L
				GW-17358-041712-CB-1037	2.0 U	µg/L
				GW-17358-041712-DR-1041	2.0 U	µg/L
				GW-17358-041712-DR-1045	2.0 U	µg/L
				GW-17358-041712-DR-1047	2.0 U	µg/L
				GW-17358-041712-JY-1031	2.0 U	µg/L
				GW-17358-041712-JY-1032	2.0 U	µg/L
				GW-17358-041712-JY-1033	2.0 U	µg/L
				GW-17358-041712-JY-1034	2.0 U	µg/L
				GW-17358-041712-JY-1035	2.0 U	µg/L
				GW-17358-041712-JY-1036	2.0 U	µg/L
				GW-17358-041812-EM-1049	2.0 U	µg/L

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POERTRAIN SITE
YPSILANTI, MIGHICAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
Select Metals	Zinc	4/23/2012	5.38	GW-17358-041712-CB-1039	50 U	µg/L
				GW-17358-041712-CB-1038	50 U	µg/L
				GW-17358-041712-DR-1041	50 U	µg/L
				GW-17358-041712-DR-1042	50 U	µg/L
				GW-17358-041712-DR-1043	50 U	µg/L
				GW-17358-041712-DR-1048	50 U	µg/L
				GW-17358-041712-JY-1031	50 U	µg/L
				GW-17358-041712-JY-1032	50 U	µg/L
				GW-17358-041712-JY-1033	50 U	µg/L
				GW-17358-041712-JY-1034	50 U	µg/L
				GW-17358-041712-JY-1035	50 U	µg/L
				GW-17358-041712-JY-1036	50 U	µg/L
				GW-17358-041812-DR-1050	50 U	µg/L
Select Metals	Thallium	4/24/2012	0.299	GW-17358-041812-CB-1054	2.0 U	µg/L
				GW-17358-041812-CB-1053	2.0 U	µg/L
				GW-17358-041812-CB-1055	2.0 U	µg/L
				GW-17358-041812-DR-1051	2.0 U	µg/L
				GW-17358-041812-DR-1052	2.0 U	µg/L
				GW-17358-041812-EM-1056	2.0 U	µg/L
				GW-17358-041912-DR-1057	2.0 U	µg/L
				GW-17358-041912-JY-1063	2.0 U	µg/L
				GW-17358-041912-JY-1064	2.0 U	µg/L
Select Metals	Copper	4/24/2012	0.750	GW-17358-041912-DR-1066	4.0 U	µg/L
				GW-17358-041912-JY-1065	4.0 U	µg/L
Select Metals	Zinc	4/24/2012	14.1	GW-17358-041912-DR-1066	50 U	µg/L
				GW-17358-041912-JY-1065	50 U	µg/L
Select Metals	Cobalt	4/25/2012	0.066	GW-17358-042012-CB-1079	20 U	µg/L
				GW-17358-042012-DR-1071	20 U	µg/L

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POERTRAIN SITE
YPSILANTI, MIGHICAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
Select Metals	Copper	4/25/2012	0.459	GW-17358-042012-CB-1077	4.0 U	µg/L
				GW-17358-042012-CB-1078	4.0 U	µg/L
				GW-17358-042012-CB-1079	4.0 U	µg/L
				GW-17358-042012-DR-1071	4.0 U	µg/L
Select Metals	Zinc	4/25/2012	2.77	GW-17358-042012-CB-1075	50 U	µg/L
				GW-17358-042012-CB-1076	50 U	µg/L
				GW-17358-042012-DR-1071	50 U	µg/L
				GW-17358-042012-DR-1073	50 U	µg/L
Select Metals	Copper	4/25/2012	0.634	GW-17358-042012-JY-1067	4.0 U	µg/L
				GW-17358-042012-JY-1068	4.0 U	µg/L
				GW-17358-042012-JY-1069	4.0 U	µg/L
				GW-17358-042012-JY-1070	4.0 U	µg/L
Select Metals	Thallium	4/25/2012	0.149	GW-17358-042012-JY-1067	2.0 U	µg/L
				GW-17358-042012-JY-1068	2.0 U	µg/L
				GW-17358-042012-JY-1069	2.0 U	µg/L
				GW-17358-042012-JY-1070	2.0 U	µg/L
Select Metals	Zinc	4/25/2012	6.04	GW-17358-042012-JY-1068	50 U	µg/L
				GW-17358-042012-JY-1070	50 U	µg/L
Select Metals	Copper	4/26/2012	0.845	GW-17358-042312-CB-1079	4.0 U	µg/L
				GW-17358-042312-CB-1085	4.0 U	µg/L
				GW-17358-042312-DR-1081	4.0 U	µg/L
				GW-17358-042312-DR-1082	4.0 U	µg/L
Select Metals	Copper	4/26/2012	0.845	GW-17358-042312-DR-1084	4.0 U	µg/L

TABLE 5

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POERTRAIN SITE
YPSILANTI, MIGHICAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
Select Metals	Zinc	4/26/2012	10.1	GW-17358-042312-CB-1079	50 U	µg/L
				GW-17358-042312-CB-1080	50 U	µg/L
				GW-17358-042312-CB-1085	50 U	µg/L
				GW-17358-042312-DR-1081	50 U	µg/L
				GW-17358-042312-DR-1082	50 U	µg/L
				GW-17358-042312-DR-1084	50 U	µg/L
Select Metals	Copper	4/27/2012	0.885	GW-17358-042412-DR-1087	4.0 U	µg/L
				GW-17358-042412-DR-1088	4.0 U	µg/L
				GW-17358-042412-DR-1089	4.0 U	µg/L
				GW-17358-042412-DR-1090	4.0 U	µg/L
				GW-17358-042412-DR-1091	4.3 U	µg/L
				GW-17358-042412-DR-1092	4.0 U	µg/L
Select Metals	Zinc	4/27/2012	7.18	GW-17358-042412-DR-1090	50 U	µg/L
				GW-17358-042412-DR-1091	50 U	µg/L
				GW-17358-042412-DR-1092	50 U	µg/L
Select Metals	Thallium	01/27/12	0.0132	SO-17358-011712-DR-003	0.075 U	mg/kg
				SO-17358-011812-DR-008	0.061 U	mg/kg
Select Metals	Copper	01/30/12	0.455	GW-17358-012312-DR-023	4.0 U	µg/L
				GW-17358-012312-DR-024	4.0 U	µg/L
				GW-17358-012312-DR-026	4.0 U	µg/L
				GW-17358-012312-DR-027	4.0 U	µg/L
				GW-17358-012312-DR-028	4.0 U	µg/L
				GW-17358-012312-DR-029	4.0 U	µg/L
				GW-17358-012412-DR-030	4.0 U	µg/L
				GW-17358-012412-DR-031	4.0 U	µg/L
				GW-17358-012412-DR-032	4.0 U	µg/L
				GW-17358-012412-DR-033	4.0 U	µg/L

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO METHOD BLANK CONTAMINATION
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POERTRAIN SITE
YPSILANTI, MIGHICAN

Parameter	*Analyte*	*Analysis Date*	*Blank Result*	*Sample ID*	*Qualified Result*	*Units*
Select Metals	Zinc	01/30/12	9.07	GW-17358-012312-DR-023	50 U	µg/L
				GW-17358-012312-DR-024	50 U	µg/L
				GW-17358-012312-DR-026	50 U	µg/L
				GW-17358-012312-DR-027	50 U	µg/L
				GW-17358-012312-DR-029	50 U	µg/L
				GW-17358-012412-DR-030	50 U	µg/L
				GW-17358-012412-DR-031	50 U	µg/L
				GW-17358-012412-DR-032	50 U	µg/L
				GW-17358-012412-DR-033	50 U	µg/L

Notes:

U - Qualified as Not Detected at the report limit

TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 6

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO VIOLATION OF SURROGATE RECOVERY ACCEPTANCE CRITERIA
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Surrogate*	*Surrogate Recovery (percent)*	*Control Limits (percent)*	*Sample ID*	*Qualified Result*	*Units*
TCL VOC	Acetone	Toluene-d8	118	74 - 115	TB-17358-041912	1.4 J	µg/L
	Methylene chloride					0.53 J	µg/L
TCL SVOC	All SVOC Compounds	Terphenyl-d14	13	37 - 119	GW-17358-041312-CB-1013	UJ	µg/L
		Nitrobenzene-d5	24	27 - 111			

Notes:

J - Estimated Concentration
UJ - Non-detect with an Estimated Report Limit

SVOC - Semivolatile Organic Compound
TCL - Target Compound List
VOC - Volatile Organic Compounds

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012 WILLOW RUN POWERTRAIN SITE YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
TCL VOC	2-Butanone	30	34	12	54 - 129	30	GW-17358-041912-JY-1063	10 UJ	µg/L
	Acetone	24	19	24	33 - 145	30		10 UJ	µg/L
	Methyl acetate	40	42	6	47 - 130	30		10 UJ	µg/L
TCL SVOC	3,3'-Dichlorobenzidine	0	0	0	10 - 110	30	GW-17358-041312-DR-1010	R	
	3-Nitroaniline	0	0	0	23 - 112	30		R	
	4-Chloroaniline	0	0	0	10 - 110	30		R	
	4-Nitroaniline	0	0	0	26 - 115	30		R	
	Atrazine	44	32	32	50 - 130	30		3.0 UJ	µg/L
	Benzo(a)anthracene	49	45	9	52 - 110	30		1.0 UJ	µg/L
	Caprolactam	0	0	0	50 - 130	30		R	
	Chrysene	48	44	8	52 - 111	30		1.0 UJ	µg/L
TCL SVOC	3,3'-Dichlorobenzidine	0	0	0	10 - 110	30	GW-17358-041612-CB-1019	R	
	Benzo(a)anthracene	48	45	9	52 - 110	30		1.0 UJ	µg/L
	Caprolactam	0	0	0	50 - 130	30		R	
	Chrysene	50	46	12	52 - 111	30		1.0 UJ	µg/L
TCL SVOC	3,3'-Dichlorobenzidine	0	0	0	10 - 110	30	GW-17358-041812-EM-1049	R	
TCL SVOC	3,3'-Dichlorobenzidine	6	7	23	10 - 110	30	GW-17358-041912-JY-1063	R	
TCL SVOC	Indeno(1,2,3-cd)pyrene	60	43	31	36-116	30	GW-17358-012412-DR-031	2.0 UJ	µg/L

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012 WILLOW RUN POWERTRAIN SITE YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
Select Metals	Antimony	42	41	4	75-125	20	SO-17358-011712-DR-001	0.039 J	mg/kg
							SO-17358-011712-DR-002	0.084 J	mg/kg
							SO-17358-011712-DR-003	0.038 J	mg/kg
							SO-17358-011712-DR-004	0.056 J	mg/kg
							SO-17358-011712-DR-005	0.18 J	mg/kg
							SO-17358-011712-DR-006	0.031 J	mg/kg
							SO-17358-011812-DR-007	0.066 J	mg/kg
							SO-17358-011812-DR-009	0.057 J	mg/kg
							SO-17358-011812-DR-010	0.048 J	mg/kg
							SO-17358-011812-DR-011	0.045 J	mg/kg
							SO-17358-011812-DR-012	0.067 J	mg/kg
							SO-17358-011812-DR-013	0.042 J	mg/kg
							SO-17358-011812-DR-014	0.046 J	mg/kg
							SO-17358-011812-DR-016	0.081 J	mg/kg
							SO-17358-011812-DR-017	0.070 J	mg/kg
							SO-17358-011812-DR-018	0.071 J	mg/kg
Select Metals	Antimony	34	31	9	75-125	20	SO-17358-011912-DR-019	0.042 J	mg/kg
							SO-17358-011912-DR-020	0.037 J	mg/kg
							SO-17358-011912-DR-021	0.063 J	mg/kg
							SO-17358-011912-DR-022	0.049 J	mg/kg
Select Metals	Calcium	52	87	17	75-125	20	SO-17358-011812-DR-009	52000 J	mg/kg
							SO-17358-011812-DR-010	38000 J	mg/kg
							SO-17358-011812-DR-011	95000 J	mg/kg
							SO-17358-011812-DR-012	6900 J	mg/kg
Select Metals	Manganese	60	275	57	75-125	20	SO-17358-011712-DR-001	200 J	mg/kg
							SO-17358-011712-DR-002	210 J	mg/kg
							SO-17358-011712-DR-003	66 J	mg/kg
							SO-17358-011712-DR-004	170 J	mg/kg

TABLE 7

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO OUTLYING
MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND/OR RELATIVE PERCENT DIFFERENCE
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*MS Recovery (percent)*	*MSD Recovery (percent)*	*RPD*	*Control Limits*		*Associated Sample ID*	*Qualified Result*	*Units*
					Recovery (percent)	*RPD (percent)*			
Select Metals	Manganese	60	275	57	75-125	20	SO-17358-011712-DR-005	220 J	mg/kg
							SO-17358-011712-DR-006	95 J	mg/kg
							SO-17358-011812-DR-007	360 J	mg/kg
							SO-17358-011812-DR-008	110 J	mg/kg
							SO-17358-011812-DR-009	230 J	mg/kg
							SO-17358-011812-DR-010	220 J	mg/kg
							SO-17358-011812-DR-011	180 J	mg/kg
							SO-17358-011812-DR-012	110 J	mg/kg
							SO-17358-011812-DR-013	600 J	mg/kg
							SO-17358-011812-DR-014	440 J	mg/kg
							SO-17358-011812-DR-015	330 J	mg/kg
							SO-17358-011812-DR-016	160 J	mg/kg
							SO-17358-011812-DR-017	190 J	mg/kg
							SO-17358-011812-DR-018	710 J	mg/kg
Select Metals	Manganese	306	108	65	75-125	20	SO-17358-011912-DR-019	54 J	mg/kg
							SO-17358-011912-DR-020	59 J	mg/kg
							SO-17358-011912-DR-021	180 J	mg/kg
							SO-17358-011912-DR-022	300 J	mg/kg

Notes:

R - Rejected
UJ - Non-detect with an Estimated Report Limit
J - Estimated Concentration

MS - Matrix Spike
MSD - Matrix Spike Duplicate
RPD - Relative Percent Difference
SVOC - Semivolatile Organic Compound
TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 8

SUMMARY OF QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*LCS Date*	*LCS %Rec*	*Control Limits %Rec*	*Associated Sample ID*	*Qualified Results*	*Units*
TCL VOC	Acetone	4/24/2012	34	43 - 136	GW-17358-041612-CB-1019	10 UJ	µg/L
					GW-17358-041612-CB-1016	200 UJ	µg/L
					GW-17358-041612-CB-1017	10 UJ	µg/L
					GW-17358-041612-CB-1018	10 UJ	µg/L
					GW-17358-041612-DR-1022	10 UJ	µg/L
					GW-17358-041612-DR-1020	10 UJ	µg/L
					GW-17358-041612-DR-1021	10 UJ	µg/L
					GW-17358-041612-DR-1023	10 UJ	µg/L
					GW-17358-041612-DR-1027	10 UJ	µg/L
					GW-17358-041612-DR-1028	10 UJ	µg/L
					GW-17358-041612-JY-1025	10 UJ	µg/L
					GW-17358-041612-DR-1030	10 UJ	µg/L
					GW-17358-041612-JY-1024	10 UJ	µg/L
					GW-17358-041612-JY-1026	10 UJ	µg/L
					GW-17358-041612-JY-1029	10 UJ	µg/L
					TB-17358-041612	10 UJ	µg/L
TCL VOC	Acetone	4/26/2012	37	43 - 136	GW-17358-042312-DR-1083	1.3 J	µg/L
TCL VOC	Isopropyl benzene	4/27/2012	115	75 - 114	GW-17358-041912-DR-1058	0.51 J	µg/L

Notes:

J - Estimated Concentration
UJ - Non-detect with an Estimated Report Limit

LCS - Laboratory Control Spike
%Rec - Percent Recovery
TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 9

SUMMARY OF DETECTED ANALYTES IN FIELD DUPLICATE SAMPLE SETS
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Analysis	*Parameters*	*Original Sample ID*	*Original Result*	*Duplicate Sample ID*	*Duplicate Result*	*RPD*	*Units*	*Qualifiers*
		GW-17358-041212-DR-1003		GW-17358-041212-DR-1004				
TCL VOC	Vinyl chloride		710		750	5.5	µg/L	
TCL SVOC	bis(2-Ethylhexyl)phthalate		0.88 J		0.82 J	7.1	µg/L	
Select Metals	Aluminum		46 J		57	21	µg/L	
	Antimony		0.16 J		2.0 U	NC	µg/L	
	Arsenic		8.7		9.1	4.5	µg/L	
	Barium		190		190	0	µg/L	
	Chromium VI (hexavalent)		0.0074 J		0.0086 J	15	µg/L	
	Cobalt		3.5 J		3.5 J	0	µg/L	
	Iron		5400		5300	1.9	µg/L	
	Lead		0.27 J		3.0 U	NC	µg/L	
	Manganese		850		830	2.4	µg/L	
	Nickel		22		21	4.7	µg/L	
	Zinc		4.6 J		50 U	NC	µg/L	
		GW-17358-041712-JY-1031		GW-17358-041712-JY-1032				
TCL VOC	1,1,1-Trichloroethane		9.0		9.0	0	µg/L	
	1,1-Dichloroethane		4.1 J		4.6 J	11	µg/L	
	cis-1,2-Dichloroethene		53		57	7.3	µg/L	
	Tetrachloroethene		180		180	0	µg/L	
	trans-1,2-Dichloroethene		3.6 J		3.7 J	2.7	µg/L	
	Trichloroethene		14		14	0	µg/L	
Select Metals	Antimony		0.34 J		0.19 J	57	µg/L	J
	Arsenic		2.3 J		2.1 J	9.1	µg/L	
	Barium		29 J		28 J	3.5	µg/L	
	Beryllium		0.26 J		1.0 U	NC	µg/L	
	Cadmium		0.13 J		0.14 J	7.4	µg/L	
	Cobalt		1.4 J		1.4 J	0	µg/L	
	Manganese		520		510	1.9	µg/L	
	Nickel		7.1 J		6.7 J	5.8	µg/L	
	Selenium		1.4 J		1.3 J	7.4	µg/L	

TABLE 9

SUMMARY OF DETECTED ANALYTES IN FIELD DUPLICATE SAMPLE SETS
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Analysis	*Parameters*	*Original Sample ID*	*Original Result*	*Duplicate Sample ID*	*Duplicate Result*	*RPD*	*Units*	*Qualifiers*
		GW-17358-041812-DR-1050		GW-17358-041812-DR-1051				
TCL VOC	Trichloroethene		0.29 J		0.22 J	27	µg/L	
TCL SVOC	bis(2-Ethylhexyl)phthalate		4.9 U		0.92 J	NC	µg/L	
Select Metals	Aluminum		21 J		24 J	13	µg/L	
	Antimony		0.31 J		0.44 J	35	µg/L	
	Arsenic		15		16	6.5	µg/L	
	Barium		140		140	0	µg/L	
	Cobalt		0.55 J		0.68 J	21	µg/L	
	Copper		4.0 U		1.4 J	NC	µg/L	
	Iron		220		240	8.7	µg/L	
	Lead		3.0 U		0.23 J	NC	µg/L	
	Manganese		120		120	0	µg/L	
	Nickel		1.6 J		1.8 J	12	µg/L	
	Selenium		5.0 U		0.57 J	NC	µg/L	
	Zinc		50 U		7.3 J	NC	µg/L	
		GW-17358-042012-JY-1067		GW-17358-042012-JY-1068				
Select Metals	Aluminum		49 J		58	17	µg/L	
	Antimony		0.38 J		0.42 J	10	µg/L	
	Arsenic		1.5 J		1.5 J	0	µg/L	
	Barium		130		130	0	µg/L	
	Calcium		95000		97000	2.1	µg/L	
	Cobalt		1.4 J		1.4 J	0	µg/L	
	Iron		34 J		47 J	32	µg/L	
	Magnesium		18000		18000	0	µg/L	
	Manganese		490		500	2.0	µg/L	
	Nickel		2.9 J		2.9 J	0	µg/L	
	Potassium		2200 J		2300 J	4.4	µg/L	
	Selenium		0.94 J		0.83 J	12	µg/L	
	Sodium		190000		200000	5.1	µg/L	

TABLE 9

SUMMARY OF DETECTED ANALYTES IN FIELD DUPLICATE SAMPLE SETS
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Analysis	*Parameters*	*Original Sample ID*	*Original Result*	*Duplicate Sample ID*	*Duplicate Result*	*RPD*	*Units*	*Qualifiers*
		GW-17358-042312-DR-1081		GW-17358-042312-DR-1082				
TCL SVOC	Anthracene		0.17 J		0.20	16	µg/L	
	bis(2-Ethylhexyl)phthalate		0.98 J		4.8 U	NC	µg/L	
		GW-17358-042312-DR-1081		GW-17358-042312-DR-1082				
Select Metals	Aluminum		25 J		30 J	18	µg/L	
	Arsenic		4.3 J		4.2 J	2.4	µg/L	
	Barium		140		140	0	µg/L	
	Calcium		170000		180000	5.7	µg/L	
	Cobalt		1.4 J		1.3 J	7	µg/L	
	Iron		5000		5000	0	µg/L	
	Lead		0.44 J		0.99 J	77	µg/L	J
	Magnesium		29000		30000	3.4	µg/L	
	Manganese		330		330	0	µg/L	
	Nickel		2.9 J		2.8 J	3.5	µg/L	
	Potassium		940 J		950 J	1.1	µg/L	
	Sodium		39000		40000	2.5	µg/L	
	Thallium		0.28 J		0.22 J	24	µg/L	
		GW-17358-042412-DR-1088		GW-17358-042412-DR-1089				
Select Metals	Aluminum		23 J		23 J	0	µg/L	
	Antimony		0.20 J		0.21 J	4.9	µg/L	
	Arsenic		0.95 J		0.68 J	33	µg/L	
	Barium		170		160	6.1	µg/L	
	Cobalt		0.43 J		0.42 J	2.4	µg/L	
	Iron		200 U		47 J	NC	µg/L	
	Lead		0.22 J		0.29 J	27	µg/L	
	Manganese		100		100	0	µg/L	
	Nickel		1.3 J		1.4 J	7.4	µg/L	
	Selenium		1.0 J		1.1 J	9.5	µg/L	
	Thallium		0.22 J		0.14 J	44	µg/L	
	Vanadium		0.60 J		4.0 U	NC	µg/L	

Notes:

J - Estimated Concentration

NC - Not calculable
RPD - Relative Percent Difference
SVOC - Semivolatile Organic Compound
TCL - Target Compound List
VOC - Volatile Organic Compounds

TABLE 10

SUMMARY OF QUALIFIED SAMPLE DATA DUE TO TRIP BLANK CONTAMINATION
RFI SOIL & GROUNDWATER INVESTIGATION - JANUARY - APRIL 2012
WILLOW RUN POWERTRAIN SITE
YPSILANTI, MICHIGAN

Parameter	*Analyte*	*Blank Date*	*Blank Result*	*Associated Sample ID*	*Qualified Result*	*Units*
TCL VOC	Acetone	04/17/12	2.0	GW-17358-041712-CB-1037	10 U	µg/L
				GW-17358-041712-CB-1040	10 U	µg/L
				GW-17358-041712-DR-1045	10 U	µg/L
				GW-17358-041712-DR-1046	10 U	µg/L
				GW-17358-041712-DR-1047	10 U	µg/L
				GW-17358-041712-DR-1048	10 U	µg/L
				GW-17358-041712-JY-1036	67 U	µg/L
TCL VOC	Acetone	04/18/12	1.4	GW-17358-041812-CB-1053	10 U	µg/L
				GW-17358-041812-CB-1054	10 U	µg/L
TCL VOC	Methylene chloride	04/17/12	0.41	GW-17358-041712-CB-1040	5.0 U	µg/L
TCL VOC	Acetone	01/23/12	2.0	GW-17358-012312-DR-025	10 U	µg/L

Notes:

U - Qualified as Not Detected at the report limit

TCL - Target Compound List
VOC - Volatile Organic Compounds

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
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North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-10274-1
Client Project/Site: 17358-T01-008, RACER Willow Run

For:
Conestoga-Rovers & Associates, Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Mr. Paul Wiseman

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LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Definitions/Glossary 7
Sample Summary 8
Detection Summary 9
Method Summary 18
Client Sample Results 19
QC Association Summary 153
QC Sample Results 159
Surrogate Summary 174
Lab Chronicle 176
Certification Summary 183
Chain of Custody 184
Receipt Checklists 188

Job ID: 240-10274-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 17358-T01-008, RACER Willow Run

Report Number: 240-10274-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

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 application 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 04/18/2012; the samples arrived in good condition, properly preserved and on ice. The temperatures of the coolers at receipt were 1.1, 1.9, 2.6, 2.6, 2.7, 3.0, 3.2, 3.5, 3.8 and 4.3 C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GW-17358-041712-JY-1031 (240-10274-1), GW-17358-041712-JY-1032 (240-10274-2), GW-17358-041712-JY-1033 (240-10274-3), GW-17358-041712-JY-1034 (240-10274-4), GW-17358-041712-JY-1035 (240-10274-5), GW-17358-041712-JY-1036 (240-10274-6), GW-17358-041712-CB-1037 (240-10274-7), GW-17358-041712-CB-1038 (240-10274-8), GW-17358-041712-CB-1039 (240-10274-9), GW-17358-041712-CB-1040 (240-10274-10), GW-17358-041712-DR-1041 (240-10274-11), GW-17358-041712-DR-1042 (240-10274-12), GW-17358-041712-DR-1043 (240-10274-13), GW-17358-041712-DR-1044 (240-10274-14), GW-17358-041712-DR-1045 (240-10274-15), GW-17358-041712-DR-1046 (240-10274-16), GW-17358-041712-DR-1047 (240-10274-17), GW-17358-041712-DR-1048 (240-10274-18) and TB-17358-041712 (240-10274-19) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/24/2012 and 04/25/2012.

Acetone was detected in method blank MB 240-41303/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

Refer to the QC report for details.

Job ID: 240-10274-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

Samples GW-17358-041712-JY-1031 (240-10274-1)[8.33X], GW-17358-041712-JY-1032 (240-10274-2)[8.33X] and GW-17358-041712-JY-1036 (240-10274-6)[6.67X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the VOCs analyses.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GW-17358-041712-JY-1031 (240-10274-1), GW-17358-041712-JY-1032 (240-10274-2), GW-17358-041712-JY-1033 (240-10274-3), GW-17358-041712-JY-1034 (240-10274-4), GW-17358-041712-JY-1035 (240-10274-5), GW-17358-041712-JY-1036 (240-10274-6), GW-17358-041712-CB-1037 (240-10274-7), GW-17358-041712-CB-1038 (240-10274-8), GW-17358-041712-CB-1039 (240-10274-9), GW-17358-041712-CB-1040 (240-10274-10), GW-17358-041712-DR-1041 (240-10274-11), GW-17358-041712-DR-1042 (240-10274-12), GW-17358-041712-DR-1043 (240-10274-13), GW-17358-041712-DR-1044 (240-10274-14), GW-17358-041712-DR-1045 (240-10274-15), GW-17358-041712-DR-1046 (240-10274-16), GW-17358-041712-DR-1047 (240-10274-17) and GW-17358-041712-DR-1048 (240-10274-18) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 04/19/2012 and 04/20/2012 and analyzed on 04/23/2012, 04/24/2012 and 04/25/2012.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Terphenyl-d14 (Surr) failed the surrogate recovery criteria low for GW-17358-041712-CB-1039 (240-10274-9). Refer to the QC report for details.

Refer to the QC report for details.

Method(s) 8270C: The following sample(s) contained one acid and/or one base surrogate outside acceptance limits: GW-17358-041712-CB-1039 (240-10274-9). The laboratory's SOP allows one acid surrogate and/or one base surrogate to be outside acceptance limits; therefore, re-extraction/re-analysis was not performed. These results have been reported and qualified.

No other difficulties were encountered during the SVOCs analyses.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples GW-17358-041712-JY-1031 (240-10274-1), GW-17358-041712-JY-1032 (240-10274-2), GW-17358-041712-JY-1033 (240-10274-3), GW-17358-041712-JY-1034 (240-10274-4), GW-17358-041712-JY-1035 (240-10274-5), GW-17358-041712-JY-1036 (240-10274-6), GW-17358-041712-CB-1037 (240-10274-7), GW-17358-041712-CB-1038 (240-10274-8), GW-17358-041712-CB-1039 (240-10274-9), GW-17358-041712-CB-1040 (240-10274-10), GW-17358-041712-DR-1041 (240-10274-11), GW-17358-041712-DR-1042 (240-10274-12), GW-17358-041712-DR-1043 (240-10274-13), GW-17358-041712-DR-1044 (240-10274-14), GW-17358-041712-DR-1045 (240-10274-15), GW-17358-041712-DR-1046 (240-10274-16), GW-17358-041712-DR-1047 (240-10274-17) and GW-17358-041712-DR-1048 (240-10274-18) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared on 04/19/2012 and analyzed on 04/20/2012 and 04/24/2012.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

Method(s) 8082: The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: GW-17358-041712-DR-1043 (240-10274-13). Lot # S65830.

Method(s) 3520C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 40800, 8082.

No other difficulties were encountered during the PCBs analyses.

Job ID: 240-10274-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICPMS)

Samples GW-17358-041712-JY-1031 (240-10274-1), GW-17358-041712-JY-1032 (240-10274-2), GW-17358-041712-JY-1033 (240-10274-3), GW-17358-041712-JY-1034 (240-10274-4), GW-17358-041712-JY-1035 (240-10274-5), GW-17358-041712-JY-1036 (240-10274-6), GW-17358-041712-CB-1037 (240-10274-7), GW-17358-041712-CB-1038 (240-10274-8), GW-17358-041712-CB-1039 (240-10274-9), GW-17358-041712-CB-1040 (240-10274-10), GW-17358-041712-DR-1041 (240-10274-11), GW-17358-041712-DR-1042 (240-10274-12), GW-17358-041712-DR-1043 (240-10274-13), GW-17358-041712-DR-1044 (240-10274-14), GW-17358-041712-DR-1045 (240-10274-15), GW-17358-041712-DR-1046 (240-10274-16), GW-17358-041712-DR-1047 (240-10274-17) and GW-17358-041712-DR-1048 (240-10274-18) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 04/20/2012 and analyzed on 04/23/2012.

Several analytes were detected in method blank MB 240-41016/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

HEXAVALENT CHROMIUM

Samples GW-17358-041712-DR-1044 (240-10274-14) and GW-17358-041712-DR-1048 (240-10274-18) were analyzed for hexavalent chromium in accordance with EPA SW-846 Method 7196A. The samples were analyzed on 04/18/2012.

No difficulties were encountered during the hexavalent chromium analyses.

All quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples GW-17358-041712-JY-1031 (240-10274-1), GW-17358-041712-JY-1032 (240-10274-2), GW-17358-041712-JY-1033 (240-10274-3), GW-17358-041712-JY-1034 (240-10274-4), GW-17358-041712-JY-1035 (240-10274-5), GW-17358-041712-JY-1036 (240-10274-6), GW-17358-041712-CB-1037 (240-10274-7), GW-17358-041712-CB-1038 (240-10274-8), GW-17358-041712-CB-1039 (240-10274-9), GW-17358-041712-CB-1040 (240-10274-10), GW-17358-041712-DR-1041 (240-10274-11), GW-17358-041712-DR-1042 (240-10274-12), GW-17358-041712-DR-1043 (240-10274-13), GW-17358-041712-DR-1044 (240-10274-14), GW-17358-041712-DR-1045 (240-10274-15), GW-17358-041712-DR-1046 (240-10274-16), GW-17358-041712-DR-1047 (240-10274-17) and GW-17358-041712-DR-1048 (240-10274-18) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/20/2012 and 04/23/2012 and analyzed on 04/20/2012 and 04/25/2012.

Mercury failed the recovery criteria low for the MS/MSD of sample 240-10159-7 in batch 240-41694.

Refer to the QC report for details.

No other difficulties were encountered during the mercury analyses.

All other quality control parameters were within the acceptance limits.

TRIVALENT CHROMIUM

Samples GW-17358-041712-DR-1044 (240-10274-14) and GW-17358-041712-DR-1048 (240-10274-18) were analyzed for trivalent chromium in accordance with SW-846 Method 7196A_CR3. The samples were analyzed on 04/24/2012.

No difficulties were encountered during the trivalent chromium analyses.

All quality control parameters were within the acceptance limits.

Job ID: 240-10274-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

AMENABLE CYANIDE

Samples GW-17358-041712-JY-1031 (240-10274-1), GW-17358-041712-JY-1032 (240-10274-2), GW-17358-041712-JY-1033 (240-10274-3) and GW-17358-041712-JY-1035 (240-10274-5) were analyzed for amenable cyanide in accordance with EPA SW-846 Method 9012A. The samples were analyzed on 04/30/2012.

No difficulties were encountered during the amenable cyanide analyses.

All quality control parameters were within the acceptance limits.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
L	A negative instrument reading had an absolute value greater than the reporting limit

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DL, RA, RE, IN	Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample
EDL	Estimated Detection Limit
EPA	United States Environmental Protection Agency
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RL	Reporting Limit
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-10274-1	GW-17358-041712-JY-1031	Water	04/17/12 09:10	04/18/12 09:00
240-10274-2	GW-17358-041712-JY-1032	Water	04/17/12 09:15	04/18/12 09:00
240-10274-3	GW-17358-041712-JY-1033	Water	04/17/12 09:55	04/18/12 09:00
240-10274-4	GW-17358-041712-JY-1034	Water	04/17/12 11:50	04/18/12 09:00
240-10274-5	GW-17358-041712-JY-1035	Water	04/17/12 14:55	04/18/12 09:00
240-10274-6	GW-17358-041712-JY-1036	Water	04/17/12 11:30	04/18/12 09:00
240-10274-7	GW-17358-041712-CB-1037	Water	04/17/12 09:25	04/18/12 09:00
240-10274-8	GW-17358-041712-CB-1038	Water	04/17/12 11:35	04/18/12 09:00
240-10274-9	GW-17358-041712-CB-1039	Water	04/17/12 13:50	04/18/12 09:00
240-10274-10	GW-17358-041712-CB-1040	Water	04/17/12 15:05	04/18/12 09:00
240-10274-11	GW-17358-041712-DR-1041	Water	04/17/12 09:00	04/18/12 09:00
240-10274-12	GW-17358-041712-DR-1042	Water	04/17/12 10:15	04/18/12 09:00
240-10274-13	GW-17358-041712-DR-1043	Water	04/17/12 11:25	04/18/12 09:00
240-10274-14	GW-17358-041712-DR-1044	Water	04/17/12 14:05	04/18/12 09:00
240-10274-15	GW-17358-041712-DR-1045	Water	04/17/12 10:20	04/18/12 09:00
240-10274-16	GW-17358-041712-DR-1046	Water	04/17/12 12:00	04/18/12 09:00
240-10274-17	GW-17358-041712-DR-1047	Water	04/17/12 15:15	04/18/12 09:00
240-10274-18	GW-17358-041712-DR-1048	Water	04/17/12 15:10	04/18/12 09:00
240-10274-19	TB-17358-041712	Water	04/17/12 00:00	04/18/12 09:00

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Client Sample ID: GW-17358-041712-JY-1031 — Lab Sample ID: 240-10274-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.1	J	8.3	1.2	ug/L	8.33		8260B	Total/NA
Tetrachloroethene	180		8.3	2.4	ug/L	8.33		8260B	Total/NA
Trichloroethene	14		8.3	1.4	ug/L	8.33		8260B	Total/NA
1,1,1-Trichloroethane	9.0		8.3	1.8	ug/L	8.33		8260B	Total/NA
cis-1,2-Dichloroethene	53		8.3	1.4	ug/L	8.33		8260B	Total/NA
trans-1,2-Dichloroethene	3.6	J	8.3	1.6	ug/L	8.33		8260B	Total/NA
Antimony	0.34	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	2.3	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	29	J B	100	0.19	ug/L	1		6020	Total Recoverable
Beryllium	0.26	J	1.0	0.20	ug/L	1		6020	Total Recoverable
Cadmium	0.13	J	1.0	0.13	ug/L	1		6020	Total Recoverable
Cobalt	1.4	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	1.4	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Manganese	520		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	7.1	J	20	0.20	ug/L	1		6020	Total Recoverable
Selenium	1.4	J	5.0	0.57	ug/L	1		6020	Total Recoverable
Thallium	1.0	J B	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	4.7	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-JY-1032 — Lab Sample ID: 240-10274-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	4.6	J	8.3	1.2	ug/L	8.33		8260B	Total/NA
Tetrachloroethene	180		8.3	2.4	ug/L	8.33		8260B	Total/NA
Trichloroethene	14		8.3	1.4	ug/L	8.33		8260B	Total/NA
1,1,1-Trichloroethane	9.0		8.3	1.8	ug/L	8.33		8260B	Total/NA
cis-1,2-Dichloroethene	57		8.3	1.4	ug/L	8.33		8260B	Total/NA
trans-1,2-Dichloroethene	3.7	J	8.3	1.6	ug/L	8.33		8260B	Total/NA
Antimony	0.19	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	2.1	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	28	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cadmium	0.14	J	1.0	0.13	ug/L	1		6020	Total Recoverable
Cobalt	1.4	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	1.3	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Manganese	510		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	6.7	J	20	0.20	ug/L	1		6020	Total Recoverable
Selenium	1.3	J	5.0	0.57	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-JY-1032 (Continued) — Lab Sample ID: 240-10274-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	0.73	J B	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	4.9	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-JY-1033 — Lab Sample ID: 240-10274-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.4		1.0	0.22	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	0.90	J	4.9	0.78	ug/L	1		8270C	Total/NA
Aluminum	190		50	19	ug/L	1		6020	Total Recoverable
Antimony	0.14	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	1.2	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	37	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	1.9	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	1.0	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	190	J	200	26	ug/L	1		6020	Total Recoverable
Manganese	870		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	5.1	J	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.19	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Thallium	0.31	J B	2.0	0.14	ug/L	1		6020	Total Recoverable
Vanadium	0.55	J	4.0	0.44	ug/L	1		6020	Total Recoverable
Zinc	3.3	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-JY-1034 — Lab Sample ID: 240-10274-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	2.0		1.0	0.15	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	13		1.0	0.17	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.9		1.0	0.19	ug/L	1		8260B	Total/NA
Aluminum	50		50	19	ug/L	1		6020	Total Recoverable
Antimony	0.26	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	1.8	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	84	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	1.9	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	0.37	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	97	J	200	26	ug/L	1		6020	Total Recoverable
Manganese	580		50	0.83	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-JY-1034 (Continued)

Lab Sample ID: 240-10274-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	4.9	J	20	0.20	ug/L	1		6020	Total Recoverable
Selenium	0.88	J	5.0	0.57	ug/L	1		6020	Total Recoverable
Thallium	0.27	J B	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	2.7	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-JY-1035

Lab Sample ID: 240-10274-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.38	J	1.0	0.16	ug/L	1		8260B	Total/NA
1,1-Dichloroethane	11		1.0	0.15	ug/L	1		8260B	Total/NA
Vinyl chloride	1.6		1.0	0.22	ug/L	1		8260B	Total/NA
1,1,1-Trichloroethane	24		1.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.17	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	2.2		1.0	0.19	ug/L	1		8260B	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane	0.62	J	1.0	0.28	ug/L	1		8260B	Total/NA
Antimony	0.19	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	2.9	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	55	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.78	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	1.6	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Manganese	210		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	3.8	J	20	0.20	ug/L	1		6020	Total Recoverable
Thallium	0.29	J B	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	2.8	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-JY-1036

Lab Sample ID: 240-10274-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.5	J	67	7.3	ug/L	6.67		8260B	Total/NA
Chloroform	5.0	J	6.7	1.1	ug/L	6.67		8260B	Total/NA
Tetrachloroethene	230		6.7	1.9	ug/L	6.67		8260B	Total/NA
Trichloroethene	6.0	J	6.7	1.1	ug/L	6.67		8260B	Total/NA
Vinyl chloride	7.3		6.7	1.5	ug/L	6.67		8260B	Total/NA
1,1,1-Trichloroethane	4.2	J	6.7	1.5	ug/L	6.67		8260B	Total/NA
cis-1,2-Dichloroethene	19		6.7	1.1	ug/L	6.67		8260B	Total/NA
Aluminum	75		50	19	ug/L	1		6020	Total Recoverable
Antimony	0.30	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	1.8	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	39	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.12	J	20	0.058	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-JY-1036 (Continued) — Lab Sample ID: 240-10274-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	1.0	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	540		200	26	ug/L	1		6020	Total Recoverable
Manganese	60		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	0.57	J	20	0.20	ug/L	1		6020	Total Recoverable
Selenium	2.1	J	5.0	0.57	ug/L	1		6020	Total Recoverable
Thallium	0.24	J B	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	3.0	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-CB-1037 — Lab Sample ID: 240-10274-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.5	J B	10	1.1	ug/L	1		8260B	Total/NA
Arsenic	4.2	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	190	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.19	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	1.6	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	3500		200	26	ug/L	1		6020	Total Recoverable
Manganese	390		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	1.1	J	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.30	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Thallium	0.14	J B	2.0	0.14	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-CB-1038 — Lab Sample ID: 240-10274-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	29	J	50	19	ug/L	1		6020	Total Recoverable
Antimony	0.26	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	1.6	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	16	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.20	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	0.56	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Manganese	44	J	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	0.91	J	20	0.20	ug/L	1		6020	Total Recoverable
Zinc	2.7	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-CB-1039 — Lab Sample ID: 240-10274-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	3000		50	19	ug/L	1		6020	Total Recoverable
Antimony	1.0	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	2.2	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	16	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.87	J	20	0.058	ug/L	1		6020	Total Recoverable
Chromium	4.1	J	10	0.71	ug/L	1		6020	Total Recoverable
Copper	9.0	B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	2700		200	26	ug/L	1		6020	Total Recoverable
Manganese	18	J	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	3.9	J	20	0.20	ug/L	1		6020	Total Recoverable
Lead	1.6	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Selenium	0.87	J	5.0	0.57	ug/L	1		6020	Total Recoverable
Thallium	0.16	J B	2.0	0.14	ug/L	1		6020	Total Recoverable
Vanadium	8.3		4.0	0.44	ug/L	1		6020	Total Recoverable
Zinc	22	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-CB-1040 — Lab Sample ID: 240-10274-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J B	10	1.1	ug/L	1		8260B	Total/NA
Chloroform	0.61	J	1.0	0.16	ug/L	1		8260B	Total/NA
Methylene Chloride	0.44	J	5.0	0.33	ug/L	1		8260B	Total/NA
Aluminum	270		50	19	ug/L	1		6020	Total Recoverable
Antimony	0.54	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	6.6		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	76	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.11	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	1.3	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	180	J	200	26	ug/L	1		6020	Total Recoverable
Manganese	71		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	2.2	J	20	0.20	ug/L	1		6020	Total Recoverable
Vanadium	3.5	J	4.0	0.44	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-DR-1041 — Lab Sample ID: 240-10274-11

Client Sample ID: GW-17358-041712-DR-1041 (Continued)

Lab Sample ID: 240-10274-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.40	J	1.0	0.16	ug/L	1		8260B	Total/NA
Aluminum	50		50	19	ug/L	1		6020	Total Recoverable
Antimony	0.62	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	1.6	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	240	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	1.3	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	5.6	B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	150	J	200	26	ug/L	1		6020	Total Recoverable
Manganese	200		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	30		20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.71	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Thallium	0.14	J B	2.0	0.14	ug/L	1		6020	Total Recoverable
Vanadium	1.1	J	4.0	0.44	ug/L	1		6020	Total Recoverable
Zinc	5.3	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-DR-1042

Lab Sample ID: 240-10274-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	9.7		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	190	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.75	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	0.69	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	1700		200	26	ug/L	1		6020	Total Recoverable
Manganese	76		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	7.6	J	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.98	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Zinc	6.6	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-DR-1043

Lab Sample ID: 240-10274-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.43	J	1.0	0.17	ug/L	1		8260B	Total/NA
2-Methylnaphthalene	0.16	J	5.1	0.10	ug/L	1		8270C	Total/NA
Dibenzofuran	0.18	J	4.0	0.10	ug/L	1		8270C	Total/NA
Fluorene	0.14	J	5.1	0.10	ug/L	1		8270C	Total/NA
Phenanthrene	0.21	J	2.0	0.10	ug/L	1		8270C	Total/NA

Client Sample ID: GW-17358-041712-DR-1043 (Continued)

Lab Sample ID: 240-10274-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	60		50	19	ug/L	1		6020	Total Recoverable
Arsenic	33		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	100	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.65	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	2.4	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	2200		200	26	ug/L	1		6020	Total Recoverable
Manganese	53		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	46		20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.92	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Vanadium	1.7	J	4.0	0.44	ug/L	1		6020	Total Recoverable
Zinc	5.7	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-DR-1044

Lab Sample ID: 240-10274-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.17	J	1.0	0.13	ug/L	1		8260B	Total/NA
Toluene	0.30	J	1.0	0.13	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	1.8	J	5.0	0.17	ug/L	1		8260B	Total/NA
Arsenic	2.1	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	280	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	1.8	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	0.54	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	20000		200	26	ug/L	1		6020	Total Recoverable
Manganese	560		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	3.2	J	20	0.20	ug/L	1		6020	Total Recoverable
Cr (VI)	0.026		0.010	0.0020	mg/L	1		7196A	Total/NA

Client Sample ID: GW-17358-041712-DR-1045

Lab Sample ID: 240-10274-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.6	J B	10	1.1	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.0	J	5.0	0.80	ug/L	1		8270C	Total/NA
Aluminum	24	J	50	19	ug/L	1		6020	Total Recoverable
Antimony	0.39	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	1.8	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	88	J B	100	0.19	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-DR-1045 (Continued)

Lab Sample ID: 240-10274-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	1.2	J	10	0.71	ug/L	1		6020	Total Recoverable
Copper	1.9	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Manganese	0.98	J	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	0.60	J	20	0.20	ug/L	1		6020	Total Recoverable
Selenium	2.9	J	5.0	0.57	ug/L	1		6020	Total Recoverable
Thallium	0.16	J B	2.0	0.14	ug/L	1		6020	Total Recoverable
Vanadium	1.3	J	4.0	0.44	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-DR-1046

Lab Sample ID: 240-10274-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.5	J	10	1.1	ug/L	1		8260B	Total/NA
2-Butanone (MEK)	1.7	J	10	0.57	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.1	J	4.9	0.78	ug/L	1		8270C	Total/NA
Arsenic	7.5		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	250	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	1.0	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	0.54	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	3600		200	26	ug/L	1		6020	Total Recoverable
Manganese	600		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	1.7	J	20	0.20	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-DR-1047

Lab Sample ID: 240-10274-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J	10	1.1	ug/L	1		8260B	Total/NA
Aluminum	23	J	50	19	ug/L	1		6020	Total Recoverable
Antimony	0.28	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	1.1	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	50	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.25	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	1.5	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Manganese	66		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	1.8	J	20	0.20	ug/L	1		6020	Total Recoverable
Selenium	0.57	J	5.0	0.57	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-DR-1047 (Continued)

Lab Sample ID: 240-10274-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	0.15	J B	2.0	0.14	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041712-DR-1048

Lab Sample ID: 240-10274-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.8	J	10	1.1	ug/L	1		8260B	Total/NA
Carbon disulfide	0.17	J	5.0	0.13	ug/L	1		8260B	Total/NA
2-Methylnaphthalene	0.22	J	5.0	0.10	ug/L	1		8270C	Total/NA
Bis(2-ethylhexyl) phthalate	2.1	J	5.0	0.80	ug/L	1		8270C	Total/NA
Naphthalene	0.23	J	5.0	0.10	ug/L	1		8270C	Total/NA
Aluminum	160		50	19	ug/L	1		6020	Total Recoverable
Antimony	0.20	J	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	18		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	450	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.32	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	1.0	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	1500		200	26	ug/L	1		6020	Total Recoverable
Manganese	130		50	0.83	ug/L	1		6020	Total Recoverable
Nickel	1.4	J	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.50	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Vanadium	0.44	J	4.0	0.44	ug/L	1		6020	Total Recoverable
Zinc	3.7	J B	50	2.3	ug/L	1		6020	Total Recoverable
Cr (VI)	0.0024	J	0.010	0.0020	mg/L	1		7196A	Total/NA

Client Sample ID: TB-17358-041712

Lab Sample ID: 240-10274-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	2.0	J	10	1.1	ug/L	1		8260B	Total/NA
Methylene Chloride	0.41	J	5.0	0.33	ug/L	1		8260B	Total/NA

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NC
8270C	TCL Semivolatile Compounds (OLMO4.2)	SW846	TAL NC
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL NC
6020	Metals (ICP/MS)	SW846	TAL NC
7470A	Mercury (CVAA)	SW846	TAL NC
7196A	Chromium, Hexavalent	SW846	TAL NC
7196A	Chromium, Trivalent (Colorimetric)	SW846	TAL NC
9012A	Cyanide, Amenable	SW846	TAL NC

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NC = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-JY-1031
Date Collected: 04/17/12 09:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	83	U	83	9.2	ug/L			04/24/12 19:34	8.33
Benzene	8.3	U	8.3	1.1	ug/L			04/24/12 19:34	8.33
Bromodichloromethane	8.3	U	8.3	1.2	ug/L			04/24/12 19:34	8.33
Bromoform	8.3	U	8.3	5.3	ug/L			04/24/12 19:34	8.33
Bromomethane	8.3	U	8.3	3.4	ug/L			04/24/12 19:34	8.33
2-Butanone (MEK)	83	U	83	4.7	ug/L			04/24/12 19:34	8.33
Carbon disulfide	42	U	42	1.1	ug/L			04/24/12 19:34	8.33
Carbon tetrachloride	8.3	U	8.3	1.1	ug/L			04/24/12 19:34	8.33
Chlorobenzene	8.3	U	8.3	1.2	ug/L			04/24/12 19:34	8.33
Chloroethane	8.3	U	8.3	2.4	ug/L			04/24/12 19:34	8.33
Chloroform	8.3	U	8.3	1.3	ug/L			04/24/12 19:34	8.33
Chloromethane	8.3	U	8.3	2.5	ug/L			04/24/12 19:34	8.33
1,1-Dichloroethane	**4.1**	**J**	8.3	1.2	ug/L			04/24/12 19:34	8.33
1,2-Dichloroethane	8.3	U	8.3	1.8	ug/L			04/24/12 19:34	8.33
1,1-Dichloroethene	8.3	U	8.3	1.6	ug/L			04/24/12 19:34	8.33
1,2-Dichloropropane	8.3	U	8.3	1.5	ug/L			04/24/12 19:34	8.33
cis-1,3-Dichloropropene	8.3	U	8.3	1.2	ug/L			04/24/12 19:34	8.33
trans-1,3-Dichloropropene	8.3	U	8.3	1.6	ug/L			04/24/12 19:34	8.33
Ethylbenzene	8.3	U	8.3	1.4	ug/L			04/24/12 19:34	8.33
2-Hexanone	83	U	83	3.4	ug/L			04/24/12 19:34	8.33
Methylene Chloride	42	U	42	2.7	ug/L			04/24/12 19:34	8.33
4-Methyl-2-pentanone (MIBK)	83	U	83	2.7	ug/L			04/24/12 19:34	8.33
Styrene	8.3	U	8.3	0.92	ug/L			04/24/12 19:34	8.33
1,1,2,2-Tetrachloroethane	8.3	U	8.3	1.5	ug/L			04/24/12 19:34	8.33
Tetrachloroethene	**180**		8.3	2.4	ug/L			04/24/12 19:34	8.33
Toluene	8.3	U	8.3	1.1	ug/L			04/24/12 19:34	8.33
Trichloroethene	**14**		8.3	1.4	ug/L			04/24/12 19:34	8.33
Vinyl chloride	8.3	U	8.3	1.8	ug/L			04/24/12 19:34	8.33
Xylenes, Total	17	U	17	2.3	ug/L			04/24/12 19:34	8.33
1,1,1-Trichloroethane	**9.0**		8.3	1.8	ug/L			04/24/12 19:34	8.33
1,1,2-Trichloroethane	8.3	U	8.3	2.2	ug/L			04/24/12 19:34	8.33
Cyclohexane	8.3	U	8.3	1.0	ug/L			04/24/12 19:34	8.33
1,2-Dibromo-3-Chloropropane	8.3	U	8.3	5.6	ug/L			04/24/12 19:34	8.33
1,2-Dibromoethane	8.3	U	8.3	2.0	ug/L			04/24/12 19:34	8.33
Dichlorodifluoromethane	8.3	U	8.3	2.6	ug/L			04/24/12 19:34	8.33
cis-1,2-Dichloroethene	**53**		8.3	1.4	ug/L			04/24/12 19:34	8.33
trans-1,2-Dichloroethene	**3.6**	**J**	8.3	1.6	ug/L			04/24/12 19:34	8.33
Isopropylbenzene	8.3	U	8.3	1.1	ug/L			04/24/12 19:34	8.33
Methyl acetate	83	U	83	3.2	ug/L			04/24/12 19:34	8.33
Methyl tert-butyl ether	42	U	42	1.4	ug/L			04/24/12 19:34	8.33
1,1,2-Trichloro-1,2,2-trifluoroethane	8.3	U	8.3	2.3	ug/L			04/24/12 19:34	8.33
1,2,4-Trichlorobenzene	8.3	U	8.3	1.2	ug/L			04/24/12 19:34	8.33
1,2-Dichlorobenzene	8.3	U	8.3	1.1	ug/L			04/24/12 19:34	8.33
1,3-Dichlorobenzene	8.3	U	8.3	1.2	ug/L			04/24/12 19:34	8.33
1,4-Dichlorobenzene	8.3	U	8.3	1.1	ug/L			04/24/12 19:34	8.33
Trichlorofluoromethane	8.3	U	8.3	1.7	ug/L			04/24/12 19:34	8.33
Dibromochloromethane	8.3	U	8.3	1.5	ug/L			04/24/12 19:34	8.33
Methylcyclohexane	8.3	U	8.3	1.1	ug/L			04/24/12 19:34	8.33

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*63 - 129*		*04/24/12 19:34*	*8.33*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-JY-1031
Date Collected: 04/17/12 09:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-1
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		66 - 117		04/24/12 19:34	8.33
Toluene-d8 (Surr)	93		74 - 115		04/24/12 19:34	8.33
Dibromofluoromethane (Surr)	95		75 - 121		04/24/12 19:34	8.33

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-JY-1032
Date Collected: 04/17/12 09:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	83	U	83	9.2	ug/L			04/24/12 19:57	8.33
Benzene	8.3	U	8.3	1.1	ug/L			04/24/12 19:57	8.33
Bromodichloromethane	8.3	U	8.3	1.2	ug/L			04/24/12 19:57	8.33
Bromoform	8.3	U	8.3	5.3	ug/L			04/24/12 19:57	8.33
Bromomethane	8.3	U	8.3	3.4	ug/L			04/24/12 19:57	8.33
2-Butanone (MEK)	83	U	83	4.7	ug/L			04/24/12 19:57	8.33
Carbon disulfide	42	U	42	1.1	ug/L			04/24/12 19:57	8.33
Carbon tetrachloride	8.3	U	8.3	1.1	ug/L			04/24/12 19:57	8.33
Chlorobenzene	8.3	U	8.3	1.2	ug/L			04/24/12 19:57	8.33
Chloroethane	8.3	U	8.3	2.4	ug/L			04/24/12 19:57	8.33
Chloroform	8.3	U	8.3	1.3	ug/L			04/24/12 19:57	8.33
Chloromethane	8.3	U	8.3	2.5	ug/L			04/24/12 19:57	8.33
1,1-Dichloroethane	**4.6**	**J**	8.3	1.2	ug/L			04/24/12 19:57	8.33
1,2-Dichloroethane	8.3	U	8.3	1.8	ug/L			04/24/12 19:57	8.33
1,1-Dichloroethene	8.3	U	8.3	1.6	ug/L			04/24/12 19:57	8.33
1,2-Dichloropropane	8.3	U	8.3	1.5	ug/L			04/24/12 19:57	8.33
cis-1,3-Dichloropropene	8.3	U	8.3	1.2	ug/L			04/24/12 19:57	8.33
trans-1,3-Dichloropropene	8.3	U	8.3	1.6	ug/L			04/24/12 19:57	8.33
Ethylbenzene	8.3	U	8.3	1.4	ug/L			04/24/12 19:57	8.33
2-Hexanone	83	U	83	3.4	ug/L			04/24/12 19:57	8.33
Methylene Chloride	42	U	42	2.7	ug/L			04/24/12 19:57	8.33
4-Methyl-2-pentanone (MIBK)	83	U	83	2.7	ug/L			04/24/12 19:57	8.33
Styrene	8.3	U	8.3	0.92	ug/L			04/24/12 19:57	8.33
1,1,2,2-Tetrachloroethane	8.3	U	8.3	1.5	ug/L			04/24/12 19:57	8.33
Tetrachloroethene	**180**		8.3	2.4	ug/L			04/24/12 19:57	8.33
Toluene	8.3	U	8.3	1.1	ug/L			04/24/12 19:57	8.33
Trichloroethene	**14**		8.3	1.4	ug/L			04/24/12 19:57	8.33
Vinyl chloride	8.3	U	8.3	1.8	ug/L			04/24/12 19:57	8.33
Xylenes, Total	17	U	17	2.3	ug/L			04/24/12 19:57	8.33
1,1,1-Trichloroethane	**9.0**		8.3	1.8	ug/L			04/24/12 19:57	8.33
1,1,2-Trichloroethane	8.3	U	8.3	2.2	ug/L			04/24/12 19:57	8.33
Cyclohexane	8.3	U	8.3	1.0	ug/L			04/24/12 19:57	8.33
1,2-Dibromo-3-Chloropropane	8.3	U	8.3	5.6	ug/L			04/24/12 19:57	8.33
1,2-Dibromoethane	8.3	U	8.3	2.0	ug/L			04/24/12 19:57	8.33
Dichlorodifluoromethane	8.3	U	8.3	2.6	ug/L			04/24/12 19:57	8.33
cis-1,2-Dichloroethene	**57**		8.3	1.4	ug/L			04/24/12 19:57	8.33
trans-1,2-Dichloroethene	**3.7**	**J**	8.3	1.6	ug/L			04/24/12 19:57	8.33
Isopropylbenzene	8.3	U	8.3	1.1	ug/L			04/24/12 19:57	8.33
Methyl acetate	83	U	83	3.2	ug/L			04/24/12 19:57	8.33
Methyl tert-butyl ether	42	U	42	1.4	ug/L			04/24/12 19:57	8.33
1,1,2-Trichloro-1,2,2-trifluoroethane	8.3	U	8.3	2.3	ug/L			04/24/12 19:57	8.33
1,2,4-Trichlorobenzene	8.3	U	8.3	1.2	ug/L			04/24/12 19:57	8.33
1,2-Dichlorobenzene	8.3	U	8.3	1.1	ug/L			04/24/12 19:57	8.33
1,3-Dichlorobenzene	8.3	U	8.3	1.2	ug/L			04/24/12 19:57	8.33
1,4-Dichlorobenzene	8.3	U	8.3	1.1	ug/L			04/24/12 19:57	8.33
Trichlorofluoromethane	8.3	U	8.3	1.7	ug/L			04/24/12 19:57	8.33
Dibromochloromethane	8.3	U	8.3	1.5	ug/L			04/24/12 19:57	8.33
Methylcyclohexane	8.3	U	8.3	1.1	ug/L			04/24/12 19:57	8.33

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*63 - 129*		*04/24/12 19:57*	*8.33*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-JY-1032
Date Collected: 04/17/12 09:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		66 - 117		04/24/12 19:57	8.33
Toluene-d8 (Surr)	90		74 - 115		04/24/12 19:57	8.33
Dibromofluoromethane (Surr)	91		75 - 121		04/24/12 19:57	8.33

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-JY-1033
Date Collected: 04/17/12 09:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/24/12 20:20	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/12 20:20	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/12 20:20	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/12 20:20	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/12 20:20	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/12 20:20	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/12 20:20	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/12 20:20	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 20:20	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/12 20:20	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/24/12 20:20	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/12 20:20	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/24/12 20:20	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 20:20	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 20:20	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/12 20:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/12 20:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/12 20:20	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/12 20:20	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/12 20:20	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/12 20:20	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/12 20:20	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/12 20:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/12 20:20	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/12 20:20	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/12 20:20	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 20:20	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/12 20:20	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/12 20:20	1
1,1,1-Trichloroethane	**1.4**		1.0	0.22	ug/L			04/24/12 20:20	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/12 20:20	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/12 20:20	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/12 20:20	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/12 20:20	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/12 20:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 20:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 20:20	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/12 20:20	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/12 20:20	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/24/12 20:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/12 20:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 20:20	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 20:20	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/12 20:20	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 20:20	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/12 20:20	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/12 20:20	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/12 20:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*63 - 129*		*04/24/12 20:20*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-JY-1033
Date Collected: 04/17/12 09:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		66 - 117		04/24/12 20:20	1
Toluene-d8 (Surr)	90		74 - 115		04/24/12 20:20	1
Dibromofluoromethane (Surr)	90		75 - 121		04/24/12 20:20	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-JY-1034
Date Collected: 04/17/12 11:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/24/12 20:42	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/12 20:42	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/12 20:42	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/12 20:42	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/12 20:42	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/12 20:42	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/12 20:42	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/12 20:42	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 20:42	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/12 20:42	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/24/12 20:42	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/12 20:42	1
1,1-Dichloroethane	**2.0**		1.0	0.15	ug/L			04/24/12 20:42	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 20:42	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 20:42	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/12 20:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/12 20:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/12 20:42	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/12 20:42	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/12 20:42	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/12 20:42	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/12 20:42	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/12 20:42	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/12 20:42	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/12 20:42	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/12 20:42	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 20:42	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/12 20:42	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/12 20:42	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 20:42	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/12 20:42	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/12 20:42	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/12 20:42	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/12 20:42	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/12 20:42	1
cis-1,2-Dichloroethene	**13**		1.0	0.17	ug/L			04/24/12 20:42	1
trans-1,2-Dichloroethene	**1.9**		1.0	0.19	ug/L			04/24/12 20:42	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/12 20:42	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/12 20:42	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/24/12 20:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/12 20:42	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 20:42	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 20:42	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/12 20:42	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 20:42	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/12 20:42	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/12 20:42	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/12 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*63 - 129*		*04/24/12 20:42*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-JY-1034
Date Collected: 04/17/12 11:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-4
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		66 - 117		04/24/12 20:42	1
Toluene-d8 (Surr)	91		74 - 115		04/24/12 20:42	1
Dibromofluoromethane (Surr)	96		75 - 121		04/24/12 20:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-JY-1035
Date Collected: 04/17/12 14:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/24/12 21:05	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/12 21:05	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/12 21:05	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/12 21:05	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/12 21:05	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/12 21:05	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/12 21:05	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/12 21:05	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 21:05	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/12 21:05	1
Chloroform	**0.38**	**J**	1.0	0.16	ug/L			04/24/12 21:05	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/12 21:05	1
1,1-Dichloroethane	**11**		1.0	0.15	ug/L			04/24/12 21:05	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 21:05	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 21:05	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/12 21:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/12 21:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/12 21:05	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/12 21:05	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/12 21:05	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/12 21:05	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/12 21:05	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/12 21:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/12 21:05	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/12 21:05	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/12 21:05	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 21:05	1
Vinyl chloride	**1.6**		1.0	0.22	ug/L			04/24/12 21:05	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/12 21:05	1
1,1,1-Trichloroethane	**24**		1.0	0.22	ug/L			04/24/12 21:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/12 21:05	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/12 21:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/12 21:05	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/12 21:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/12 21:05	1
cis-1,2-Dichloroethene	**14**		1.0	0.17	ug/L			04/24/12 21:05	1
trans-1,2-Dichloroethene	**2.2**		1.0	0.19	ug/L			04/24/12 21:05	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/12 21:05	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/12 21:05	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/24/12 21:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.62**	**J**	1.0	0.28	ug/L			04/24/12 21:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 21:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 21:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/12 21:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 21:05	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/12 21:05	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/12 21:05	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/12 21:05	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 129		04/24/12 21:05	1
4-Bromofluorobenzene (Surr)	88		66 - 117		04/24/12 21:05	1
Toluene-d8 (Surr)	93		74 - 115		04/24/12 21:05	1
Dibromofluoromethane (Surr)	96		75 - 121		04/24/12 21:05	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-JY-1036
Date Collected: 04/17/12 11:30
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.5**	**J**	67	7.3	ug/L			04/25/12 11:44	6.67
Benzene	6.7	U	6.7	0.87	ug/L			04/25/12 11:44	6.67
Bromodichloromethane	6.7	U	6.7	1.0	ug/L			04/25/12 11:44	6.67
Bromoform	6.7	U	6.7	4.3	ug/L			04/25/12 11:44	6.67
Bromomethane	6.7	U	6.7	2.7	ug/L			04/25/12 11:44	6.67
2-Butanone (MEK)	67	U	67	3.8	ug/L			04/25/12 11:44	6.67
Carbon disulfide	33	U	33	0.87	ug/L			04/25/12 11:44	6.67
Carbon tetrachloride	6.7	U	6.7	0.87	ug/L			04/25/12 11:44	6.67
Chlorobenzene	6.7	U	6.7	1.0	ug/L			04/25/12 11:44	6.67
Chloroethane	6.7	U	6.7	1.9	ug/L			04/25/12 11:44	6.67
Chloroform	**5.0**	**J**	6.7	1.1	ug/L			04/25/12 11:44	6.67
Chloromethane	6.7	U	6.7	2.0	ug/L			04/25/12 11:44	6.67
1,1-Dichloroethane	6.7	U	6.7	1.0	ug/L			04/25/12 11:44	6.67
1,2-Dichloroethane	6.7	U	6.7	1.5	ug/L			04/25/12 11:44	6.67
1,1-Dichloroethene	6.7	U	6.7	1.3	ug/L			04/25/12 11:44	6.67
1,2-Dichloropropane	6.7	U	6.7	1.2	ug/L			04/25/12 11:44	6.67
cis-1,3-Dichloropropene	6.7	U	6.7	0.93	ug/L			04/25/12 11:44	6.67
trans-1,3-Dichloropropene	6.7	U	6.7	1.3	ug/L			04/25/12 11:44	6.67
Ethylbenzene	6.7	U	6.7	1.1	ug/L			04/25/12 11:44	6.67
2-Hexanone	67	U	67	2.7	ug/L			04/25/12 11:44	6.67
Methylene Chloride	33	U	33	2.2	ug/L			04/25/12 11:44	6.67
4-Methyl-2-pentanone (MIBK)	67	U	67	2.1	ug/L			04/25/12 11:44	6.67
Styrene	6.7	U	6.7	0.73	ug/L			04/25/12 11:44	6.67
1,1,2,2-Tetrachloroethane	6.7	U	6.7	1.2	ug/L			04/25/12 11:44	6.67
Tetrachloroethene	**230**		6.7	1.9	ug/L			04/25/12 11:44	6.67
Toluene	6.7	U	6.7	0.87	ug/L			04/25/12 11:44	6.67
Trichloroethene	**6.0**	**J**	6.7	1.1	ug/L			04/25/12 11:44	6.67
Vinyl chloride	**7.3**		6.7	1.5	ug/L			04/25/12 11:44	6.67
Xylenes, Total	13	U	13	1.9	ug/L			04/25/12 11:44	6.67
1,1,1-Trichloroethane	**4.2**	**J**	6.7	1.5	ug/L			04/25/12 11:44	6.67
1,1,2-Trichloroethane	6.7	U	6.7	1.8	ug/L			04/25/12 11:44	6.67
Cyclohexane	6.7	U	6.7	0.80	ug/L			04/25/12 11:44	6.67
1,2-Dibromo-3-Chloropropane	6.7	U	6.7	4.5	ug/L			04/25/12 11:44	6.67
1,2-Dibromoethane	6.7	U	6.7	1.6	ug/L			04/25/12 11:44	6.67
Dichlorodifluoromethane	6.7	U	6.7	2.1	ug/L			04/25/12 11:44	6.67
cis-1,2-Dichloroethene	**19**		6.7	1.1	ug/L			04/25/12 11:44	6.67
trans-1,2-Dichloroethene	6.7	U	6.7	1.3	ug/L			04/25/12 11:44	6.67
Isopropylbenzene	6.7	U	6.7	0.87	ug/L			04/25/12 11:44	6.67
Methyl acetate	67	U	67	2.5	ug/L			04/25/12 11:44	6.67
Methyl tert-butyl ether	33	U	33	1.1	ug/L			04/25/12 11:44	6.67
1,1,2-Trichloro-1,2,2-trifluoroethane	6.7	U	6.7	1.9	ug/L			04/25/12 11:44	6.67
1,2,4-Trichlorobenzene	6.7	U	6.7	1.0	ug/L			04/25/12 11:44	6.67
1,2-Dichlorobenzene	6.7	U	6.7	0.87	ug/L			04/25/12 11:44	6.67
1,3-Dichlorobenzene	6.7	U	6.7	0.93	ug/L			04/25/12 11:44	6.67
1,4-Dichlorobenzene	6.7	U	6.7	0.87	ug/L			04/25/12 11:44	6.67
Trichlorofluoromethane	6.7	U	6.7	1.4	ug/L			04/25/12 11:44	6.67
Dibromochloromethane	6.7	U	6.7	1.2	ug/L			04/25/12 11:44	6.67
Methylcyclohexane	6.7	U	6.7	0.87	ug/L			04/25/12 11:44	6.67

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*63 - 129*		*04/25/12 11:44*	*6.67*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-JY-1036
Date Collected: 04/17/12 11:30
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-6
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		66 - 117		04/25/12 11:44	6.67
Toluene-d8 (Surr)	96		74 - 115		04/25/12 11:44	6.67
Dibromofluoromethane (Surr)	96		75 - 121		04/25/12 11:44	6.67

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-CB-1037
Date Collected: 04/17/12 09:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.5**	**J B**	10	1.1	ug/L			04/24/12 21:50	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/12 21:50	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/12 21:50	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/12 21:50	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/12 21:50	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/12 21:50	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/12 21:50	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/12 21:50	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 21:50	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/12 21:50	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/24/12 21:50	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/12 21:50	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/24/12 21:50	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 21:50	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 21:50	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/12 21:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/12 21:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/12 21:50	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/12 21:50	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/12 21:50	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/12 21:50	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/12 21:50	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/12 21:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/12 21:50	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/12 21:50	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/12 21:50	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 21:50	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/12 21:50	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/12 21:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 21:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/12 21:50	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/12 21:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/12 21:50	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/12 21:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/12 21:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 21:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 21:50	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/12 21:50	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/12 21:50	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/24/12 21:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/12 21:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 21:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 21:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/12 21:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 21:50	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/12 21:50	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/12 21:50	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/12 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*63 - 129*		*04/24/12 21:50*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-CB-1037
Date Collected: 04/17/12 09:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-7
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		66 - 117		04/24/12 21:50	1
Toluene-d8 (Surr)	89		74 - 115		04/24/12 21:50	1
Dibromofluoromethane (Surr)	93		75 - 121		04/24/12 21:50	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-CB-1038
Date Collected: 04/17/12 11:35
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/24/12 22:13	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/12 22:13	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/12 22:13	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/12 22:13	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/12 22:13	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/12 22:13	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/12 22:13	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/12 22:13	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 22:13	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/12 22:13	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/24/12 22:13	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/12 22:13	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/24/12 22:13	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 22:13	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 22:13	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/12 22:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/12 22:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/12 22:13	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/12 22:13	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/12 22:13	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/12 22:13	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/12 22:13	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/12 22:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/12 22:13	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/12 22:13	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/12 22:13	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 22:13	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/12 22:13	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/12 22:13	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 22:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/12 22:13	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/12 22:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/12 22:13	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/12 22:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/12 22:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 22:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 22:13	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/12 22:13	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/12 22:13	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/24/12 22:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/12 22:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 22:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 22:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/12 22:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 22:13	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/12 22:13	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/12 22:13	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/12 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*63 - 129*		*04/24/12 22:13*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-CB-1038
Date Collected: 04/17/12 11:35
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-8
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		66 - 117		04/24/12 22:13	1
Toluene-d8 (Surr)	88		74 - 115		04/24/12 22:13	1
Dibromofluoromethane (Surr)	94		75 - 121		04/24/12 22:13	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-CB-1039
Date Collected: 04/17/12 13:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/24/12 22:36	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/12 22:36	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/12 22:36	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/12 22:36	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/12 22:36	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/12 22:36	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/12 22:36	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/12 22:36	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 22:36	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/12 22:36	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/24/12 22:36	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/12 22:36	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/24/12 22:36	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 22:36	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 22:36	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/12 22:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/12 22:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/12 22:36	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/12 22:36	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/12 22:36	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/12 22:36	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/12 22:36	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/12 22:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/12 22:36	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/12 22:36	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/12 22:36	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 22:36	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/12 22:36	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/12 22:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 22:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/12 22:36	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/12 22:36	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/12 22:36	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/12 22:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/12 22:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 22:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 22:36	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/12 22:36	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/12 22:36	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/24/12 22:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/12 22:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 22:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 22:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/12 22:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 22:36	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/12 22:36	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/12 22:36	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/12 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*63 - 129*		*04/24/12 22:36*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-CB-1039
Date Collected: 04/17/12 13:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-9
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		66 - 117		04/24/12 22:36	1
Toluene-d8 (Surr)	89		74 - 115		04/24/12 22:36	1
Dibromofluoromethane (Surr)	91		75 - 121		04/24/12 22:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-CB-1040
Date Collected: 04/17/12 15:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.0**	**J B**	10	1.1	ug/L			04/24/12 22:58	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/12 22:58	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/12 22:58	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/12 22:58	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/12 22:58	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/12 22:58	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/12 22:58	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/12 22:58	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 22:58	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/12 22:58	1
Chloroform	**0.61**	**J**	1.0	0.16	ug/L			04/24/12 22:58	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/12 22:58	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/24/12 22:58	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 22:58	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 22:58	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/12 22:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/12 22:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/12 22:58	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/12 22:58	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/12 22:58	1
Methylene Chloride	**0.44**	**J**	5.0	0.33	ug/L			04/24/12 22:58	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/12 22:58	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/12 22:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/12 22:58	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/12 22:58	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/12 22:58	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 22:58	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/12 22:58	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/12 22:58	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 22:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/12 22:58	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/12 22:58	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/12 22:58	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/12 22:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/12 22:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 22:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 22:58	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/12 22:58	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/12 22:58	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/24/12 22:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/12 22:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 22:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 22:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/12 22:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 22:58	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/12 22:58	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/12 22:58	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/12 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*63 - 129*		*04/24/12 22:58*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-CB-1040
Date Collected: 04/17/12 15:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-10
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		66 - 117		04/24/12 22:58	1
Toluene-d8 (Surr)	90		74 - 115		04/24/12 22:58	1
Dibromofluoromethane (Surr)	94		75 - 121		04/24/12 22:58	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-DR-1041
Date Collected: 04/17/12 09:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/24/12 23:21	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/12 23:21	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/12 23:21	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/12 23:21	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/12 23:21	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/12 23:21	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/12 23:21	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/12 23:21	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 23:21	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/12 23:21	1
Chloroform	**0.40**	**J**	1.0	0.16	ug/L			04/24/12 23:21	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/12 23:21	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/24/12 23:21	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 23:21	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 23:21	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/12 23:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/12 23:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/12 23:21	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/12 23:21	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/12 23:21	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/12 23:21	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/12 23:21	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/12 23:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/12 23:21	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/12 23:21	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/12 23:21	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 23:21	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/12 23:21	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/12 23:21	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 23:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/12 23:21	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/12 23:21	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/12 23:21	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/12 23:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/12 23:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 23:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 23:21	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/12 23:21	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/12 23:21	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/24/12 23:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/12 23:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 23:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 23:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/12 23:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 23:21	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/12 23:21	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/12 23:21	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/12 23:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 129*		*04/24/12 23:21*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-DR-1041
Date Collected: 04/17/12 09:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-11
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		66 - 117		04/24/12 23:21	1
Toluene-d8 (Surr)	92		74 - 115		04/24/12 23:21	1
Dibromofluoromethane (Surr)	94		75 - 121		04/24/12 23:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-DR-1042
Date Collected: 04/17/12 10:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/24/12 23:44	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/12 23:44	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/12 23:44	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/12 23:44	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/12 23:44	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/12 23:44	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/12 23:44	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/12 23:44	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 23:44	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/12 23:44	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/24/12 23:44	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/12 23:44	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/24/12 23:44	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 23:44	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 23:44	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/12 23:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/12 23:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/12 23:44	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/12 23:44	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/12 23:44	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/12 23:44	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/12 23:44	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/12 23:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/12 23:44	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/12 23:44	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/12 23:44	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 23:44	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/12 23:44	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/12 23:44	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 23:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/12 23:44	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/12 23:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/12 23:44	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/12 23:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/12 23:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 23:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 23:44	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/12 23:44	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/12 23:44	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/24/12 23:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/12 23:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 23:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 23:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/12 23:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 23:44	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/12 23:44	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/12 23:44	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/12 23:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*63 - 129*		*04/24/12 23:44*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-DR-1042
Date Collected: 04/17/12 10:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-12
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		66 - 117		04/24/12 23:44	1
Toluene-d8 (Surr)	90		74 - 115		04/24/12 23:44	1
Dibromofluoromethane (Surr)	91		75 - 121		04/24/12 23:44	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-DR-1043
Date Collected: 04/17/12 11:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/25/12 00:06	1
Benzene	1.0	U	1.0	0.13	ug/L			04/25/12 00:06	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/25/12 00:06	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/25/12 00:06	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/25/12 00:06	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/25/12 00:06	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/25/12 00:06	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/25/12 00:06	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 00:06	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/25/12 00:06	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/25/12 00:06	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/25/12 00:06	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/25/12 00:06	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 00:06	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 00:06	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/25/12 00:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/25/12 00:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/25/12 00:06	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/25/12 00:06	1
2-Hexanone	10	U	10	0.41	ug/L			04/25/12 00:06	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/25/12 00:06	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/25/12 00:06	1
Styrene	1.0	U	1.0	0.11	ug/L			04/25/12 00:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/25/12 00:06	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/25/12 00:06	1
Toluene	1.0	U	1.0	0.13	ug/L			04/25/12 00:06	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 00:06	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/25/12 00:06	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/25/12 00:06	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 00:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/25/12 00:06	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/25/12 00:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/25/12 00:06	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/25/12 00:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/25/12 00:06	1
cis-1,2-Dichloroethene	**0.43**	**J**	1.0	0.17	ug/L			04/25/12 00:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 00:06	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/25/12 00:06	1
Methyl acetate	10	U	10	0.38	ug/L			04/25/12 00:06	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/25/12 00:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/25/12 00:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 00:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 00:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/25/12 00:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 00:06	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/25/12 00:06	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/25/12 00:06	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/25/12 00:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*63 - 129*		*04/25/12 00:06*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-DR-1043
Date Collected: 04/17/12 11:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-13
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		66 - 117		04/25/12 00:06	1
Toluene-d8 (Surr)	92		74 - 115		04/25/12 00:06	1
Dibromofluoromethane (Surr)	94		75 - 121		04/25/12 00:06	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-DR-1044
Date Collected: 04/17/12 14:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/25/12 00:28	1
Benzene	**0.17**	**J**	1.0	0.13	ug/L			04/25/12 00:28	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/25/12 00:28	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/25/12 00:28	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/25/12 00:28	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/25/12 00:28	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/25/12 00:28	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/25/12 00:28	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 00:28	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/25/12 00:28	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/25/12 00:28	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/25/12 00:28	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/25/12 00:28	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 00:28	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 00:28	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/25/12 00:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/25/12 00:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/25/12 00:28	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/25/12 00:28	1
2-Hexanone	10	U	10	0.41	ug/L			04/25/12 00:28	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/25/12 00:28	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/25/12 00:28	1
Styrene	1.0	U	1.0	0.11	ug/L			04/25/12 00:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/25/12 00:28	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/25/12 00:28	1
Toluene	**0.30**	**J**	1.0	0.13	ug/L			04/25/12 00:28	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 00:28	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/25/12 00:28	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/25/12 00:28	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 00:28	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/25/12 00:28	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/25/12 00:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/25/12 00:28	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/25/12 00:28	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/25/12 00:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 00:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 00:28	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/25/12 00:28	1
Methyl acetate	10	U	10	0.38	ug/L			04/25/12 00:28	1
Methyl tert-butyl ether	**1.8**	**J**	5.0	0.17	ug/L			04/25/12 00:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/25/12 00:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 00:28	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 00:28	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/25/12 00:28	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 00:28	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/25/12 00:28	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/25/12 00:28	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/25/12 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 129*		*04/25/12 00:28*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-DR-1044
Date Collected: 04/17/12 14:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-14
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		66 - 117		04/25/12 00:28	1
Toluene-d8 (Surr)	92		74 - 115		04/25/12 00:28	1
Dibromofluoromethane (Surr)	96		75 - 121		04/25/12 00:28	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-DR-1045
Date Collected: 04/17/12 10:20
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.6**	**J B**	10	1.1	ug/L			04/25/12 00:51	1
Benzene	1.0	U	1.0	0.13	ug/L			04/25/12 00:51	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/25/12 00:51	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/25/12 00:51	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/25/12 00:51	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/25/12 00:51	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/25/12 00:51	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/25/12 00:51	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 00:51	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/25/12 00:51	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/25/12 00:51	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/25/12 00:51	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/25/12 00:51	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 00:51	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 00:51	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/25/12 00:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/25/12 00:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/25/12 00:51	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/25/12 00:51	1
2-Hexanone	10	U	10	0.41	ug/L			04/25/12 00:51	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/25/12 00:51	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/25/12 00:51	1
Styrene	1.0	U	1.0	0.11	ug/L			04/25/12 00:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/25/12 00:51	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/25/12 00:51	1
Toluene	1.0	U	1.0	0.13	ug/L			04/25/12 00:51	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 00:51	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/25/12 00:51	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/25/12 00:51	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 00:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/25/12 00:51	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/25/12 00:51	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/25/12 00:51	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/25/12 00:51	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/25/12 00:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 00:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 00:51	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/25/12 00:51	1
Methyl acetate	10	U	10	0.38	ug/L			04/25/12 00:51	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/25/12 00:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/25/12 00:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 00:51	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 00:51	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/25/12 00:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 00:51	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/25/12 00:51	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/25/12 00:51	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/25/12 00:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*63 - 129*		*04/25/12 00:51*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-DR-1045
Date Collected: 04/17/12 10:20
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-15
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		66 - 117		04/25/12 00:51	1
Toluene-d8 (Surr)	91		74 - 115		04/25/12 00:51	1
Dibromofluoromethane (Surr)	93		75 - 121		04/25/12 00:51	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-DR-1046
Date Collected: 04/17/12 12:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**9.5**	**J**	10	1.1	ug/L			04/25/12 12:06	1
Benzene	1.0	U	1.0	0.13	ug/L			04/25/12 12:06	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/25/12 12:06	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/25/12 12:06	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/25/12 12:06	1
2-Butanone (MEK)	**1.7**	**J**	10	0.57	ug/L			04/25/12 12:06	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/25/12 12:06	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/25/12 12:06	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 12:06	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/25/12 12:06	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/25/12 12:06	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/25/12 12:06	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/25/12 12:06	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 12:06	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 12:06	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/25/12 12:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/25/12 12:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/25/12 12:06	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/25/12 12:06	1
2-Hexanone	10	U	10	0.41	ug/L			04/25/12 12:06	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/25/12 12:06	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/25/12 12:06	1
Styrene	1.0	U	1.0	0.11	ug/L			04/25/12 12:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/25/12 12:06	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/25/12 12:06	1
Toluene	1.0	U	1.0	0.13	ug/L			04/25/12 12:06	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 12:06	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/25/12 12:06	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/25/12 12:06	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 12:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/25/12 12:06	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/25/12 12:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/25/12 12:06	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/25/12 12:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/25/12 12:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 12:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 12:06	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/25/12 12:06	1
Methyl acetate	10	U	10	0.38	ug/L			04/25/12 12:06	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/25/12 12:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/25/12 12:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 12:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 12:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/25/12 12:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 12:06	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/25/12 12:06	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/25/12 12:06	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/25/12 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*63 - 129*		*04/25/12 12:06*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-DR-1046
Date Collected: 04/17/12 12:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-16
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		66 - 117		04/25/12 12:06	1
Toluene-d8 (Surr)	99		74 - 115		04/25/12 12:06	1
Dibromofluoromethane (Surr)	95		75 - 121		04/25/12 12:06	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-DR-1047
Date Collected: 04/17/12 15:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-17
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.0**	**J**	10	1.1	ug/L			04/25/12 12:28	1
Benzene	1.0	U	1.0	0.13	ug/L			04/25/12 12:28	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/25/12 12:28	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/25/12 12:28	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/25/12 12:28	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/25/12 12:28	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/25/12 12:28	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/25/12 12:28	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 12:28	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/25/12 12:28	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/25/12 12:28	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/25/12 12:28	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/25/12 12:28	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 12:28	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 12:28	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/25/12 12:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/25/12 12:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/25/12 12:28	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/25/12 12:28	1
2-Hexanone	10	U	10	0.41	ug/L			04/25/12 12:28	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/25/12 12:28	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/25/12 12:28	1
Styrene	1.0	U	1.0	0.11	ug/L			04/25/12 12:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/25/12 12:28	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/25/12 12:28	1
Toluene	1.0	U	1.0	0.13	ug/L			04/25/12 12:28	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 12:28	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/25/12 12:28	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/25/12 12:28	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 12:28	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/25/12 12:28	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/25/12 12:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/25/12 12:28	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/25/12 12:28	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/25/12 12:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 12:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 12:28	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/25/12 12:28	1
Methyl acetate	10	U	10	0.38	ug/L			04/25/12 12:28	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/25/12 12:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/25/12 12:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 12:28	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 12:28	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/25/12 12:28	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 12:28	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/25/12 12:28	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/25/12 12:28	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/25/12 12:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*63 - 129*		*04/25/12 12:28*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-DR-1047
Date Collected: 04/17/12 15:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-17
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		66 - 117		04/25/12 12:28	1
Toluene-d8 (Surr)	99		74 - 115		04/25/12 12:28	1
Dibromofluoromethane (Surr)	96		75 - 121		04/25/12 12:28	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041712-DR-1048
Date Collected: 04/17/12 15:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-18
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.8**	**J**	10	1.1	ug/L			04/25/12 12:51	1
Benzene	1.0	U	1.0	0.13	ug/L			04/25/12 12:51	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/25/12 12:51	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/25/12 12:51	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/25/12 12:51	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/25/12 12:51	1
Carbon disulfide	**0.17**	**J**	5.0	0.13	ug/L			04/25/12 12:51	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/25/12 12:51	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 12:51	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/25/12 12:51	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/25/12 12:51	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/25/12 12:51	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/25/12 12:51	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 12:51	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 12:51	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/25/12 12:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/25/12 12:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/25/12 12:51	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/25/12 12:51	1
2-Hexanone	10	U	10	0.41	ug/L			04/25/12 12:51	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/25/12 12:51	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/25/12 12:51	1
Styrene	1.0	U	1.0	0.11	ug/L			04/25/12 12:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/25/12 12:51	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/25/12 12:51	1
Toluene	1.0	U	1.0	0.13	ug/L			04/25/12 12:51	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 12:51	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/25/12 12:51	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/25/12 12:51	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 12:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/25/12 12:51	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/25/12 12:51	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/25/12 12:51	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/25/12 12:51	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/25/12 12:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 12:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 12:51	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/25/12 12:51	1
Methyl acetate	10	U	10	0.38	ug/L			04/25/12 12:51	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/25/12 12:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/25/12 12:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 12:51	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 12:51	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/25/12 12:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 12:51	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/25/12 12:51	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/25/12 12:51	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/25/12 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*63 - 129*		*04/25/12 12:51*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: GW-17358-041712-DR-1048
Date Collected: 04/17/12 15:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-18
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		66 - 117		04/25/12 12:51	1
Toluene-d8 (Surr)	99		74 - 115		04/25/12 12:51	1
Dibromofluoromethane (Surr)	95		75 - 121		04/25/12 12:51	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17358-041712
Date Collected: 04/17/12 00:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-19
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2.0**	**J**	10	1.1	ug/L			04/25/12 13:14	1
Benzene	1.0	U	1.0	0.13	ug/L			04/25/12 13:14	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/25/12 13:14	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/25/12 13:14	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/25/12 13:14	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/25/12 13:14	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/25/12 13:14	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/25/12 13:14	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 13:14	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/25/12 13:14	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/25/12 13:14	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/25/12 13:14	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/25/12 13:14	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 13:14	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 13:14	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/25/12 13:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/25/12 13:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/25/12 13:14	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/25/12 13:14	1
2-Hexanone	10	U	10	0.41	ug/L			04/25/12 13:14	1
Methylene Chloride	**0.41**	**J**	5.0	0.33	ug/L			04/25/12 13:14	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/25/12 13:14	1
Styrene	1.0	U	1.0	0.11	ug/L			04/25/12 13:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/25/12 13:14	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/25/12 13:14	1
Toluene	1.0	U	1.0	0.13	ug/L			04/25/12 13:14	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 13:14	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/25/12 13:14	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/25/12 13:14	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 13:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/25/12 13:14	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/25/12 13:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/25/12 13:14	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/25/12 13:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/25/12 13:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 13:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 13:14	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/25/12 13:14	1
Methyl acetate	10	U	10	0.38	ug/L			04/25/12 13:14	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/25/12 13:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/25/12 13:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 13:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 13:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/25/12 13:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 13:14	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/25/12 13:14	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/25/12 13:14	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/25/12 13:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*63 - 129*		*04/25/12 13:14*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Client Sample ID: TB-17358-041712
Date Collected: 04/17/12 00:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-19
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		66 - 117		04/25/12 13:14	1
Toluene-d8 (Surr)	98		74 - 115		04/25/12 13:14	1
Dibromofluoromethane (Surr)	96		75 - 121		04/25/12 13:14	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-JY-1031
Date Collected: 04/17/12 09:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.9	U	4.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
2,2'-oxybis[1-chloropropane]	4.9	U	4.9	0.39	ug/L		04/19/12 09:14	04/23/12 15:15	1
2,4,5-Trichlorophenol	4.9	U	4.9	0.29	ug/L		04/19/12 09:14	04/23/12 15:15	1
2,4,6-Trichlorophenol	3.9	U	3.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
2,4-Dichlorophenol	9.8	U	9.8	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
2,4-Dimethylphenol	4.9	U	4.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/19/12 09:14	04/23/12 15:15	1
2,4-Dinitrotoluene	4.9	U	4.9	0.26	ug/L		04/19/12 09:14	04/23/12 15:15	1
2,6-Dinitrotoluene	4.9	U	4.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
2-Chloronaphthalene	4.9	U	4.9	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
2-Chlorophenol	4.9	U	4.9	0.28	ug/L		04/19/12 09:14	04/23/12 15:15	1
2-Methylnaphthalene	4.9	U	4.9	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
2-Methylphenol	4.9	U	4.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
2-Nitroaniline	20	U	20	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
2-Nitrophenol	4.9	U	4.9	0.27	ug/L		04/19/12 09:14	04/23/12 15:15	1
3,3'-Dichlorobenzidine	0.98	U	0.98	0.36	ug/L		04/19/12 09:14	04/23/12 15:15	1
3-Nitroaniline	20	U	20	0.27	ug/L		04/19/12 09:14	04/23/12 15:15	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/19/12 09:14	04/23/12 15:15	1
4-Bromophenyl phenyl ether	4.9	U	4.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
4-Chloro-3-methylphenol	4.9	U	4.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
4-Chloroaniline	9.8	U	9.8	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
4-Chlorophenyl phenyl ether	4.9	U	4.9	0.29	ug/L		04/19/12 09:14	04/23/12 15:15	1
4-Nitroaniline	20	U	20	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/19/12 09:14	04/23/12 15:15	1
Acenaphthene	4.9	U	4.9	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Acenaphthylene	4.9	U	4.9	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Acetophenone	4.9	U	4.9	0.33	ug/L		04/19/12 09:14	04/23/12 15:15	1
Anthracene	4.9	U	4.9	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Atrazine	2.9	U	2.9	0.33	ug/L		04/19/12 09:14	04/23/12 15:15	1
Benzaldehyde	4.9	U	4.9	0.38	ug/L		04/19/12 09:14	04/23/12 15:15	1
Benzo[a]anthracene	0.98	U	0.98	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Benzo[a]pyrene	0.98	U	0.98	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Benzo[b]fluoranthene	0.98	U	0.98	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Benzo[g,h,i]perylene	0.98	U	0.98	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Benzo[k]fluoranthene	0.98	U	0.98	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Bis(2-chloroethoxy)methane	4.9	U	4.9	0.31	ug/L		04/19/12 09:14	04/23/12 15:15	1
Bis(2-chloroethyl)ether	0.98	U	0.98	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Bis(2-ethylhexyl) phthalate	4.9	U	4.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
Butyl benzyl phthalate	4.9	U	4.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
Caprolactam	9.8	U	9.8	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
Carbazole	9.8	U	9.8	0.27	ug/L		04/19/12 09:14	04/23/12 15:15	1
Chrysene	0.98	U	0.98	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Dibenzofuran	3.9	U	3.9	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Diethyl phthalate	4.9	U	4.9	0.59	ug/L		04/19/12 09:14	04/23/12 15:15	1
Dimethyl phthalate	4.9	U	4.9	0.28	ug/L		04/19/12 09:14	04/23/12 15:15	1
Di-n-butyl phthalate	4.9	U	4.9	0.66	ug/L		04/19/12 09:14	04/23/12 15:15	1
Di-n-octyl phthalate	4.9	U	4.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
Fluoranthene	0.98	U	0.98	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Fluorene	4.9	U	4.9	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Hexachlorobenzene	0.20	U	0.20	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-JY-1031
Date Collected: 04/17/12 09:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	0.98	U	0.98	0.26	ug/L		04/19/12 09:14	04/23/12 15:15	1
Hexachlorocyclopentadiene	4.9	U	4.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
Hexachloroethane	4.9	U	4.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Isophorone	4.9	U	4.9	0.26	ug/L		04/19/12 09:14	04/23/12 15:15	1
Naphthalene	4.9	U	4.9	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Nitrobenzene	2.9	U	2.9	0.039	ug/L		04/19/12 09:14	04/23/12 15:15	1
N-Nitrosodi-n-propylamine	4.9	U	4.9	0.78	ug/L		04/19/12 09:14	04/23/12 15:15	1
N-Nitrosodiphenylamine	4.9	U	4.9	0.30	ug/L		04/19/12 09:14	04/23/12 15:15	1
Pentachlorophenol	4.9	U	4.9	2.4	ug/L		04/19/12 09:14	04/23/12 15:15	1
Phenol	4.9	U	4.9	0.59	ug/L		04/19/12 09:14	04/23/12 15:15	1
Phenanthrene	2.0	U	2.0	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
Pyrene	4.9	U	4.9	0.098	ug/L		04/19/12 09:14	04/23/12 15:15	1
3 & 4 Methylphenol	4.9	U	4.9	0.74	ug/L		04/19/12 09:14	04/23/12 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*52*		*28 - 110*	*04/19/12 09:14*	*04/23/12 15:15*	*1*
2-Fluorophenol (Surr)	*53*		*10 - 110*	*04/19/12 09:14*	*04/23/12 15:15*	*1*
2,4,6-Tribromophenol (Surr)	*48*		*22 - 120*	*04/19/12 09:14*	*04/23/12 15:15*	*1*
Nitrobenzene-d5 (Surr)	*50*		*27 - 111*	*04/19/12 09:14*	*04/23/12 15:15*	*1*
Phenol-d5 (Surr)	*48*		*10 - 110*	*04/19/12 09:14*	*04/23/12 15:15*	*1*
Terphenyl-d14 (Surr)	*75*		*37 - 119*	*04/19/12 09:14*	*04/23/12 15:15*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-JY-1032
Date Collected: 04/17/12 09:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
2,2'-oxybis[1-chloropropane]	4.9	U	4.9	0.39	ug/L		04/20/12 08:47	04/25/12 10:57	1
2,4,5-Trichlorophenol	4.9	U	4.9	0.29	ug/L		04/20/12 08:47	04/25/12 10:57	1
2,4,6-Trichlorophenol	3.9	U	3.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
2,4-Dichlorophenol	9.8	U	9.8	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
2,4-Dimethylphenol	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/25/12 10:57	1
2,4-Dinitrotoluene	4.9	U	4.9	0.26	ug/L		04/20/12 08:47	04/25/12 10:57	1
2,6-Dinitrotoluene	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
2-Chloronaphthalene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
2-Chlorophenol	4.9	U	4.9	0.28	ug/L		04/20/12 08:47	04/25/12 10:57	1
2-Methylnaphthalene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
2-Methylphenol	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
2-Nitroaniline	20	U	20	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
2-Nitrophenol	4.9	U	4.9	0.27	ug/L		04/20/12 08:47	04/25/12 10:57	1
3,3'-Dichlorobenzidine	0.98	U	0.98	0.36	ug/L		04/20/12 08:47	04/25/12 10:57	1
3-Nitroaniline	20	U	20	0.27	ug/L		04/20/12 08:47	04/25/12 10:57	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/25/12 10:57	1
4-Bromophenyl phenyl ether	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
4-Chloro-3-methylphenol	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
4-Chloroaniline	9.8	U	9.8	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
4-Chlorophenyl phenyl ether	4.9	U	4.9	0.29	ug/L		04/20/12 08:47	04/25/12 10:57	1
4-Nitroaniline	20	U	20	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/25/12 10:57	1
Acenaphthene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Acenaphthylene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Acetophenone	4.9	U	4.9	0.33	ug/L		04/20/12 08:47	04/25/12 10:57	1
Anthracene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Atrazine	2.9	U	2.9	0.33	ug/L		04/20/12 08:47	04/25/12 10:57	1
Benzaldehyde	4.9	U	4.9	0.38	ug/L		04/20/12 08:47	04/25/12 10:57	1
Benzo[a]anthracene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Benzo[a]pyrene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Benzo[b]fluoranthene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Benzo[g,h,i]perylene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Benzo[k]fluoranthene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Bis(2-chloroethoxy)methane	4.9	U	4.9	0.31	ug/L		04/20/12 08:47	04/25/12 10:57	1
Bis(2-chloroethyl)ether	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Bis(2-ethylhexyl) phthalate	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
Butyl benzyl phthalate	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
Caprolactam	9.8	U	9.8	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
Carbazole	9.8	U	9.8	0.27	ug/L		04/20/12 08:47	04/25/12 10:57	1
Chrysene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Dibenzofuran	3.9	U	3.9	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Diethyl phthalate	4.9	U	4.9	0.59	ug/L		04/20/12 08:47	04/25/12 10:57	1
Dimethyl phthalate	4.9	U	4.9	0.28	ug/L		04/20/12 08:47	04/25/12 10:57	1
Di-n-butyl phthalate	4.9	U	4.9	0.66	ug/L		04/20/12 08:47	04/25/12 10:57	1
Di-n-octyl phthalate	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
Fluoranthene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Fluorene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Hexachlorobenzene	0.20	U	0.20	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-JY-1032
Date Collected: 04/17/12 09:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	0.98	U	0.98	0.26	ug/L		04/20/12 08:47	04/25/12 10:57	1
Hexachlorocyclopentadiene	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
Hexachloroethane	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Isophorone	4.9	U	4.9	0.26	ug/L		04/20/12 08:47	04/25/12 10:57	1
Naphthalene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Nitrobenzene	2.9	U	2.9	0.039	ug/L		04/20/12 08:47	04/25/12 10:57	1
N-Nitrosodi-n-propylamine	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 10:57	1
N-Nitrosodiphenylamine	4.9	U	4.9	0.30	ug/L		04/20/12 08:47	04/25/12 10:57	1
Pentachlorophenol	4.9	U	4.9	2.4	ug/L		04/20/12 08:47	04/25/12 10:57	1
Phenol	4.9	U	4.9	0.59	ug/L		04/20/12 08:47	04/25/12 10:57	1
Phenanthrene	2.0	U	2.0	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
Pyrene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/25/12 10:57	1
3 & 4 Methylphenol	4.9	U	4.9	0.74	ug/L		04/20/12 08:47	04/25/12 10:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*56*		*28 - 110*	*04/20/12 08:47*	*04/25/12 10:57*	*1*
2-Fluorophenol (Surr)	*60*		*10 - 110*	*04/20/12 08:47*	*04/25/12 10:57*	*1*
2,4,6-Tribromophenol (Surr)	*59*		*22 - 120*	*04/20/12 08:47*	*04/25/12 10:57*	*1*
Nitrobenzene-d5 (Surr)	*56*		*27 - 111*	*04/20/12 08:47*	*04/25/12 10:57*	*1*
Phenol-d5 (Surr)	*60*		*10 - 110*	*04/20/12 08:47*	*04/25/12 10:57*	*1*
Terphenyl-d14 (Surr)	*66*		*37 - 119*	*04/20/12 08:47*	*04/25/12 10:57*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-JY-1033
Date Collected: 04/17/12 09:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
2,2'-oxybis[1-chloropropane]	4.9	U	4.9	0.39	ug/L		04/20/12 08:47	04/25/12 11:16	1
2,4,5-Trichlorophenol	4.9	U	4.9	0.29	ug/L		04/20/12 08:47	04/25/12 11:16	1
2,4,6-Trichlorophenol	3.9	U	3.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
2,4-Dichlorophenol	9.7	U	9.7	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
2,4-Dimethylphenol	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/20/12 08:47	04/25/12 11:16	1
2,4-Dinitrotoluene	4.9	U	4.9	0.26	ug/L		04/20/12 08:47	04/25/12 11:16	1
2,6-Dinitrotoluene	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
2-Chloronaphthalene	4.9	U	4.9	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
2-Chlorophenol	4.9	U	4.9	0.28	ug/L		04/20/12 08:47	04/25/12 11:16	1
2-Methylnaphthalene	4.9	U	4.9	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
2-Methylphenol	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
2-Nitroaniline	19	U	19	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
2-Nitrophenol	4.9	U	4.9	0.27	ug/L		04/20/12 08:47	04/25/12 11:16	1
3,3'-Dichlorobenzidine	0.97	U	0.97	0.36	ug/L		04/20/12 08:47	04/25/12 11:16	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/20/12 08:47	04/25/12 11:16	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/20/12 08:47	04/25/12 11:16	1
4-Bromophenyl phenyl ether	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
4-Chloro-3-methylphenol	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
4-Chloroaniline	9.7	U	9.7	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
4-Chlorophenyl phenyl ether	4.9	U	4.9	0.29	ug/L		04/20/12 08:47	04/25/12 11:16	1
4-Nitroaniline	19	U	19	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/20/12 08:47	04/25/12 11:16	1
Acenaphthene	4.9	U	4.9	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Acenaphthylene	4.9	U	4.9	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Acetophenone	4.9	U	4.9	0.33	ug/L		04/20/12 08:47	04/25/12 11:16	1
Anthracene	4.9	U	4.9	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Atrazine	2.9	U	2.9	0.33	ug/L		04/20/12 08:47	04/25/12 11:16	1
Benzaldehyde	4.9	U	4.9	0.38	ug/L		04/20/12 08:47	04/25/12 11:16	1
Benzo[a]anthracene	0.97	U	0.97	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Benzo[a]pyrene	0.97	U	0.97	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Benzo[b]fluoranthene	0.97	U	0.97	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Benzo[g,h,i]perylene	0.97	U	0.97	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Benzo[k]fluoranthene	0.97	U	0.97	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Bis(2-chloroethoxy)methane	4.9	U	4.9	0.31	ug/L		04/20/12 08:47	04/25/12 11:16	1
Bis(2-chloroethyl)ether	0.97	U	0.97	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Bis(2-ethylhexyl) phthalate	**0.90**	**J**	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
Butyl benzyl phthalate	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
Caprolactam	9.7	U	9.7	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
Carbazole	9.7	U	9.7	0.27	ug/L		04/20/12 08:47	04/25/12 11:16	1
Chrysene	0.97	U	0.97	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Dibenzofuran	3.9	U	3.9	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Diethyl phthalate	4.9	U	4.9	0.58	ug/L		04/20/12 08:47	04/25/12 11:16	1
Dimethyl phthalate	4.9	U	4.9	0.28	ug/L		04/20/12 08:47	04/25/12 11:16	1
Di-n-butyl phthalate	4.9	U	4.9	0.65	ug/L		04/20/12 08:47	04/25/12 11:16	1
Di-n-octyl phthalate	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
Fluoranthene	0.97	U	0.97	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Fluorene	4.9	U	4.9	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Hexachlorobenzene	0.19	U	0.19	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-JY-1033
Date Collected: 04/17/12 09:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	0.97	U	0.97	0.26	ug/L		04/20/12 08:47	04/25/12 11:16	1
Hexachlorocyclopentadiene	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
Hexachloroethane	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Isophorone	4.9	U	4.9	0.26	ug/L		04/20/12 08:47	04/25/12 11:16	1
Naphthalene	4.9	U	4.9	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Nitrobenzene	2.9	U	2.9	0.039	ug/L		04/20/12 08:47	04/25/12 11:16	1
N-Nitrosodi-n-propylamine	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/25/12 11:16	1
N-Nitrosodiphenylamine	4.9	U	4.9	0.30	ug/L		04/20/12 08:47	04/25/12 11:16	1
Pentachlorophenol	4.9	U	4.9	2.3	ug/L		04/20/12 08:47	04/25/12 11:16	1
Phenol	4.9	U	4.9	0.58	ug/L		04/20/12 08:47	04/25/12 11:16	1
Phenanthrene	1.9	U	1.9	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
Pyrene	4.9	U	4.9	0.097	ug/L		04/20/12 08:47	04/25/12 11:16	1
3 & 4 Methylphenol	4.9	U	4.9	0.73	ug/L		04/20/12 08:47	04/25/12 11:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*55*		*28 - 110*	*04/20/12 08:47*	*04/25/12 11:16*	*1*
2-Fluorophenol (Surr)	*58*		*10 - 110*	*04/20/12 08:47*	*04/25/12 11:16*	*1*
2,4,6-Tribromophenol (Surr)	*62*		*22 - 120*	*04/20/12 08:47*	*04/25/12 11:16*	*1*
Nitrobenzene-d5 (Surr)	*54*		*27 - 111*	*04/20/12 08:47*	*04/25/12 11:16*	*1*
Phenol-d5 (Surr)	*60*		*10 - 110*	*04/20/12 08:47*	*04/25/12 11:16*	*1*
Terphenyl-d14 (Surr)	*69*		*37 - 119*	*04/20/12 08:47*	*04/25/12 11:16*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-JY-1034
Date Collected: 04/17/12 11:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/20/12 08:47	04/25/12 11:35	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/20/12 08:47	04/25/12 11:35	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/20/12 08:47	04/25/12 11:35	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/20/12 08:47	04/25/12 11:35	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/20/12 08:47	04/25/12 11:35	1
2-Methylnaphthalene	4.8	U	4.8	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
2-Nitroaniline	19	U	19	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/20/12 08:47	04/25/12 11:35	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		04/20/12 08:47	04/25/12 11:35	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/20/12 08:47	04/25/12 11:35	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/20/12 08:47	04/25/12 11:35	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/20/12 08:47	04/25/12 11:35	1
4-Nitroaniline	19	U	19	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/20/12 08:47	04/25/12 11:35	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Acetophenone	4.8	U	4.8	0.32	ug/L		04/20/12 08:47	04/25/12 11:35	1
Anthracene	4.8	U	4.8	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Atrazine	2.9	U	2.9	0.32	ug/L		04/20/12 08:47	04/25/12 11:35	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/20/12 08:47	04/25/12 11:35	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		04/20/12 08:47	04/25/12 11:35	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
Caprolactam	9.5	U	9.5	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
Carbazole	9.5	U	9.5	0.27	ug/L		04/20/12 08:47	04/25/12 11:35	1
Chrysene	0.95	U	0.95	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		04/20/12 08:47	04/25/12 11:35	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/20/12 08:47	04/25/12 11:35	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/20/12 08:47	04/25/12 11:35	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Fluorene	4.8	U	4.8	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-JY-1034
Date Collected: 04/17/12 11:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		04/20/12 08:47	04/25/12 11:35	1
Hexachlorocyclopentadiene	4.8	U	4.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/20/12 08:47	04/25/12 11:35	1
Naphthalene	4.8	U	4.8	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/20/12 08:47	04/25/12 11:35	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		04/20/12 08:47	04/25/12 11:35	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/20/12 08:47	04/25/12 11:35	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/20/12 08:47	04/25/12 11:35	1
Phenol	4.8	U	4.8	0.57	ug/L		04/20/12 08:47	04/25/12 11:35	1
Phenanthrene	1.9	U	1.9	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
Pyrene	4.8	U	4.8	0.095	ug/L		04/20/12 08:47	04/25/12 11:35	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		04/20/12 08:47	04/25/12 11:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*52*		*28 - 110*	*04/20/12 08:47*	*04/25/12 11:35*	*1*
2-Fluorophenol (Surr)	*53*		*10 - 110*	*04/20/12 08:47*	*04/25/12 11:35*	*1*
2,4,6-Tribromophenol (Surr)	*56*		*22 - 120*	*04/20/12 08:47*	*04/25/12 11:35*	*1*
Nitrobenzene-d5 (Surr)	*52*		*27 - 111*	*04/20/12 08:47*	*04/25/12 11:35*	*1*
Phenol-d5 (Surr)	*55*		*10 - 110*	*04/20/12 08:47*	*04/25/12 11:35*	*1*
Terphenyl-d14 (Surr)	*64*		*37 - 119*	*04/20/12 08:47*	*04/25/12 11:35*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-JY-1035
Date Collected: 04/17/12 14:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/20/12 08:47	04/25/12 11:53	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/20/12 08:47	04/25/12 11:53	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
2,4-Dichlorophenol	9.6	U	9.6	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
2,4-Dimethylphenol	4.8	U	4.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/20/12 08:47	04/25/12 11:53	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/20/12 08:47	04/25/12 11:53	1
2,6-Dinitrotoluene	4.8	U	4.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
2-Chloronaphthalene	4.8	U	4.8	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/20/12 08:47	04/25/12 11:53	1
2-Methylnaphthalene	4.8	U	4.8	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
2-Methylphenol	4.8	U	4.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
2-Nitroaniline	19	U	19	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/20/12 08:47	04/25/12 11:53	1
3,3'-Dichlorobenzidine	0.96	U	0.96	0.36	ug/L		04/20/12 08:47	04/25/12 11:53	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/20/12 08:47	04/25/12 11:53	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/20/12 08:47	04/25/12 11:53	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
4-Chloroaniline	9.6	U	9.6	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/20/12 08:47	04/25/12 11:53	1
4-Nitroaniline	19	U	19	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/20/12 08:47	04/25/12 11:53	1
Acenaphthene	4.8	U	4.8	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Acenaphthylene	4.8	U	4.8	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Acetophenone	4.8	U	4.8	0.33	ug/L		04/20/12 08:47	04/25/12 11:53	1
Anthracene	4.8	U	4.8	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Atrazine	2.9	U	2.9	0.33	ug/L		04/20/12 08:47	04/25/12 11:53	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/20/12 08:47	04/25/12 11:53	1
Benzo[a]anthracene	0.96	U	0.96	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Benzo[a]pyrene	0.96	U	0.96	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Benzo[b]fluoranthene	0.96	U	0.96	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Benzo[g,h,i]perylene	0.96	U	0.96	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Benzo[k]fluoranthene	0.96	U	0.96	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.31	ug/L		04/20/12 08:47	04/25/12 11:53	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
Butyl benzyl phthalate	4.8	U	4.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
Caprolactam	9.6	U	9.6	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
Carbazole	9.6	U	9.6	0.27	ug/L		04/20/12 08:47	04/25/12 11:53	1
Chrysene	0.96	U	0.96	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Dibenzofuran	3.8	U	3.8	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Diethyl phthalate	4.8	U	4.8	0.58	ug/L		04/20/12 08:47	04/25/12 11:53	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/20/12 08:47	04/25/12 11:53	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/20/12 08:47	04/25/12 11:53	1
Di-n-octyl phthalate	4.8	U	4.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
Fluoranthene	0.96	U	0.96	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Fluorene	4.8	U	4.8	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Hexachlorobenzene	0.19	U	0.19	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-JY-1035
Date Collected: 04/17/12 14:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	0.96	U	0.96	0.26	ug/L		04/20/12 08:47	04/25/12 11:53	1
Hexachlorocyclopentadiene	4.8	U	4.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
Hexachloroethane	4.8	U	4.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/20/12 08:47	04/25/12 11:53	1
Naphthalene	4.8	U	4.8	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/20/12 08:47	04/25/12 11:53	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.77	ug/L		04/20/12 08:47	04/25/12 11:53	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/20/12 08:47	04/25/12 11:53	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/20/12 08:47	04/25/12 11:53	1
Phenol	4.8	U	4.8	0.58	ug/L		04/20/12 08:47	04/25/12 11:53	1
Phenanthrene	1.9	U	1.9	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
Pyrene	4.8	U	4.8	0.096	ug/L		04/20/12 08:47	04/25/12 11:53	1
3 & 4 Methylphenol	4.8	U	4.8	0.72	ug/L		04/20/12 08:47	04/25/12 11:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*49*		*28 - 110*	*04/20/12 08:47*	*04/25/12 11:53*	*1*
2-Fluorophenol (Surr)	*52*		*10 - 110*	*04/20/12 08:47*	*04/25/12 11:53*	*1*
2,4,6-Tribromophenol (Surr)	*53*		*22 - 120*	*04/20/12 08:47*	*04/25/12 11:53*	*1*
Nitrobenzene-d5 (Surr)	*50*		*27 - 111*	*04/20/12 08:47*	*04/25/12 11:53*	*1*
Phenol-d5 (Surr)	*53*		*10 - 110*	*04/20/12 08:47*	*04/25/12 11:53*	*1*
Terphenyl-d14 (Surr)	*60*		*37 - 119*	*04/20/12 08:47*	*04/25/12 11:53*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-JY-1036
Date Collected: 04/17/12 11:30
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/20/12 08:47	04/24/12 16:14	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 16:14	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
2,4-Dichlorophenol	9.9	U	9.9	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
2,4-Dimethylphenol	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 16:14	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 16:14	1
2,6-Dinitrotoluene	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
2-Chloronaphthalene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 16:14	1
2-Methylnaphthalene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
2-Methylphenol	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
2-Nitroaniline	20	U	20	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/20/12 08:47	04/24/12 16:14	1
3,3'-Dichlorobenzidine	0.99	U	0.99	0.37	ug/L		04/20/12 08:47	04/24/12 16:14	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/20/12 08:47	04/24/12 16:14	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 16:14	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
4-Chloroaniline	9.9	U	9.9	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 16:14	1
4-Nitroaniline	20	U	20	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 16:14	1
Acenaphthene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Acenaphthylene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/20/12 08:47	04/24/12 16:14	1
Anthracene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/20/12 08:47	04/24/12 16:14	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/20/12 08:47	04/24/12 16:14	1
Benzo[a]anthracene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Benzo[a]pyrene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Benzo[b]fluoranthene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Benzo[g,h,i]perylene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Benzo[k]fluoranthene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/20/12 08:47	04/24/12 16:14	1
Bis(2-chloroethyl)ether	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
Butyl benzyl phthalate	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
Caprolactam	9.9	U	9.9	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
Carbazole	9.9	U	9.9	0.28	ug/L		04/20/12 08:47	04/24/12 16:14	1
Chrysene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Dibenzofuran	4.0	U	4.0	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Diethyl phthalate	5.0	U	5.0	0.59	ug/L		04/20/12 08:47	04/24/12 16:14	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 16:14	1
Di-n-butyl phthalate	5.0	U	5.0	0.66	ug/L		04/20/12 08:47	04/24/12 16:14	1
Di-n-octyl phthalate	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
Fluoranthene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Fluorene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Hexachlorobenzene	0.20	U	0.20	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-JY-1036
Date Collected: 04/17/12 11:30
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	0.99	U	0.99	0.27	ug/L		04/20/12 08:47	04/24/12 16:14	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
Hexachloroethane	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 16:14	1
Naphthalene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/20/12 08:47	04/24/12 16:14	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 16:14	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/20/12 08:47	04/24/12 16:14	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/20/12 08:47	04/24/12 16:14	1
Phenol	5.0	U	5.0	0.59	ug/L		04/20/12 08:47	04/24/12 16:14	1
Phenanthrene	2.0	U	2.0	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
Pyrene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 16:14	1
3 & 4 Methylphenol	5.0	U	5.0	0.74	ug/L		04/20/12 08:47	04/24/12 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*39*		*28 - 110*	*04/20/12 08:47*	*04/24/12 16:14*	*1*
2-Fluorophenol (Surr)	*41*		*10 - 110*	*04/20/12 08:47*	*04/24/12 16:14*	*1*
2,4,6-Tribromophenol (Surr)	*50*		*22 - 120*	*04/20/12 08:47*	*04/24/12 16:14*	*1*
Nitrobenzene-d5 (Surr)	*39*		*27 - 111*	*04/20/12 08:47*	*04/24/12 16:14*	*1*
Phenol-d5 (Surr)	*43*		*10 - 110*	*04/20/12 08:47*	*04/24/12 16:14*	*1*
Terphenyl-d14 (Surr)	*46*		*37 - 119*	*04/20/12 08:47*	*04/24/12 16:14*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-CB-1037
Date Collected: 04/17/12 09:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/20/12 08:47	04/24/12 16:32	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 16:32	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 16:32	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 16:32	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 16:32	1
2-Methylnaphthalene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
2-Nitroaniline	20	U	20	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/20/12 08:47	04/24/12 16:32	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/20/12 08:47	04/24/12 16:32	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/20/12 08:47	04/24/12 16:32	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 16:32	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
4-Chloroaniline	10	U	10	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 16:32	1
4-Nitroaniline	20	U	20	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 16:32	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/20/12 08:47	04/24/12 16:32	1
Anthracene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/20/12 08:47	04/24/12 16:32	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/20/12 08:47	04/24/12 16:32	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/20/12 08:47	04/24/12 16:32	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
Caprolactam	10	U	10	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
Carbazole	10	U	10	0.28	ug/L		04/20/12 08:47	04/24/12 16:32	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		04/20/12 08:47	04/24/12 16:32	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 16:32	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		04/20/12 08:47	04/24/12 16:32	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Fluorene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-CB-1037
Date Collected: 04/17/12 09:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/20/12 08:47	04/24/12 16:32	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
Hexachloroethane	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 16:32	1
Naphthalene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/20/12 08:47	04/24/12 16:32	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 16:32	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/20/12 08:47	04/24/12 16:32	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/20/12 08:47	04/24/12 16:32	1
Phenol	5.0	U	5.0	0.60	ug/L		04/20/12 08:47	04/24/12 16:32	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
Pyrene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 16:32	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		04/20/12 08:47	04/24/12 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*34*		*28 - 110*	*04/20/12 08:47*	*04/24/12 16:32*	*1*
2-Fluorophenol (Surr)	*32*		*10 - 110*	*04/20/12 08:47*	*04/24/12 16:32*	*1*
2,4,6-Tribromophenol (Surr)	*45*		*22 - 120*	*04/20/12 08:47*	*04/24/12 16:32*	*1*
Nitrobenzene-d5 (Surr)	*34*		*27 - 111*	*04/20/12 08:47*	*04/24/12 16:32*	*1*
Phenol-d5 (Surr)	*35*		*10 - 110*	*04/20/12 08:47*	*04/24/12 16:32*	*1*
Terphenyl-d14 (Surr)	*42*		*37 - 119*	*04/20/12 08:47*	*04/24/12 16:32*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-CB-1038
Date Collected: 04/17/12 11:35
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.4	U	5.4	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
2,2'-oxybis[1-chloropropane]	5.4	U	5.4	0.43	ug/L		04/20/12 08:47	04/24/12 21:11	1
2,4,5-Trichlorophenol	5.4	U	5.4	0.33	ug/L		04/20/12 08:47	04/24/12 21:11	1
2,4,6-Trichlorophenol	4.3	U	4.3	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
2,4-Dichlorophenol	11	U	11	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
2,4-Dimethylphenol	5.4	U	5.4	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
2,4-Dinitrophenol	22	U	22	2.6	ug/L		04/20/12 08:47	04/24/12 21:11	1
2,4-Dinitrotoluene	5.4	U	5.4	0.29	ug/L		04/20/12 08:47	04/24/12 21:11	1
2,6-Dinitrotoluene	5.4	U	5.4	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
2-Chloronaphthalene	5.4	U	5.4	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
2-Chlorophenol	5.4	U	5.4	0.32	ug/L		04/20/12 08:47	04/24/12 21:11	1
2-Methylnaphthalene	5.4	U	5.4	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
2-Methylphenol	5.4	U	5.4	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
2-Nitroaniline	22	U	22	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
2-Nitrophenol	5.4	U	5.4	0.30	ug/L		04/20/12 08:47	04/24/12 21:11	1
3,3'-Dichlorobenzidine	1.1	U	1.1	0.40	ug/L		04/20/12 08:47	04/24/12 21:11	1
3-Nitroaniline	22	U	22	0.30	ug/L		04/20/12 08:47	04/24/12 21:11	1
4,6-Dinitro-2-methylphenol	22	U	22	2.6	ug/L		04/20/12 08:47	04/24/12 21:11	1
4-Bromophenyl phenyl ether	5.4	U	5.4	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
4-Chloro-3-methylphenol	5.4	U	5.4	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
4-Chloroaniline	11	U	11	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
4-Chlorophenyl phenyl ether	5.4	U	5.4	0.33	ug/L		04/20/12 08:47	04/24/12 21:11	1
4-Nitroaniline	22	U	22	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
4-Nitrophenol	22	U	22	2.6	ug/L		04/20/12 08:47	04/24/12 21:11	1
Acenaphthene	5.4	U	5.4	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Acenaphthylene	5.4	U	5.4	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Acetophenone	5.4	U	5.4	0.37	ug/L		04/20/12 08:47	04/24/12 21:11	1
Anthracene	5.4	U	5.4	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Atrazine	3.3	U	3.3	0.37	ug/L		04/20/12 08:47	04/24/12 21:11	1
Benzaldehyde	5.4	U	5.4	0.42	ug/L		04/20/12 08:47	04/24/12 21:11	1
Benzo[a]anthracene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Benzo[a]pyrene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Benzo[b]fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Benzo[g,h,i]perylene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Benzo[k]fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Bis(2-chloroethoxy)methane	5.4	U	5.4	0.35	ug/L		04/20/12 08:47	04/24/12 21:11	1
Bis(2-chloroethyl)ether	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Bis(2-ethylhexyl) phthalate	5.4	U	5.4	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
Butyl benzyl phthalate	5.4	U	5.4	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
Caprolactam	11	U	11	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
Carbazole	11	U	11	0.30	ug/L		04/20/12 08:47	04/24/12 21:11	1
Chrysene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Dibenz(a,h)anthracene	2.2	U	2.2	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Dibenzofuran	4.3	U	4.3	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Diethyl phthalate	5.4	U	5.4	0.65	ug/L		04/20/12 08:47	04/24/12 21:11	1
Dimethyl phthalate	5.4	U	5.4	0.32	ug/L		04/20/12 08:47	04/24/12 21:11	1
Di-n-butyl phthalate	5.4	U	5.4	0.73	ug/L		04/20/12 08:47	04/24/12 21:11	1
Di-n-octyl phthalate	5.4	U	5.4	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
Fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Fluorene	5.4	U	5.4	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Hexachlorobenzene	0.22	U	0.22	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-CB-1038
Date Collected: 04/17/12 11:35
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	1.1	U	1.1	0.29	ug/L		04/20/12 08:47	04/24/12 21:11	1
Hexachlorocyclopentadiene	5.4	U	5.4	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
Hexachloroethane	5.4	U	5.4	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
Indeno[1,2,3-cd]pyrene	2.2	U	2.2	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Isophorone	5.4	U	5.4	0.29	ug/L		04/20/12 08:47	04/24/12 21:11	1
Naphthalene	5.4	U	5.4	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Nitrobenzene	3.3	U	3.3	0.043	ug/L		04/20/12 08:47	04/24/12 21:11	1
N-Nitrosodi-n-propylamine	5.4	U	5.4	0.87	ug/L		04/20/12 08:47	04/24/12 21:11	1
N-Nitrosodiphenylamine	5.4	U	5.4	0.34	ug/L		04/20/12 08:47	04/24/12 21:11	1
Pentachlorophenol	5.4	U	5.4	2.6	ug/L		04/20/12 08:47	04/24/12 21:11	1
Phenol	5.4	U	5.4	0.65	ug/L		04/20/12 08:47	04/24/12 21:11	1
Phenanthrene	2.2	U	2.2	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
Pyrene	5.4	U	5.4	0.11	ug/L		04/20/12 08:47	04/24/12 21:11	1
3 & 4 Methylphenol	5.4	U	5.4	0.82	ug/L		04/20/12 08:47	04/24/12 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*45*		*28 - 110*	*04/20/12 08:47*	*04/24/12 21:11*	*1*
2-Fluorophenol (Surr)	*47*		*10 - 110*	*04/20/12 08:47*	*04/24/12 21:11*	*1*
2,4,6-Tribromophenol (Surr)	*49*		*22 - 120*	*04/20/12 08:47*	*04/24/12 21:11*	*1*
Nitrobenzene-d5 (Surr)	*44*		*27 - 111*	*04/20/12 08:47*	*04/24/12 21:11*	*1*
Phenol-d5 (Surr)	*47*		*10 - 110*	*04/20/12 08:47*	*04/24/12 21:11*	*1*
Terphenyl-d14 (Surr)	*59*		*37 - 119*	*04/20/12 08:47*	*04/24/12 21:11*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-CB-1039
Date Collected: 04/17/12 13:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.3	U	5.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
2,2'-oxybis[1-chloropropane]	5.3	U	5.3	0.43	ug/L		04/20/12 08:47	04/24/12 16:51	1
2,4,5-Trichlorophenol	5.3	U	5.3	0.32	ug/L		04/20/12 08:47	04/24/12 16:51	1
2,4,6-Trichlorophenol	4.3	U	4.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
2,4-Dichlorophenol	11	U	11	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
2,4-Dimethylphenol	5.3	U	5.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
2,4-Dinitrophenol	21	U	21	2.6	ug/L		04/20/12 08:47	04/24/12 16:51	1
2,4-Dinitrotoluene	5.3	U	5.3	0.29	ug/L		04/20/12 08:47	04/24/12 16:51	1
2,6-Dinitrotoluene	5.3	U	5.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
2-Chloronaphthalene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
2-Chlorophenol	5.3	U	5.3	0.31	ug/L		04/20/12 08:47	04/24/12 16:51	1
2-Methylnaphthalene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
2-Methylphenol	5.3	U	5.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
2-Nitroaniline	21	U	21	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
2-Nitrophenol	5.3	U	5.3	0.30	ug/L		04/20/12 08:47	04/24/12 16:51	1
3,3'-Dichlorobenzidine	1.1	U	1.1	0.39	ug/L		04/20/12 08:47	04/24/12 16:51	1
3-Nitroaniline	21	U	21	0.30	ug/L		04/20/12 08:47	04/24/12 16:51	1
4,6-Dinitro-2-methylphenol	21	U	21	2.6	ug/L		04/20/12 08:47	04/24/12 16:51	1
4-Bromophenyl phenyl ether	5.3	U	5.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
4-Chloro-3-methylphenol	5.3	U	5.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
4-Chloroaniline	11	U	11	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
4-Chlorophenyl phenyl ether	5.3	U	5.3	0.32	ug/L		04/20/12 08:47	04/24/12 16:51	1
4-Nitroaniline	21	U	21	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
4-Nitrophenol	21	U	21	2.6	ug/L		04/20/12 08:47	04/24/12 16:51	1
Acenaphthene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Acenaphthylene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Acetophenone	5.3	U	5.3	0.36	ug/L		04/20/12 08:47	04/24/12 16:51	1
Anthracene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Atrazine	3.2	U	3.2	0.36	ug/L		04/20/12 08:47	04/24/12 16:51	1
Benzaldehyde	5.3	U	5.3	0.41	ug/L		04/20/12 08:47	04/24/12 16:51	1
Benzo[a]anthracene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Benzo[a]pyrene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Benzo[b]fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Benzo[g,h,i]perylene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Benzo[k]fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Bis(2-chloroethoxy)methane	5.3	U	5.3	0.34	ug/L		04/20/12 08:47	04/24/12 16:51	1
Bis(2-chloroethyl)ether	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Bis(2-ethylhexyl) phthalate	5.3	U	5.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
Butyl benzyl phthalate	5.3	U	5.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
Caprolactam	11	U	11	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
Carbazole	11	U	11	0.30	ug/L		04/20/12 08:47	04/24/12 16:51	1
Chrysene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Dibenzofuran	4.3	U	4.3	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Diethyl phthalate	5.3	U	5.3	0.64	ug/L		04/20/12 08:47	04/24/12 16:51	1
Dimethyl phthalate	5.3	U	5.3	0.31	ug/L		04/20/12 08:47	04/24/12 16:51	1
Di-n-butyl phthalate	5.3	U	5.3	0.71	ug/L		04/20/12 08:47	04/24/12 16:51	1
Di-n-octyl phthalate	5.3	U	5.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
Fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Fluorene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Hexachlorobenzene	0.21	U	0.21	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-CB-1039
Date Collected: 04/17/12 13:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	1.1	U	1.1	0.29	ug/L		04/20/12 08:47	04/24/12 16:51	1
Hexachlorocyclopentadiene	5.3	U	5.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
Hexachloroethane	5.3	U	5.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Isophorone	5.3	U	5.3	0.29	ug/L		04/20/12 08:47	04/24/12 16:51	1
Naphthalene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Nitrobenzene	3.2	U	3.2	0.043	ug/L		04/20/12 08:47	04/24/12 16:51	1
N-Nitrosodi-n-propylamine	5.3	U	5.3	0.85	ug/L		04/20/12 08:47	04/24/12 16:51	1
N-Nitrosodiphenylamine	5.3	U	5.3	0.33	ug/L		04/20/12 08:47	04/24/12 16:51	1
Pentachlorophenol	5.3	U	5.3	2.6	ug/L		04/20/12 08:47	04/24/12 16:51	1
Phenol	5.3	U	5.3	0.64	ug/L		04/20/12 08:47	04/24/12 16:51	1
Phenanthrene	2.1	U	2.1	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
Pyrene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 16:51	1
3 & 4 Methylphenol	5.3	U	5.3	0.80	ug/L		04/20/12 08:47	04/24/12 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*34*		*28 - 110*	*04/20/12 08:47*	*04/24/12 16:51*	*1*
2-Fluorophenol (Surr)	*32*		*10 - 110*	*04/20/12 08:47*	*04/24/12 16:51*	*1*
2,4,6-Tribromophenol (Surr)	*46*		*22 - 120*	*04/20/12 08:47*	*04/24/12 16:51*	*1*
Nitrobenzene-d5 (Surr)	*34*		*27 - 111*	*04/20/12 08:47*	*04/24/12 16:51*	*1*
Phenol-d5 (Surr)	*35*		*10 - 110*	*04/20/12 08:47*	*04/24/12 16:51*	*1*
Terphenyl-d14 (Surr)	*31*	*X*	*37 - 119*	*04/20/12 08:47*	*04/24/12 16:51*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-CB-1040
Date Collected: 04/17/12 15:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.3	U	5.3	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
2,2'-oxybis[1-chloropropane]	5.3	U	5.3	0.42	ug/L		04/20/12 08:47	04/24/12 15:18	1
2,4,5-Trichlorophenol	5.3	U	5.3	0.32	ug/L		04/20/12 08:47	04/24/12 15:18	1
2,4,6-Trichlorophenol	4.2	U	4.2	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
2,4-Dichlorophenol	11	U	11	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
2,4-Dimethylphenol	5.3	U	5.3	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		04/20/12 08:47	04/24/12 15:18	1
2,4-Dinitrotoluene	5.3	U	5.3	0.28	ug/L		04/20/12 08:47	04/24/12 15:18	1
2,6-Dinitrotoluene	5.3	U	5.3	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
2-Chloronaphthalene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
2-Chlorophenol	5.3	U	5.3	0.31	ug/L		04/20/12 08:47	04/24/12 15:18	1
2-Methylnaphthalene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
2-Methylphenol	5.3	U	5.3	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
2-Nitroaniline	21	U	21	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
2-Nitrophenol	5.3	U	5.3	0.29	ug/L		04/20/12 08:47	04/24/12 15:18	1
3,3'-Dichlorobenzidine	1.1	U	1.1	0.39	ug/L		04/20/12 08:47	04/24/12 15:18	1
3-Nitroaniline	21	U	21	0.29	ug/L		04/20/12 08:47	04/24/12 15:18	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		04/20/12 08:47	04/24/12 15:18	1
4-Bromophenyl phenyl ether	5.3	U	5.3	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
4-Chloro-3-methylphenol	5.3	U	5.3	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
4-Chloroaniline	11	U	11	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
4-Chlorophenyl phenyl ether	5.3	U	5.3	0.32	ug/L		04/20/12 08:47	04/24/12 15:18	1
4-Nitroaniline	21	U	21	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
4-Nitrophenol	21	U	21	2.5	ug/L		04/20/12 08:47	04/24/12 15:18	1
Acenaphthene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Acenaphthylene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Acetophenone	5.3	U	5.3	0.36	ug/L		04/20/12 08:47	04/24/12 15:18	1
Anthracene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Atrazine	3.2	U	3.2	0.36	ug/L		04/20/12 08:47	04/24/12 15:18	1
Benzaldehyde	5.3	U	5.3	0.41	ug/L		04/20/12 08:47	04/24/12 15:18	1
Benzo[a]anthracene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Benzo[a]pyrene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Benzo[b]fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Benzo[g,h,i]perylene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Benzo[k]fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Bis(2-chloroethoxy)methane	5.3	U	5.3	0.34	ug/L		04/20/12 08:47	04/24/12 15:18	1
Bis(2-chloroethyl)ether	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Bis(2-ethylhexyl) phthalate	5.3	U	5.3	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
Butyl benzyl phthalate	5.3	U	5.3	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
Caprolactam	11	U	11	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
Carbazole	11	U	11	0.29	ug/L		04/20/12 08:47	04/24/12 15:18	1
Chrysene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Dibenzofuran	4.2	U	4.2	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Diethyl phthalate	5.3	U	5.3	0.63	ug/L		04/20/12 08:47	04/24/12 15:18	1
Dimethyl phthalate	5.3	U	5.3	0.31	ug/L		04/20/12 08:47	04/24/12 15:18	1
Di-n-butyl phthalate	5.3	U	5.3	0.71	ug/L		04/20/12 08:47	04/24/12 15:18	1
Di-n-octyl phthalate	5.3	U	5.3	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
Fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Fluorene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Hexachlorobenzene	0.21	U	0.21	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-CB-1040
Date Collected: 04/17/12 15:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	1.1	U	1.1	0.28	ug/L		04/20/12 08:47	04/24/12 15:18	1
Hexachlorocyclopentadiene	5.3	U	5.3	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
Hexachloroethane	5.3	U	5.3	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Isophorone	5.3	U	5.3	0.28	ug/L		04/20/12 08:47	04/24/12 15:18	1
Naphthalene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Nitrobenzene	3.2	U	3.2	0.042	ug/L		04/20/12 08:47	04/24/12 15:18	1
N-Nitrosodi-n-propylamine	5.3	U	5.3	0.84	ug/L		04/20/12 08:47	04/24/12 15:18	1
N-Nitrosodiphenylamine	5.3	U	5.3	0.33	ug/L		04/20/12 08:47	04/24/12 15:18	1
Pentachlorophenol	5.3	U	5.3	2.5	ug/L		04/20/12 08:47	04/24/12 15:18	1
Phenol	5.3	U	5.3	0.63	ug/L		04/20/12 08:47	04/24/12 15:18	1
Phenanthrene	2.1	U	2.1	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
Pyrene	5.3	U	5.3	0.11	ug/L		04/20/12 08:47	04/24/12 15:18	1
3 & 4 Methylphenol	5.3	U	5.3	0.79	ug/L		04/20/12 08:47	04/24/12 15:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*48*		*28 - 110*	*04/20/12 08:47*	*04/24/12 15:18*	*1*
2-Fluorophenol (Surr)	*48*		*10 - 110*	*04/20/12 08:47*	*04/24/12 15:18*	*1*
2,4,6-Tribromophenol (Surr)	*54*		*22 - 120*	*04/20/12 08:47*	*04/24/12 15:18*	*1*
Nitrobenzene-d5 (Surr)	*48*		*27 - 111*	*04/20/12 08:47*	*04/24/12 15:18*	*1*
Phenol-d5 (Surr)	*49*		*10 - 110*	*04/20/12 08:47*	*04/24/12 15:18*	*1*
Terphenyl-d14 (Surr)	*60*		*37 - 119*	*04/20/12 08:47*	*04/24/12 15:18*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-DR-1041
Date Collected: 04/17/12 09:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.41	ug/L		04/20/12 08:47	04/24/12 17:47	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.31	ug/L		04/20/12 08:47	04/24/12 17:47	1
2,4,6-Trichlorophenol	4.1	U	4.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
2,4-Dichlorophenol	10	U	10	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
2,4-Dimethylphenol	5.1	U	5.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 17:47	1
2,4-Dinitrotoluene	5.1	U	5.1	0.28	ug/L		04/20/12 08:47	04/24/12 17:47	1
2,6-Dinitrotoluene	5.1	U	5.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
2-Chlorophenol	5.1	U	5.1	0.30	ug/L		04/20/12 08:47	04/24/12 17:47	1
2-Methylnaphthalene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
2-Methylphenol	5.1	U	5.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
2-Nitroaniline	20	U	20	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
2-Nitrophenol	5.1	U	5.1	0.29	ug/L		04/20/12 08:47	04/24/12 17:47	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.38	ug/L		04/20/12 08:47	04/24/12 17:47	1
3-Nitroaniline	20	U	20	0.29	ug/L		04/20/12 08:47	04/24/12 17:47	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 17:47	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
4-Chloroaniline	10	U	10	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.31	ug/L		04/20/12 08:47	04/24/12 17:47	1
4-Nitroaniline	20	U	20	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 17:47	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Acetophenone	5.1	U	5.1	0.35	ug/L		04/20/12 08:47	04/24/12 17:47	1
Anthracene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Atrazine	3.1	U	3.1	0.35	ug/L		04/20/12 08:47	04/24/12 17:47	1
Benzaldehyde	5.1	U	5.1	0.40	ug/L		04/20/12 08:47	04/24/12 17:47	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.33	ug/L		04/20/12 08:47	04/24/12 17:47	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
Butyl benzyl phthalate	5.1	U	5.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
Caprolactam	10	U	10	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
Carbazole	10	U	10	0.29	ug/L		04/20/12 08:47	04/24/12 17:47	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Dibenzofuran	4.1	U	4.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		04/20/12 08:47	04/24/12 17:47	1
Dimethyl phthalate	5.1	U	5.1	0.30	ug/L		04/20/12 08:47	04/24/12 17:47	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		04/20/12 08:47	04/24/12 17:47	1
Di-n-octyl phthalate	5.1	U	5.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Fluorene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-DR-1041
Date Collected: 04/17/12 09:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		04/20/12 08:47	04/24/12 17:47	1
Hexachlorocyclopentadiene	5.1	U	5.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
Hexachloroethane	5.1	U	5.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Isophorone	5.1	U	5.1	0.28	ug/L		04/20/12 08:47	04/24/12 17:47	1
Naphthalene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Nitrobenzene	3.1	U	3.1	0.041	ug/L		04/20/12 08:47	04/24/12 17:47	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:47	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.32	ug/L		04/20/12 08:47	04/24/12 17:47	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		04/20/12 08:47	04/24/12 17:47	1
Phenol	5.1	U	5.1	0.61	ug/L		04/20/12 08:47	04/24/12 17:47	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
Pyrene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:47	1
3 & 4 Methylphenol	5.1	U	5.1	0.77	ug/L		04/20/12 08:47	04/24/12 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*43*		*28 - 110*	*04/20/12 08:47*	*04/24/12 17:47*	*1*
2-Fluorophenol (Surr)	*46*		*10 - 110*	*04/20/12 08:47*	*04/24/12 17:47*	*1*
2,4,6-Tribromophenol (Surr)	*58*		*22 - 120*	*04/20/12 08:47*	*04/24/12 17:47*	*1*
Nitrobenzene-d5 (Surr)	*45*		*27 - 111*	*04/20/12 08:47*	*04/24/12 17:47*	*1*
Phenol-d5 (Surr)	*49*		*10 - 110*	*04/20/12 08:47*	*04/24/12 17:47*	*1*
Terphenyl-d14 (Surr)	*57*		*37 - 119*	*04/20/12 08:47*	*04/24/12 17:47*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-DR-1042
Date Collected: 04/17/12 10:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.2	U	5.2	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
2,2'-oxybis[1-chloropropane]	5.2	U	5.2	0.41	ug/L		04/20/12 08:47	04/24/12 17:28	1
2,4,5-Trichlorophenol	5.2	U	5.2	0.31	ug/L		04/20/12 08:47	04/24/12 17:28	1
2,4,6-Trichlorophenol	4.1	U	4.1	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
2,4-Dichlorophenol	10	U	10	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
2,4-Dimethylphenol	5.2	U	5.2	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		04/20/12 08:47	04/24/12 17:28	1
2,4-Dinitrotoluene	5.2	U	5.2	0.28	ug/L		04/20/12 08:47	04/24/12 17:28	1
2,6-Dinitrotoluene	5.2	U	5.2	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
2-Chloronaphthalene	5.2	U	5.2	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
2-Chlorophenol	5.2	U	5.2	0.30	ug/L		04/20/12 08:47	04/24/12 17:28	1
2-Methylnaphthalene	5.2	U	5.2	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
2-Methylphenol	5.2	U	5.2	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
2-Nitroaniline	21	U	21	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
2-Nitrophenol	5.2	U	5.2	0.29	ug/L		04/20/12 08:47	04/24/12 17:28	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.38	ug/L		04/20/12 08:47	04/24/12 17:28	1
3-Nitroaniline	21	U	21	0.29	ug/L		04/20/12 08:47	04/24/12 17:28	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		04/20/12 08:47	04/24/12 17:28	1
4-Bromophenyl phenyl ether	5.2	U	5.2	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
4-Chloro-3-methylphenol	5.2	U	5.2	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
4-Chloroaniline	10	U	10	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
4-Chlorophenyl phenyl ether	5.2	U	5.2	0.31	ug/L		04/20/12 08:47	04/24/12 17:28	1
4-Nitroaniline	21	U	21	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
4-Nitrophenol	21	U	21	2.5	ug/L		04/20/12 08:47	04/24/12 17:28	1
Acenaphthene	5.2	U	5.2	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Acenaphthylene	5.2	U	5.2	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Acetophenone	5.2	U	5.2	0.35	ug/L		04/20/12 08:47	04/24/12 17:28	1
Anthracene	5.2	U	5.2	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Atrazine	3.1	U	3.1	0.35	ug/L		04/20/12 08:47	04/24/12 17:28	1
Benzaldehyde	5.2	U	5.2	0.40	ug/L		04/20/12 08:47	04/24/12 17:28	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Bis(2-chloroethoxy)methane	5.2	U	5.2	0.33	ug/L		04/20/12 08:47	04/24/12 17:28	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Bis(2-ethylhexyl) phthalate	5.2	U	5.2	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
Butyl benzyl phthalate	5.2	U	5.2	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
Caprolactam	10	U	10	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
Carbazole	10	U	10	0.29	ug/L		04/20/12 08:47	04/24/12 17:28	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Dibenzofuran	4.1	U	4.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Diethyl phthalate	5.2	U	5.2	0.62	ug/L		04/20/12 08:47	04/24/12 17:28	1
Dimethyl phthalate	5.2	U	5.2	0.30	ug/L		04/20/12 08:47	04/24/12 17:28	1
Di-n-butyl phthalate	5.2	U	5.2	0.69	ug/L		04/20/12 08:47	04/24/12 17:28	1
Di-n-octyl phthalate	5.2	U	5.2	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Fluorene	5.2	U	5.2	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Hexachlorobenzene	0.21	U	0.21	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-DR-1042
Date Collected: 04/17/12 10:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		04/20/12 08:47	04/24/12 17:28	1
Hexachlorocyclopentadiene	5.2	U	5.2	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
Hexachloroethane	5.2	U	5.2	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Isophorone	5.2	U	5.2	0.28	ug/L		04/20/12 08:47	04/24/12 17:28	1
Naphthalene	5.2	U	5.2	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Nitrobenzene	3.1	U	3.1	0.041	ug/L		04/20/12 08:47	04/24/12 17:28	1
N-Nitrosodi-n-propylamine	5.2	U	5.2	0.82	ug/L		04/20/12 08:47	04/24/12 17:28	1
N-Nitrosodiphenylamine	5.2	U	5.2	0.32	ug/L		04/20/12 08:47	04/24/12 17:28	1
Pentachlorophenol	5.2	U	5.2	2.5	ug/L		04/20/12 08:47	04/24/12 17:28	1
Phenol	5.2	U	5.2	0.62	ug/L		04/20/12 08:47	04/24/12 17:28	1
Phenanthrene	2.1	U	2.1	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
Pyrene	5.2	U	5.2	0.10	ug/L		04/20/12 08:47	04/24/12 17:28	1
3 & 4 Methylphenol	5.2	U	5.2	0.77	ug/L		04/20/12 08:47	04/24/12 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*43*		*28 - 110*	*04/20/12 08:47*	*04/24/12 17:28*	*1*
2-Fluorophenol (Surr)	*44*		*10 - 110*	*04/20/12 08:47*	*04/24/12 17:28*	*1*
2,4,6-Tribromophenol (Surr)	*59*		*22 - 120*	*04/20/12 08:47*	*04/24/12 17:28*	*1*
Nitrobenzene-d5 (Surr)	*44*		*27 - 111*	*04/20/12 08:47*	*04/24/12 17:28*	*1*
Phenol-d5 (Surr)	*48*		*10 - 110*	*04/20/12 08:47*	*04/24/12 17:28*	*1*
Terphenyl-d14 (Surr)	*53*		*37 - 119*	*04/20/12 08:47*	*04/24/12 17:28*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-DR-1043
Date Collected: 04/17/12 11:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.40	ug/L		04/20/12 08:47	04/24/12 18:05	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.30	ug/L		04/20/12 08:47	04/24/12 18:05	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
2,4-Dichlorophenol	10	U	10	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
2,4-Dimethylphenol	5.1	U	5.1	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 18:05	1
2,4-Dinitrotoluene	5.1	U	5.1	0.27	ug/L		04/20/12 08:47	04/24/12 18:05	1
2,6-Dinitrotoluene	5.1	U	5.1	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
2-Chlorophenol	5.1	U	5.1	0.29	ug/L		04/20/12 08:47	04/24/12 18:05	1
2-Methylnaphthalene	**0.16**	**J**	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
2-Methylphenol	5.1	U	5.1	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
2-Nitroaniline	20	U	20	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
2-Nitrophenol	5.1	U	5.1	0.28	ug/L		04/20/12 08:47	04/24/12 18:05	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/20/12 08:47	04/24/12 18:05	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/20/12 08:47	04/24/12 18:05	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 18:05	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
4-Chloroaniline	10	U	10	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.30	ug/L		04/20/12 08:47	04/24/12 18:05	1
4-Nitroaniline	20	U	20	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 18:05	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Acetophenone	5.1	U	5.1	0.34	ug/L		04/20/12 08:47	04/24/12 18:05	1
Anthracene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/20/12 08:47	04/24/12 18:05	1
Benzaldehyde	5.1	U	5.1	0.39	ug/L		04/20/12 08:47	04/24/12 18:05	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.32	ug/L		04/20/12 08:47	04/24/12 18:05	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
Butyl benzyl phthalate	5.1	U	5.1	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
Caprolactam	10	U	10	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
Carbazole	10	U	10	0.28	ug/L		04/20/12 08:47	04/24/12 18:05	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Dibenzofuran	**0.18**	**J**	4.0	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		04/20/12 08:47	04/24/12 18:05	1
Dimethyl phthalate	5.1	U	5.1	0.29	ug/L		04/20/12 08:47	04/24/12 18:05	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		04/20/12 08:47	04/24/12 18:05	1
Di-n-octyl phthalate	5.1	U	5.1	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Fluorene	**0.14**	**J**	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-DR-1043
Date Collected: 04/17/12 11:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/20/12 08:47	04/24/12 18:05	1
Hexachlorocyclopentadiene	5.1	U	5.1	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
Hexachloroethane	5.1	U	5.1	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Isophorone	5.1	U	5.1	0.27	ug/L		04/20/12 08:47	04/24/12 18:05	1
Naphthalene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/20/12 08:47	04/24/12 18:05	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.81	ug/L		04/20/12 08:47	04/24/12 18:05	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.31	ug/L		04/20/12 08:47	04/24/12 18:05	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		04/20/12 08:47	04/24/12 18:05	1
Phenol	5.1	U	5.1	0.61	ug/L		04/20/12 08:47	04/24/12 18:05	1
Phenanthrene	**0.21**	**J**	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
Pyrene	5.1	U	5.1	0.10	ug/L		04/20/12 08:47	04/24/12 18:05	1
3 & 4 Methylphenol	5.1	U	5.1	0.76	ug/L		04/20/12 08:47	04/24/12 18:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*46*		*28 - 110*	*04/20/12 08:47*	*04/24/12 18:05*	*1*
2-Fluorophenol (Surr)	*49*		*10 - 110*	*04/20/12 08:47*	*04/24/12 18:05*	*1*
2,4,6-Tribromophenol (Surr)	*56*		*22 - 120*	*04/20/12 08:47*	*04/24/12 18:05*	*1*
Nitrobenzene-d5 (Surr)	*47*		*27 - 111*	*04/20/12 08:47*	*04/24/12 18:05*	*1*
Phenol-d5 (Surr)	*51*		*10 - 110*	*04/20/12 08:47*	*04/24/12 18:05*	*1*
Terphenyl-d14 (Surr)	*52*		*37 - 119*	*04/20/12 08:47*	*04/24/12 18:05*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-DR-1044
Date Collected: 04/17/12 14:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/20/12 08:47	04/24/12 20:34	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 20:34	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
2,4-Dichlorophenol	9.9	U	9.9	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
2,4-Dimethylphenol	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 20:34	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 20:34	1
2,6-Dinitrotoluene	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
2-Chloronaphthalene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 20:34	1
2-Methylnaphthalene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
2-Methylphenol	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
2-Nitroaniline	20	U	20	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/20/12 08:47	04/24/12 20:34	1
3,3'-Dichlorobenzidine	0.99	U	0.99	0.37	ug/L		04/20/12 08:47	04/24/12 20:34	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/20/12 08:47	04/24/12 20:34	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 20:34	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
4-Chloroaniline	9.9	U	9.9	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 20:34	1
4-Nitroaniline	20	U	20	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 20:34	1
Acenaphthene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Acenaphthylene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/20/12 08:47	04/24/12 20:34	1
Anthracene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/20/12 08:47	04/24/12 20:34	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/20/12 08:47	04/24/12 20:34	1
Benzo[a]anthracene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Benzo[a]pyrene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Benzo[b]fluoranthene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Benzo[g,h,i]perylene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Benzo[k]fluoranthene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/20/12 08:47	04/24/12 20:34	1
Bis(2-chloroethyl)ether	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
Butyl benzyl phthalate	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
Caprolactam	9.9	U	9.9	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
Carbazole	9.9	U	9.9	0.28	ug/L		04/20/12 08:47	04/24/12 20:34	1
Chrysene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Dibenzofuran	4.0	U	4.0	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Diethyl phthalate	5.0	U	5.0	0.59	ug/L		04/20/12 08:47	04/24/12 20:34	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 20:34	1
Di-n-butyl phthalate	5.0	U	5.0	0.66	ug/L		04/20/12 08:47	04/24/12 20:34	1
Di-n-octyl phthalate	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
Fluoranthene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Fluorene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Hexachlorobenzene	0.20	U	0.20	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-DR-1044
Date Collected: 04/17/12 14:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	0.99	U	0.99	0.27	ug/L		04/20/12 08:47	04/24/12 20:34	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
Hexachloroethane	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 20:34	1
Naphthalene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/20/12 08:47	04/24/12 20:34	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 20:34	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/20/12 08:47	04/24/12 20:34	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/20/12 08:47	04/24/12 20:34	1
Phenol	5.0	U	5.0	0.59	ug/L		04/20/12 08:47	04/24/12 20:34	1
Phenanthrene	2.0	U	2.0	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
Pyrene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 20:34	1
3 & 4 Methylphenol	5.0	U	5.0	0.74	ug/L		04/20/12 08:47	04/24/12 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*42*		*28 - 110*	*04/20/12 08:47*	*04/24/12 20:34*	*1*
2-Fluorophenol (Surr)	*45*		*10 - 110*	*04/20/12 08:47*	*04/24/12 20:34*	*1*
2,4,6-Tribromophenol (Surr)	*51*		*22 - 120*	*04/20/12 08:47*	*04/24/12 20:34*	*1*
Nitrobenzene-d5 (Surr)	*42*		*27 - 111*	*04/20/12 08:47*	*04/24/12 20:34*	*1*
Phenol-d5 (Surr)	*46*		*10 - 110*	*04/20/12 08:47*	*04/24/12 20:34*	*1*
Terphenyl-d14 (Surr)	*54*		*37 - 119*	*04/20/12 08:47*	*04/24/12 20:34*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-DR-1045
Date Collected: 04/17/12 10:20
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/20/12 08:47	04/24/12 15:55	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 15:55	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 15:55	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 15:55	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 15:55	1
2-Methylnaphthalene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
2-Nitroaniline	20	U	20	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/20/12 08:47	04/24/12 15:55	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/20/12 08:47	04/24/12 15:55	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/20/12 08:47	04/24/12 15:55	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 15:55	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
4-Chloroaniline	10	U	10	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 15:55	1
4-Nitroaniline	20	U	20	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 15:55	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/20/12 08:47	04/24/12 15:55	1
Anthracene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/20/12 08:47	04/24/12 15:55	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/20/12 08:47	04/24/12 15:55	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/20/12 08:47	04/24/12 15:55	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Bis(2-ethylhexyl) phthalate	**1.0**	**J**	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
Caprolactam	10	U	10	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
Carbazole	10	U	10	0.28	ug/L		04/20/12 08:47	04/24/12 15:55	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		04/20/12 08:47	04/24/12 15:55	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 15:55	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		04/20/12 08:47	04/24/12 15:55	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Fluorene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-DR-1045
Date Collected: 04/17/12 10:20
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/20/12 08:47	04/24/12 15:55	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
Hexachloroethane	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 15:55	1
Naphthalene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/20/12 08:47	04/24/12 15:55	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 15:55	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/20/12 08:47	04/24/12 15:55	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/20/12 08:47	04/24/12 15:55	1
Phenol	5.0	U	5.0	0.60	ug/L		04/20/12 08:47	04/24/12 15:55	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
Pyrene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 15:55	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		04/20/12 08:47	04/24/12 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*49*		*28 - 110*	*04/20/12 08:47*	*04/24/12 15:55*	*1*
2-Fluorophenol (Surr)	*49*		*10 - 110*	*04/20/12 08:47*	*04/24/12 15:55*	*1*
2,4,6-Tribromophenol (Surr)	*58*		*22 - 120*	*04/20/12 08:47*	*04/24/12 15:55*	*1*
Nitrobenzene-d5 (Surr)	*49*		*27 - 111*	*04/20/12 08:47*	*04/24/12 15:55*	*1*
Phenol-d5 (Surr)	*51*		*10 - 110*	*04/20/12 08:47*	*04/24/12 15:55*	*1*
Terphenyl-d14 (Surr)	*61*		*37 - 119*	*04/20/12 08:47*	*04/24/12 15:55*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-DR-1046
Date Collected: 04/17/12 12:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
2,2'-oxybis[1-chloropropane]	4.9	U	4.9	0.39	ug/L		04/20/12 08:47	04/24/12 17:09	1
2,4,5-Trichlorophenol	4.9	U	4.9	0.29	ug/L		04/20/12 08:47	04/24/12 17:09	1
2,4,6-Trichlorophenol	3.9	U	3.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
2,4-Dichlorophenol	9.8	U	9.8	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
2,4-Dimethylphenol	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 17:09	1
2,4-Dinitrotoluene	4.9	U	4.9	0.26	ug/L		04/20/12 08:47	04/24/12 17:09	1
2,6-Dinitrotoluene	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
2-Chloronaphthalene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
2-Chlorophenol	4.9	U	4.9	0.28	ug/L		04/20/12 08:47	04/24/12 17:09	1
2-Methylnaphthalene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
2-Methylphenol	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
2-Nitroaniline	20	U	20	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
2-Nitrophenol	4.9	U	4.9	0.27	ug/L		04/20/12 08:47	04/24/12 17:09	1
3,3'-Dichlorobenzidine	0.98	U	0.98	0.36	ug/L		04/20/12 08:47	04/24/12 17:09	1
3-Nitroaniline	20	U	20	0.27	ug/L		04/20/12 08:47	04/24/12 17:09	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 17:09	1
4-Bromophenyl phenyl ether	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
4-Chloro-3-methylphenol	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
4-Chloroaniline	9.8	U	9.8	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
4-Chlorophenyl phenyl ether	4.9	U	4.9	0.29	ug/L		04/20/12 08:47	04/24/12 17:09	1
4-Nitroaniline	20	U	20	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 17:09	1
Acenaphthene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Acenaphthylene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Acetophenone	4.9	U	4.9	0.33	ug/L		04/20/12 08:47	04/24/12 17:09	1
Anthracene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Atrazine	2.9	U	2.9	0.33	ug/L		04/20/12 08:47	04/24/12 17:09	1
Benzaldehyde	4.9	U	4.9	0.38	ug/L		04/20/12 08:47	04/24/12 17:09	1
Benzo[a]anthracene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Benzo[a]pyrene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Benzo[b]fluoranthene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Benzo[g,h,i]perylene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Benzo[k]fluoranthene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Bis(2-chloroethoxy)methane	4.9	U	4.9	0.31	ug/L		04/20/12 08:47	04/24/12 17:09	1
Bis(2-chloroethyl)ether	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Bis(2-ethylhexyl) phthalate	**1.1**	**J**	4.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
Butyl benzyl phthalate	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
Caprolactam	9.8	U	9.8	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
Carbazole	9.8	U	9.8	0.27	ug/L		04/20/12 08:47	04/24/12 17:09	1
Chrysene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Dibenzofuran	3.9	U	3.9	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Diethyl phthalate	4.9	U	4.9	0.59	ug/L		04/20/12 08:47	04/24/12 17:09	1
Dimethyl phthalate	4.9	U	4.9	0.28	ug/L		04/20/12 08:47	04/24/12 17:09	1
Di-n-butyl phthalate	4.9	U	4.9	0.66	ug/L		04/20/12 08:47	04/24/12 17:09	1
Di-n-octyl phthalate	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
Fluoranthene	0.98	U	0.98	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Fluorene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Hexachlorobenzene	0.20	U	0.20	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-DR-1046
Date Collected: 04/17/12 12:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	0.98	U	0.98	0.26	ug/L		04/20/12 08:47	04/24/12 17:09	1
Hexachlorocyclopentadiene	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
Hexachloroethane	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Isophorone	4.9	U	4.9	0.26	ug/L		04/20/12 08:47	04/24/12 17:09	1
Naphthalene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Nitrobenzene	2.9	U	2.9	0.039	ug/L		04/20/12 08:47	04/24/12 17:09	1
N-Nitrosodi-n-propylamine	4.9	U	4.9	0.78	ug/L		04/20/12 08:47	04/24/12 17:09	1
N-Nitrosodiphenylamine	4.9	U	4.9	0.30	ug/L		04/20/12 08:47	04/24/12 17:09	1
Pentachlorophenol	4.9	U	4.9	2.4	ug/L		04/20/12 08:47	04/24/12 17:09	1
Phenol	4.9	U	4.9	0.59	ug/L		04/20/12 08:47	04/24/12 17:09	1
Phenanthrene	2.0	U	2.0	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
Pyrene	4.9	U	4.9	0.098	ug/L		04/20/12 08:47	04/24/12 17:09	1
3 & 4 Methylphenol	4.9	U	4.9	0.74	ug/L		04/20/12 08:47	04/24/12 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*47*		*28 - 110*	*04/20/12 08:47*	*04/24/12 17:09*	*1*
2-Fluorophenol (Surr)	*51*		*10 - 110*	*04/20/12 08:47*	*04/24/12 17:09*	*1*
2,4,6-Tribromophenol (Surr)	*56*		*22 - 120*	*04/20/12 08:47*	*04/24/12 17:09*	*1*
Nitrobenzene-d5 (Surr)	*47*		*27 - 111*	*04/20/12 08:47*	*04/24/12 17:09*	*1*
Phenol-d5 (Surr)	*54*		*10 - 110*	*04/20/12 08:47*	*04/24/12 17:09*	*1*
Terphenyl-d14 (Surr)	*49*		*37 - 119*	*04/20/12 08:47*	*04/24/12 17:09*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-DR-1047
Date Collected: 04/17/12 15:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-17
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/20/12 08:47	04/24/12 15:36	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 15:36	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
2,4-Dichlorophenol	9.9	U	9.9	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
2,4-Dimethylphenol	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 15:36	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 15:36	1
2,6-Dinitrotoluene	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
2-Chloronaphthalene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 15:36	1
2-Methylnaphthalene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
2-Methylphenol	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
2-Nitroaniline	20	U	20	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/20/12 08:47	04/24/12 15:36	1
3,3'-Dichlorobenzidine	0.99	U	0.99	0.37	ug/L		04/20/12 08:47	04/24/12 15:36	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/20/12 08:47	04/24/12 15:36	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 15:36	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
4-Chloroaniline	9.9	U	9.9	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 15:36	1
4-Nitroaniline	20	U	20	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 15:36	1
Acenaphthene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Acenaphthylene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/20/12 08:47	04/24/12 15:36	1
Anthracene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/20/12 08:47	04/24/12 15:36	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/20/12 08:47	04/24/12 15:36	1
Benzo[a]anthracene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Benzo[a]pyrene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Benzo[b]fluoranthene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Benzo[g,h,i]perylene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Benzo[k]fluoranthene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/20/12 08:47	04/24/12 15:36	1
Bis(2-chloroethyl)ether	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
Butyl benzyl phthalate	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
Caprolactam	9.9	U	9.9	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
Carbazole	9.9	U	9.9	0.28	ug/L		04/20/12 08:47	04/24/12 15:36	1
Chrysene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Dibenzofuran	4.0	U	4.0	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Diethyl phthalate	5.0	U	5.0	0.59	ug/L		04/20/12 08:47	04/24/12 15:36	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 15:36	1
Di-n-butyl phthalate	5.0	U	5.0	0.66	ug/L		04/20/12 08:47	04/24/12 15:36	1
Di-n-octyl phthalate	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
Fluoranthene	0.99	U	0.99	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Fluorene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Hexachlorobenzene	0.20	U	0.20	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-DR-1047
Date Collected: 04/17/12 15:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-17
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	0.99	U	0.99	0.27	ug/L		04/20/12 08:47	04/24/12 15:36	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
Hexachloroethane	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 15:36	1
Naphthalene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/20/12 08:47	04/24/12 15:36	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.79	ug/L		04/20/12 08:47	04/24/12 15:36	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/20/12 08:47	04/24/12 15:36	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/20/12 08:47	04/24/12 15:36	1
Phenol	5.0	U	5.0	0.59	ug/L		04/20/12 08:47	04/24/12 15:36	1
Phenanthrene	2.0	U	2.0	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
Pyrene	5.0	U	5.0	0.099	ug/L		04/20/12 08:47	04/24/12 15:36	1
3 & 4 Methylphenol	5.0	U	5.0	0.74	ug/L		04/20/12 08:47	04/24/12 15:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*52*		*28 - 110*	*04/20/12 08:47*	*04/24/12 15:36*	*1*
2-Fluorophenol (Surr)	*60*		*10 - 110*	*04/20/12 08:47*	*04/24/12 15:36*	*1*
2,4,6-Tribromophenol (Surr)	*64*		*22 - 120*	*04/20/12 08:47*	*04/24/12 15:36*	*1*
Nitrobenzene-d5 (Surr)	*55*		*27 - 111*	*04/20/12 08:47*	*04/24/12 15:36*	*1*
Phenol-d5 (Surr)	*60*		*10 - 110*	*04/20/12 08:47*	*04/24/12 15:36*	*1*
Terphenyl-d14 (Surr)	*69*		*37 - 119*	*04/20/12 08:47*	*04/24/12 15:36*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041712-DR-1048
Date Collected: 04/17/12 15:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-18
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/20/12 08:47	04/24/12 20:53	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 20:53	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 20:53	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 20:53	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 20:53	1
2-Methylnaphthalene	**0.22**	**J**	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
2-Nitroaniline	20	U	20	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/20/12 08:47	04/24/12 20:53	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/20/12 08:47	04/24/12 20:53	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/20/12 08:47	04/24/12 20:53	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 20:53	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
4-Chloroaniline	10	U	10	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 20:53	1
4-Nitroaniline	20	U	20	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 20:53	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/20/12 08:47	04/24/12 20:53	1
Anthracene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/20/12 08:47	04/24/12 20:53	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/20/12 08:47	04/24/12 20:53	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/20/12 08:47	04/24/12 20:53	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Bis(2-ethylhexyl) phthalate	**2.1**	**J**	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
Caprolactam	10	U	10	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
Carbazole	10	U	10	0.28	ug/L		04/20/12 08:47	04/24/12 20:53	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		04/20/12 08:47	04/24/12 20:53	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 20:53	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		04/20/12 08:47	04/24/12 20:53	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Fluorene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041712-DR-1048
Date Collected: 04/17/12 15:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-18
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/20/12 08:47	04/24/12 20:53	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
Hexachloroethane	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 20:53	1
Naphthalene	**0.23**	**J**	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/20/12 08:47	04/24/12 20:53	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 20:53	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/20/12 08:47	04/24/12 20:53	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/20/12 08:47	04/24/12 20:53	1
Phenol	5.0	U	5.0	0.60	ug/L		04/20/12 08:47	04/24/12 20:53	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
Pyrene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 20:53	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		04/20/12 08:47	04/24/12 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*47*		*28 - 110*	*04/20/12 08:47*	*04/24/12 20:53*	*1*
2-Fluorophenol (Surr)	*47*		*10 - 110*	*04/20/12 08:47*	*04/24/12 20:53*	*1*
2,4,6-Tribromophenol (Surr)	*56*		*22 - 120*	*04/20/12 08:47*	*04/24/12 20:53*	*1*
Nitrobenzene-d5 (Surr)	*46*		*27 - 111*	*04/20/12 08:47*	*04/24/12 20:53*	*1*
Phenol-d5 (Surr)	*50*		*10 - 110*	*04/20/12 08:47*	*04/24/12 20:53*	*1*
Terphenyl-d14 (Surr)	*58*		*37 - 119*	*04/20/12 08:47*	*04/24/12 20:53*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-JY-1031
Date Collected: 04/17/12 09:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.098	U	0.098	0.043	ug/L		04/19/12 08:41	04/20/12 17:17	1
Aroclor-1221	0.098	U	0.098	0.044	ug/L		04/19/12 08:41	04/20/12 17:17	1
Aroclor-1232	0.098	U	0.098	0.072	ug/L		04/19/12 08:41	04/20/12 17:17	1
Aroclor-1242	0.098	U	0.098	0.059	ug/L		04/19/12 08:41	04/20/12 17:17	1
Aroclor-1248	0.098	U	0.098	0.060	ug/L		04/19/12 08:41	04/20/12 17:17	1
Aroclor-1254	0.098	U	0.098	0.031	ug/L		04/19/12 08:41	04/20/12 17:17	1
Aroclor-1260	0.098	U	0.098	0.037	ug/L		04/19/12 08:41	04/20/12 17:17	1
Aroclor-1262	0.098	U	0.098	0.035	ug/L		04/19/12 08:41	04/20/12 17:17	1
Aroclor-1268	0.098	U	0.098	0.054	ug/L		04/19/12 08:41	04/20/12 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*23 - 136*	*04/19/12 08:41*	*04/20/12 17:17*	*1*
DCB Decachlorobiphenyl	*61*		*10 - 130*	*04/19/12 08:41*	*04/20/12 17:17*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-JY-1032
Date Collected: 04/17/12 09:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/19/12 08:41	04/20/12 17:33	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/19/12 08:41	04/20/12 17:33	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/19/12 08:41	04/20/12 17:33	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/19/12 08:41	04/20/12 17:33	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/19/12 08:41	04/20/12 17:33	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/19/12 08:41	04/20/12 17:33	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/19/12 08:41	04/20/12 17:33	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/19/12 08:41	04/20/12 17:33	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/19/12 08:41	04/20/12 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*60*		*23 - 136*	*04/19/12 08:41*	*04/20/12 17:33*	*1*
DCB Decachlorobiphenyl	*63*		*10 - 130*	*04/19/12 08:41*	*04/20/12 17:33*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-JY-1033
Date Collected: 04/17/12 09:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.099	U	0.099	0.044	ug/L		04/19/12 08:41	04/20/12 17:48	1
Aroclor-1221	0.099	U	0.099	0.045	ug/L		04/19/12 08:41	04/20/12 17:48	1
Aroclor-1232	0.099	U	0.099	0.072	ug/L		04/19/12 08:41	04/20/12 17:48	1
Aroclor-1242	0.099	U	0.099	0.059	ug/L		04/19/12 08:41	04/20/12 17:48	1
Aroclor-1248	0.099	U	0.099	0.060	ug/L		04/19/12 08:41	04/20/12 17:48	1
Aroclor-1254	0.099	U	0.099	0.032	ug/L		04/19/12 08:41	04/20/12 17:48	1
Aroclor-1260	0.099	U	0.099	0.038	ug/L		04/19/12 08:41	04/20/12 17:48	1
Aroclor-1262	0.099	U	0.099	0.036	ug/L		04/19/12 08:41	04/20/12 17:48	1
Aroclor-1268	0.099	U	0.099	0.054	ug/L		04/19/12 08:41	04/20/12 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*59*		*23 - 136*	*04/19/12 08:41*	*04/20/12 17:48*	*1*
DCB Decachlorobiphenyl	*47*		*10 - 130*	*04/19/12 08:41*	*04/20/12 17:48*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-JY-1034
Date Collected: 04/17/12 11:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/19/12 08:41	04/20/12 18:04	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/19/12 08:41	04/20/12 18:04	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/19/12 08:41	04/20/12 18:04	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/19/12 08:41	04/20/12 18:04	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/19/12 08:41	04/20/12 18:04	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/19/12 08:41	04/20/12 18:04	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/19/12 08:41	04/20/12 18:04	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/19/12 08:41	04/20/12 18:04	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/19/12 08:41	04/20/12 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*23 - 136*	*04/19/12 08:41*	*04/20/12 18:04*	*1*
DCB Decachlorobiphenyl	*62*		*10 - 130*	*04/19/12 08:41*	*04/20/12 18:04*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-JY-1035
Date Collected: 04/17/12 14:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.098	U	0.098	0.043	ug/L		04/19/12 08:41	04/20/12 19:07	1
Aroclor-1221	0.098	U	0.098	0.044	ug/L		04/19/12 08:41	04/20/12 19:07	1
Aroclor-1232	0.098	U	0.098	0.072	ug/L		04/19/12 08:41	04/20/12 19:07	1
Aroclor-1242	0.098	U	0.098	0.059	ug/L		04/19/12 08:41	04/20/12 19:07	1
Aroclor-1248	0.098	U	0.098	0.060	ug/L		04/19/12 08:41	04/20/12 19:07	1
Aroclor-1254	0.098	U	0.098	0.031	ug/L		04/19/12 08:41	04/20/12 19:07	1
Aroclor-1260	0.098	U	0.098	0.037	ug/L		04/19/12 08:41	04/20/12 19:07	1
Aroclor-1262	0.098	U	0.098	0.035	ug/L		04/19/12 08:41	04/20/12 19:07	1
Aroclor-1268	0.098	U	0.098	0.054	ug/L		04/19/12 08:41	04/20/12 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*23 - 136*	*04/19/12 08:41*	*04/20/12 19:07*	*1*
DCB Decachlorobiphenyl	*63*		*10 - 130*	*04/19/12 08:41*	*04/20/12 19:07*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-JY-1036
Date Collected: 04/17/12 11:30
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.11	U	0.11	0.048	ug/L		04/19/12 08:41	04/20/12 18:52	1
Aroclor-1221	0.11	U	0.11	0.049	ug/L		04/19/12 08:41	04/20/12 18:52	1
Aroclor-1232	0.11	U	0.11	0.079	ug/L		04/19/12 08:41	04/20/12 18:52	1
Aroclor-1242	0.11	U	0.11	0.065	ug/L		04/19/12 08:41	04/20/12 18:52	1
Aroclor-1248	0.11	U	0.11	0.066	ug/L		04/19/12 08:41	04/20/12 18:52	1
Aroclor-1254	0.11	U	0.11	0.035	ug/L		04/19/12 08:41	04/20/12 18:52	1
Aroclor-1260	0.11	U	0.11	0.041	ug/L		04/19/12 08:41	04/20/12 18:52	1
Aroclor-1262	0.11	U	0.11	0.039	ug/L		04/19/12 08:41	04/20/12 18:52	1
Aroclor-1268	0.11	U	0.11	0.060	ug/L		04/19/12 08:41	04/20/12 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*23 - 136*	*04/19/12 08:41*	*04/20/12 18:52*	*1*
DCB Decachlorobiphenyl	*58*		*10 - 130*	*04/19/12 08:41*	*04/20/12 18:52*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-CB-1037
Date Collected: 04/17/12 09:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.046	ug/L		04/19/12 08:41	04/20/12 18:36	1
Aroclor-1221	0.10	U	0.10	0.047	ug/L		04/19/12 08:41	04/20/12 18:36	1
Aroclor-1232	0.10	U	0.10	0.076	ug/L		04/19/12 08:41	04/20/12 18:36	1
Aroclor-1242	0.10	U	0.10	0.063	ug/L		04/19/12 08:41	04/20/12 18:36	1
Aroclor-1248	0.10	U	0.10	0.064	ug/L		04/19/12 08:41	04/20/12 18:36	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/19/12 08:41	04/20/12 18:36	1
Aroclor-1260	0.10	U	0.10	0.040	ug/L		04/19/12 08:41	04/20/12 18:36	1
Aroclor-1262	0.10	U	0.10	0.038	ug/L		04/19/12 08:41	04/20/12 18:36	1
Aroclor-1268	0.10	U	0.10	0.057	ug/L		04/19/12 08:41	04/20/12 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*66*		*23 - 136*	*04/19/12 08:41*	*04/20/12 18:36*	*1*
DCB Decachlorobiphenyl	*44*		*10 - 130*	*04/19/12 08:41*	*04/20/12 18:36*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-CB-1038
Date Collected: 04/17/12 11:35
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.11	U	0.11	0.047	ug/L		04/19/12 08:41	04/20/12 18:20	1
Aroclor-1221	0.11	U	0.11	0.048	ug/L		04/19/12 08:41	04/20/12 18:20	1
Aroclor-1232	0.11	U	0.11	0.078	ug/L		04/19/12 08:41	04/20/12 18:20	1
Aroclor-1242	0.11	U	0.11	0.065	ug/L		04/19/12 08:41	04/20/12 18:20	1
Aroclor-1248	0.11	U	0.11	0.066	ug/L		04/19/12 08:41	04/20/12 18:20	1
Aroclor-1254	0.11	U	0.11	0.034	ug/L		04/19/12 08:41	04/20/12 18:20	1
Aroclor-1260	0.11	U	0.11	0.041	ug/L		04/19/12 08:41	04/20/12 18:20	1
Aroclor-1262	0.11	U	0.11	0.039	ug/L		04/19/12 08:41	04/20/12 18:20	1
Aroclor-1268	0.11	U	0.11	0.059	ug/L		04/19/12 08:41	04/20/12 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*65*		*23 - 136*	*04/19/12 08:41*	*04/20/12 18:20*	*1*
DCB Decachlorobiphenyl	*63*		*10 - 130*	*04/19/12 08:41*	*04/20/12 18:20*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-CB-1039
Date Collected: 04/17/12 13:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/19/12 08:41	04/20/12 19:23	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/19/12 08:41	04/20/12 19:23	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/19/12 08:41	04/20/12 19:23	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/19/12 08:41	04/20/12 19:23	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/19/12 08:41	04/20/12 19:23	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/19/12 08:41	04/20/12 19:23	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/19/12 08:41	04/20/12 19:23	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/19/12 08:41	04/20/12 19:23	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/19/12 08:41	04/20/12 19:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*63*		*23 - 136*	*04/19/12 08:41*	*04/20/12 19:23*	*1*
DCB Decachlorobiphenyl	*23*		*10 - 130*	*04/19/12 08:41*	*04/20/12 19:23*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-CB-1040
Date Collected: 04/17/12 15:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.11	U	0.11	0.046	ug/L		04/19/12 08:41	04/20/12 19:39	1
Aroclor-1221	0.11	U	0.11	0.047	ug/L		04/19/12 08:41	04/20/12 19:39	1
Aroclor-1232	0.11	U	0.11	0.077	ug/L		04/19/12 08:41	04/20/12 19:39	1
Aroclor-1242	0.11	U	0.11	0.063	ug/L		04/19/12 08:41	04/20/12 19:39	1
Aroclor-1248	0.11	U	0.11	0.064	ug/L		04/19/12 08:41	04/20/12 19:39	1
Aroclor-1254	0.11	U	0.11	0.034	ug/L		04/19/12 08:41	04/20/12 19:39	1
Aroclor-1260	0.11	U	0.11	0.040	ug/L		04/19/12 08:41	04/20/12 19:39	1
Aroclor-1262	0.11	U	0.11	0.038	ug/L		04/19/12 08:41	04/20/12 19:39	1
Aroclor-1268	0.11	U	0.11	0.058	ug/L		04/19/12 08:41	04/20/12 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*23 - 136*	*04/19/12 08:41*	*04/20/12 19:39*	*1*
DCB Decachlorobiphenyl	*60*		*10 - 130*	*04/19/12 08:41*	*04/20/12 19:39*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-DR-1041
Date Collected: 04/17/12 09:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.045	ug/L		04/19/12 08:41	04/20/12 19:55	1
Aroclor-1221	0.10	U	0.10	0.046	ug/L		04/19/12 08:41	04/20/12 19:55	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		04/19/12 08:41	04/20/12 19:55	1
Aroclor-1242	0.10	U	0.10	0.061	ug/L		04/19/12 08:41	04/20/12 19:55	1
Aroclor-1248	0.10	U	0.10	0.062	ug/L		04/19/12 08:41	04/20/12 19:55	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/19/12 08:41	04/20/12 19:55	1
Aroclor-1260	0.10	U	0.10	0.039	ug/L		04/19/12 08:41	04/20/12 19:55	1
Aroclor-1262	0.10	U	0.10	0.037	ug/L		04/19/12 08:41	04/20/12 19:55	1
Aroclor-1268	0.10	U	0.10	0.056	ug/L		04/19/12 08:41	04/20/12 19:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*23 - 136*	*04/19/12 08:41*	*04/20/12 19:55*	*1*
DCB Decachlorobiphenyl	*40*		*10 - 130*	*04/19/12 08:41*	*04/20/12 19:55*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-DR-1042
Date Collected: 04/17/12 10:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.11	U	0.11	0.047	ug/L		04/19/12 08:41	04/20/12 20:10	1
Aroclor-1221	0.11	U	0.11	0.048	ug/L		04/19/12 08:41	04/20/12 20:10	1
Aroclor-1232	0.11	U	0.11	0.078	ug/L		04/19/12 08:41	04/20/12 20:10	1
Aroclor-1242	0.11	U	0.11	0.065	ug/L		04/19/12 08:41	04/20/12 20:10	1
Aroclor-1248	0.11	U	0.11	0.066	ug/L		04/19/12 08:41	04/20/12 20:10	1
Aroclor-1254	0.11	U	0.11	0.034	ug/L		04/19/12 08:41	04/20/12 20:10	1
Aroclor-1260	0.11	U	0.11	0.041	ug/L		04/19/12 08:41	04/20/12 20:10	1
Aroclor-1262	0.11	U	0.11	0.039	ug/L		04/19/12 08:41	04/20/12 20:10	1
Aroclor-1268	0.11	U	0.11	0.059	ug/L		04/19/12 08:41	04/20/12 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*23 - 136*	*04/19/12 08:41*	*04/20/12 20:10*	*1*
DCB Decachlorobiphenyl	*51*		*10 - 130*	*04/19/12 08:41*	*04/20/12 20:10*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-DR-1043
Date Collected: 04/17/12 11:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.099	U	0.099	0.044	ug/L		04/19/12 08:41	04/24/12 09:05	1
Aroclor-1221	0.099	U	0.099	0.045	ug/L		04/19/12 08:41	04/24/12 09:05	1
Aroclor-1232	0.099	U	0.099	0.072	ug/L		04/19/12 08:41	04/24/12 09:05	1
Aroclor-1242	0.099	U	0.099	0.059	ug/L		04/19/12 08:41	04/24/12 09:05	1
Aroclor-1248	0.099	U	0.099	0.060	ug/L		04/19/12 08:41	04/24/12 09:05	1
Aroclor-1254	0.099	U	0.099	0.032	ug/L		04/19/12 08:41	04/24/12 09:05	1
Aroclor-1260	0.099	U	0.099	0.038	ug/L		04/19/12 08:41	04/24/12 09:05	1
Aroclor-1262	0.099	U	0.099	0.036	ug/L		04/19/12 08:41	04/24/12 09:05	1
Aroclor-1268	0.099	U	0.099	0.054	ug/L		04/19/12 08:41	04/24/12 09:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*48*		*23 - 136*	*04/19/12 08:41*	*04/24/12 09:05*	*1*
DCB Decachlorobiphenyl	*35*		*10 - 130*	*04/19/12 08:41*	*04/24/12 09:05*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-DR-1044
Date Collected: 04/17/12 14:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/19/12 08:41	04/20/12 20:58	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/19/12 08:41	04/20/12 20:58	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		04/19/12 08:41	04/20/12 20:58	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		04/19/12 08:41	04/20/12 20:58	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		04/19/12 08:41	04/20/12 20:58	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/19/12 08:41	04/20/12 20:58	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/19/12 08:41	04/20/12 20:58	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/19/12 08:41	04/20/12 20:58	1
Aroclor-1268	0.10	U	0.10	0.055	ug/L		04/19/12 08:41	04/20/12 20:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*71*		*23 - 136*	*04/19/12 08:41*	*04/20/12 20:58*	*1*
DCB Decachlorobiphenyl	*42*		*10 - 130*	*04/19/12 08:41*	*04/20/12 20:58*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-DR-1045
Date Collected: 04/17/12 10:20
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/19/12 08:41	04/20/12 20:42	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/19/12 08:41	04/20/12 20:42	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		04/19/12 08:41	04/20/12 20:42	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		04/19/12 08:41	04/20/12 20:42	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		04/19/12 08:41	04/20/12 20:42	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/19/12 08:41	04/20/12 20:42	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/19/12 08:41	04/20/12 20:42	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/19/12 08:41	04/20/12 20:42	1
Aroclor-1268	0.10	U	0.10	0.055	ug/L		04/19/12 08:41	04/20/12 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*23 - 136*	*04/19/12 08:41*	*04/20/12 20:42*	*1*
DCB Decachlorobiphenyl	*36*		*10 - 130*	*04/19/12 08:41*	*04/20/12 20:42*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-DR-1046
Date Collected: 04/17/12 12:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.099	U	0.099	0.044	ug/L		04/19/12 08:41	04/20/12 20:26	1
Aroclor-1221	0.099	U	0.099	0.045	ug/L		04/19/12 08:41	04/20/12 20:26	1
Aroclor-1232	0.099	U	0.099	0.072	ug/L		04/19/12 08:41	04/20/12 20:26	1
Aroclor-1242	0.099	U	0.099	0.059	ug/L		04/19/12 08:41	04/20/12 20:26	1
Aroclor-1248	0.099	U	0.099	0.060	ug/L		04/19/12 08:41	04/20/12 20:26	1
Aroclor-1254	0.099	U	0.099	0.032	ug/L		04/19/12 08:41	04/20/12 20:26	1
Aroclor-1260	0.099	U	0.099	0.038	ug/L		04/19/12 08:41	04/20/12 20:26	1
Aroclor-1262	0.099	U	0.099	0.036	ug/L		04/19/12 08:41	04/20/12 20:26	1
Aroclor-1268	0.099	U	0.099	0.054	ug/L		04/19/12 08:41	04/20/12 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*63*		*23 - 136*	*04/19/12 08:41*	*04/20/12 20:26*	*1*
DCB Decachlorobiphenyl	*45*		*10 - 130*	*04/19/12 08:41*	*04/20/12 20:26*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-DR-1047
Date Collected: 04/17/12 15:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-17
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.098	U	0.098	0.043	ug/L		04/19/12 08:41	04/20/12 21:29	1
Aroclor-1221	0.098	U	0.098	0.044	ug/L		04/19/12 08:41	04/20/12 21:29	1
Aroclor-1232	0.098	U	0.098	0.072	ug/L		04/19/12 08:41	04/20/12 21:29	1
Aroclor-1242	0.098	U	0.098	0.059	ug/L		04/19/12 08:41	04/20/12 21:29	1
Aroclor-1248	0.098	U	0.098	0.060	ug/L		04/19/12 08:41	04/20/12 21:29	1
Aroclor-1254	0.098	U	0.098	0.031	ug/L		04/19/12 08:41	04/20/12 21:29	1
Aroclor-1260	0.098	U	0.098	0.037	ug/L		04/19/12 08:41	04/20/12 21:29	1
Aroclor-1262	0.098	U	0.098	0.035	ug/L		04/19/12 08:41	04/20/12 21:29	1
Aroclor-1268	0.098	U	0.098	0.054	ug/L		04/19/12 08:41	04/20/12 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*56*		*23 - 136*	*04/19/12 08:41*	*04/20/12 21:29*	*1*
DCB Decachlorobiphenyl	*50*		*10 - 130*	*04/19/12 08:41*	*04/20/12 21:29*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041712-DR-1048
Date Collected: 04/17/12 15:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-18
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.045	ug/L		04/19/12 08:41	04/20/12 21:45	1
Aroclor-1221	0.10	U	0.10	0.046	ug/L		04/19/12 08:41	04/20/12 21:45	1
Aroclor-1232	0.10	U	0.10	0.075	ug/L		04/19/12 08:41	04/20/12 21:45	1
Aroclor-1242	0.10	U	0.10	0.062	ug/L		04/19/12 08:41	04/20/12 21:45	1
Aroclor-1248	0.10	U	0.10	0.063	ug/L		04/19/12 08:41	04/20/12 21:45	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/19/12 08:41	04/20/12 21:45	1
Aroclor-1260	0.10	U	0.10	0.039	ug/L		04/19/12 08:41	04/20/12 21:45	1
Aroclor-1262	0.10	U	0.10	0.037	ug/L		04/19/12 08:41	04/20/12 21:45	1
Aroclor-1268	0.10	U	0.10	0.057	ug/L		04/19/12 08:41	04/20/12 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*54*		*23 - 136*	*04/19/12 08:41*	*04/20/12 21:45*	*1*
DCB Decachlorobiphenyl	*54*		*10 - 130*	*04/19/12 08:41*	*04/20/12 21:45*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-JY-1031
Date Collected: 04/17/12 09:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/20/12 12:10	04/23/12 13:19	1
Antimony	**0.34**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 13:19	1
Arsenic	**2.3**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 13:19	1
Barium	**29**	**J B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 13:19	1
Beryllium	**0.26**	**J**	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 13:19	1
Cadmium	**0.13**	**J**	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 13:19	1
Cobalt	**1.4**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 13:19	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 13:19	1
Copper	**1.4**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 13:19	1
Iron	200	U L	200	26	ug/L		04/20/12 12:10	04/23/12 13:19	1
Manganese	**520**		50	0.83	ug/L		04/20/12 12:10	04/23/12 13:19	1
Nickel	**7.1**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 13:19	1
Lead	3.0	U	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 13:19	1
Selenium	**1.4**	**J**	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 13:19	1
Thallium	**1.0**	**J B**	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 13:19	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 13:19	1
Zinc	**4.7**	**J B**	50	2.3	ug/L		04/20/12 12:10	04/23/12 13:19	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 13:19	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-JY-1032
Date Collected: 04/17/12 09:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/20/12 12:10	04/23/12 13:24	1
Antimony	**0.19**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 13:24	1
Arsenic	**2.1**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 13:24	1
Barium	**28**	**J B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 13:24	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 13:24	1
Cadmium	**0.14**	**J**	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 13:24	1
Cobalt	**1.4**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 13:24	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 13:24	1
Copper	**1.3**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 13:24	1
Iron	200	U L	200	26	ug/L		04/20/12 12:10	04/23/12 13:24	1
Manganese	**510**		50	0.83	ug/L		04/20/12 12:10	04/23/12 13:24	1
Nickel	**6.7**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 13:24	1
Lead	3.0	U	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 13:24	1
Selenium	**1.3**	**J**	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 13:24	1
Thallium	**0.73**	**J B**	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 13:24	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 13:24	1
Zinc	**4.9**	**J B**	50	2.3	ug/L		04/20/12 12:10	04/23/12 13:24	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 13:24	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-JY-1033
Date Collected: 04/17/12 09:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**190**		50	19	ug/L		04/20/12 12:10	04/23/12 13:30	1
Antimony	**0.14**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 13:30	1
Arsenic	**1.2**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 13:30	1
Barium	**37**	**J B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 13:30	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 13:30	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 13:30	1
Cobalt	**1.9**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 13:30	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 13:30	1
Copper	**1.0**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 13:30	1
Iron	**190**	**J**	200	26	ug/L		04/20/12 12:10	04/23/12 13:30	1
Manganese	**870**		50	0.83	ug/L		04/20/12 12:10	04/23/12 13:30	1
Nickel	**5.1**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 13:30	1
Lead	**0.19**	**J**	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 13:30	1
Selenium	5.0	U	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 13:30	1
Thallium	**0.31**	**J B**	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 13:30	1
Vanadium	**0.55**	**J**	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 13:30	1
Zinc	**3.3**	**J B**	50	2.3	ug/L		04/20/12 12:10	04/23/12 13:30	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 13:30	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-JY-1034
Date Collected: 04/17/12 11:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**50**		50	19	ug/L		04/20/12 12:10	04/23/12 13:35	1
Antimony	**0.26**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 13:35	1
Arsenic	**1.8**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 13:35	1
Barium	**84**	**J B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 13:35	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 13:35	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 13:35	1
Cobalt	**1.9**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 13:35	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 13:35	1
Copper	**0.37**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 13:35	1
Iron	**97**	**J**	200	26	ug/L		04/20/12 12:10	04/23/12 13:35	1
Manganese	**580**		50	0.83	ug/L		04/20/12 12:10	04/23/12 13:35	1
Nickel	**4.9**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 13:35	1
Lead	3.0	U	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 13:35	1
Selenium	**0.88**	**J**	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 13:35	1
Thallium	**0.27**	**J B**	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 13:35	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 13:35	1
Zinc	**2.7**	**J B**	50	2.3	ug/L		04/20/12 12:10	04/23/12 13:35	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 13:35	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-JY-1035
Date Collected: 04/17/12 14:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/20/12 12:10	04/23/12 13:52	1
Antimony	**0.19**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 13:52	1
Arsenic	**2.9**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 13:52	1
Barium	**55**	**J B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 13:52	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 13:52	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 13:52	1
Cobalt	**0.78**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 13:52	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 13:52	1
Copper	**1.6**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 13:52	1
Iron	200	U	200	26	ug/L		04/20/12 12:10	04/23/12 13:52	1
Manganese	**210**		50	0.83	ug/L		04/20/12 12:10	04/23/12 13:52	1
Nickel	**3.8**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 13:52	1
Lead	3.0	U	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 13:52	1
Selenium	5.0	U	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 13:52	1
Thallium	**0.29**	**J B**	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 13:52	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 13:52	1
Zinc	**2.8**	**J B**	50	2.3	ug/L		04/20/12 12:10	04/23/12 13:52	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 13:52	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-JY-1036
Date Collected: 04/17/12 11:30
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**75**		50	19	ug/L		04/20/12 12:10	04/23/12 13:57	1
Antimony	**0.30**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 13:57	1
Arsenic	**1.8**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 13:57	1
Barium	**39**	**J B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 13:57	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 13:57	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 13:57	1
Cobalt	**0.12**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 13:57	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 13:57	1
Copper	**1.0**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 13:57	1
Iron	**540**		200	26	ug/L		04/20/12 12:10	04/23/12 13:57	1
Manganese	**60**		50	0.83	ug/L		04/20/12 12:10	04/23/12 13:57	1
Nickel	**0.57**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 13:57	1
Lead	3.0	U	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 13:57	1
Selenium	**2.1**	**J**	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 13:57	1
Thallium	**0.24**	**J B**	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 13:57	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 13:57	1
Zinc	**3.0**	**J B**	50	2.3	ug/L		04/20/12 12:10	04/23/12 13:57	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 13:57	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-CB-1037
Date Collected: 04/17/12 09:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/20/12 12:10	04/23/12 14:03	1
Antimony	2.0	U	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:03	1
Arsenic	**4.2**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 14:03	1
Barium	**190**	**B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 14:03	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 14:03	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:03	1
Cobalt	**0.19**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 14:03	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 14:03	1
Copper	**1.6**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 14:03	1
Iron	**3500**		200	26	ug/L		04/20/12 12:10	04/23/12 14:03	1
Manganese	**390**		50	0.83	ug/L		04/20/12 12:10	04/23/12 14:03	1
Nickel	**1.1**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 14:03	1
Lead	**0.30**	**J**	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 14:03	1
Selenium	5.0	U	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 14:03	1
Thallium	**0.14**	**J B**	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 14:03	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 14:03	1
Zinc	50	U	50	2.3	ug/L		04/20/12 12:10	04/23/12 14:03	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 14:03	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-CB-1038
Date Collected: 04/17/12 11:35
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**29**	**J**	50	19	ug/L		04/20/12 12:10	04/23/12 14:08	1
Antimony	**0.26**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:08	1
Arsenic	**1.6**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 14:08	1
Barium	**16**	**J B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 14:08	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 14:08	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:08	1
Cobalt	**0.20**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 14:08	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 14:08	1
Copper	**0.56**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 14:08	1
Iron	200	U	200	26	ug/L		04/20/12 12:10	04/23/12 14:08	1
Manganese	**44**	**J**	50	0.83	ug/L		04/20/12 12:10	04/23/12 14:08	1
Nickel	**0.91**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 14:08	1
Lead	3.0	U	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 14:08	1
Selenium	5.0	U	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 14:08	1
Thallium	2.0	U	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 14:08	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 14:08	1
Zinc	**2.7**	**J B**	50	2.3	ug/L		04/20/12 12:10	04/23/12 14:08	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 14:08	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-CB-1039
Date Collected: 04/17/12 13:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**3000**		50	19	ug/L		04/20/12 12:10	04/23/12 14:13	1
Antimony	**1.0**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:13	1
Arsenic	**2.2**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 14:13	1
Barium	**16**	**J B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 14:13	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 14:13	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:13	1
Cobalt	**0.87**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 14:13	1
Chromium	**4.1**	**J**	10	0.71	ug/L		04/20/12 12:10	04/23/12 14:13	1
Copper	**9.0**	**B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 14:13	1
Iron	**2700**		200	26	ug/L		04/20/12 12:10	04/23/12 14:13	1
Manganese	**18**	**J**	50	0.83	ug/L		04/20/12 12:10	04/23/12 14:13	1
Nickel	**3.9**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 14:13	1
Lead	**1.6**	**J**	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 14:13	1
Selenium	**0.87**	**J**	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 14:13	1
Thallium	**0.16**	**J B**	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 14:13	1
Vanadium	**8.3**		4.0	0.44	ug/L		04/20/12 12:10	04/23/12 14:13	1
Zinc	**22**	**J B**	50	2.3	ug/L		04/20/12 12:10	04/23/12 14:13	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 14:13	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-CB-1040
Date Collected: 04/17/12 15:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**270**		50	19	ug/L		04/20/12 12:10	04/23/12 14:19	1
Antimony	**0.54**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:19	1
Arsenic	**6.6**		5.0	0.40	ug/L		04/20/12 12:10	04/23/12 14:19	1
Barium	**76**	**J B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 14:19	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 14:19	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:19	1
Cobalt	**0.11**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 14:19	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 14:19	1
Copper	**1.3**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 14:19	1
Iron	**180**	**J**	200	26	ug/L		04/20/12 12:10	04/23/12 14:19	1
Manganese	**71**		50	0.83	ug/L		04/20/12 12:10	04/23/12 14:19	1
Nickel	**2.2**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 14:19	1
Lead	3.0	U	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 14:19	1
Selenium	5.0	U	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 14:19	1
Thallium	2.0	U	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 14:19	1
Vanadium	**3.5**	**J**	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 14:19	1
Zinc	50	U	50	2.3	ug/L		04/20/12 12:10	04/23/12 14:19	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 14:19	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-DR-1041
Date Collected: 04/17/12 09:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**50**		50	19	ug/L		04/20/12 12:10	04/23/12 14:24	1
Antimony	**0.62**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:24	1
Arsenic	**1.6**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 14:24	1
Barium	**240**	**B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 14:24	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 14:24	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:24	1
Cobalt	**1.3**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 14:24	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 14:24	1
Copper	**5.6**	**B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 14:24	1
Iron	**150**	**J**	200	26	ug/L		04/20/12 12:10	04/23/12 14:24	1
Manganese	**200**		50	0.83	ug/L		04/20/12 12:10	04/23/12 14:24	1
Nickel	**30**		20	0.20	ug/L		04/20/12 12:10	04/23/12 14:24	1
Lead	**0.71**	**J**	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 14:24	1
Selenium	5.0	U	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 14:24	1
Thallium	**0.14**	**J B**	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 14:24	1
Vanadium	**1.1**	**J**	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 14:24	1
Zinc	**5.3**	**J B**	50	2.3	ug/L		04/20/12 12:10	04/23/12 14:24	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 14:24	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-DR-1042
Date Collected: 04/17/12 10:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/20/12 12:10	04/23/12 14:30	1
Antimony	2.0	U	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:30	1
Arsenic	**9.7**		5.0	0.40	ug/L		04/20/12 12:10	04/23/12 14:30	1
Barium	**190**	**B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 14:30	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 14:30	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:30	1
Cobalt	**0.75**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 14:30	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 14:30	1
Copper	**0.69**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 14:30	1
Iron	**1700**		200	26	ug/L		04/20/12 12:10	04/23/12 14:30	1
Manganese	**76**		50	0.83	ug/L		04/20/12 12:10	04/23/12 14:30	1
Nickel	**7.6**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 14:30	1
Lead	**0.98**	**J**	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 14:30	1
Selenium	5.0	U	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 14:30	1
Thallium	2.0	U	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 14:30	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 14:30	1
Zinc	**6.6**	**J B**	50	2.3	ug/L		04/20/12 12:10	04/23/12 14:30	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 14:30	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-DR-1043
Date Collected: 04/17/12 11:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**60**		50	19	ug/L		04/20/12 12:10	04/23/12 14:35	1
Antimony	2.0	U	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:35	1
Arsenic	**33**		5.0	0.40	ug/L		04/20/12 12:10	04/23/12 14:35	1
Barium	**100**	**B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 14:35	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 14:35	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:35	1
Cobalt	**0.65**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 14:35	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 14:35	1
Copper	**2.4**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 14:35	1
Iron	**2200**		200	26	ug/L		04/20/12 12:10	04/23/12 14:35	1
Manganese	**53**		50	0.83	ug/L		04/20/12 12:10	04/23/12 14:35	1
Nickel	**46**		20	0.20	ug/L		04/20/12 12:10	04/23/12 14:35	1
Lead	**0.92**	**J**	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 14:35	1
Selenium	5.0	U	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 14:35	1
Thallium	2.0	U	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 14:35	1
Vanadium	**1.7**	**J**	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 14:35	1
Zinc	**5.7**	**J B**	50	2.3	ug/L		04/20/12 12:10	04/23/12 14:35	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 14:35	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-DR-1044
Date Collected: 04/17/12 14:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/20/12 12:10	04/23/12 14:40	1
Antimony	2.0	U	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:40	1
Arsenic	**2.1**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 14:40	1
Barium	**280**	**B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 14:40	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 14:40	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:40	1
Cobalt	**1.8**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 14:40	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 14:40	1
Copper	**0.54**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 14:40	1
Iron	**20000**		200	26	ug/L		04/20/12 12:10	04/23/12 14:40	1
Manganese	**560**		50	0.83	ug/L		04/20/12 12:10	04/23/12 14:40	1
Nickel	**3.2**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 14:40	1
Lead	3.0	U	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 14:40	1
Selenium	5.0	U	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 14:40	1
Thallium	2.0	U	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 14:40	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 14:40	1
Zinc	50	U	50	2.3	ug/L		04/20/12 12:10	04/23/12 14:40	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 14:40	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-DR-1045
Date Collected: 04/17/12 10:20
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**24**	**J**	50	19	ug/L		04/20/12 12:10	04/23/12 14:57	1
Antimony	**0.39**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:57	1
Arsenic	**1.8**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 14:57	1
Barium	**88**	**J B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 14:57	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 14:57	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 14:57	1
Cobalt	20	U	20	0.058	ug/L		04/20/12 12:10	04/23/12 14:57	1
Chromium	**1.2**	**J**	10	0.71	ug/L		04/20/12 12:10	04/23/12 14:57	1
Copper	**1.9**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 14:57	1
Iron	200	U	200	26	ug/L		04/20/12 12:10	04/23/12 14:57	1
Manganese	**0.98**	**J**	50	0.83	ug/L		04/20/12 12:10	04/23/12 14:57	1
Nickel	**0.60**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 14:57	1
Lead	3.0	U	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 14:57	1
Selenium	**2.9**	**J**	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 14:57	1
Thallium	**0.16**	**J B**	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 14:57	1
Vanadium	**1.3**	**J**	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 14:57	1
Zinc	50	U	50	2.3	ug/L		04/20/12 12:10	04/23/12 14:57	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 14:57	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-DR-1046
Date Collected: 04/17/12 12:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/20/12 12:10	04/23/12 15:03	1
Antimony	2.0	U	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 15:03	1
Arsenic	**7.5**		5.0	0.40	ug/L		04/20/12 12:10	04/23/12 15:03	1
Barium	**250**	**B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 15:03	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 15:03	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 15:03	1
Cobalt	**1.0**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 15:03	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 15:03	1
Copper	**0.54**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 15:03	1
Iron	**3600**		200	26	ug/L		04/20/12 12:10	04/23/12 15:03	1
Manganese	**600**		50	0.83	ug/L		04/20/12 12:10	04/23/12 15:03	1
Nickel	**1.7**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 15:03	1
Lead	3.0	U	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 15:03	1
Selenium	5.0	U	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 15:03	1
Thallium	2.0	U	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 15:03	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 15:03	1
Zinc	50	U	50	2.3	ug/L		04/20/12 12:10	04/23/12 15:03	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 15:03	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-DR-1047
Date Collected: 04/17/12 15:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-17
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**23**	**J**	50	19	ug/L		04/20/12 12:10	04/23/12 15:08	1
Antimony	**0.28**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 15:08	1
Arsenic	**1.1**	**J**	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 15:08	1
Barium	**50**	**J B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 15:08	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 15:08	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 15:08	1
Cobalt	**0.25**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 15:08	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 15:08	1
Copper	**1.5**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 15:08	1
Iron	200	U	200	26	ug/L		04/20/12 12:10	04/23/12 15:08	1
Manganese	**66**		50	0.83	ug/L		04/20/12 12:10	04/23/12 15:08	1
Nickel	**1.8**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 15:08	1
Lead	3.0	U	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 15:08	1
Selenium	**0.57**	**J**	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 15:08	1
Thallium	**0.15**	**J B**	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 15:08	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 15:08	1
Zinc	50	U	50	2.3	ug/L		04/20/12 12:10	04/23/12 15:08	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 15:08	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041712-DR-1048
Date Collected: 04/17/12 15:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-18
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**160**		50	19	ug/L		04/20/12 12:10	04/23/12 15:13	1
Antimony	**0.20**	**J**	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 15:13	1
Arsenic	**18**		5.0	0.40	ug/L		04/20/12 12:10	04/23/12 15:13	1
Barium	**450**	**B**	100	0.19	ug/L		04/20/12 12:10	04/23/12 15:13	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 15:13	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 15:13	1
Cobalt	**0.32**	**J**	20	0.058	ug/L		04/20/12 12:10	04/23/12 15:13	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 15:13	1
Copper	**1.0**	**J B**	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 15:13	1
Iron	**1500**		200	26	ug/L		04/20/12 12:10	04/23/12 15:13	1
Manganese	**130**		50	0.83	ug/L		04/20/12 12:10	04/23/12 15:13	1
Nickel	**1.4**	**J**	20	0.20	ug/L		04/20/12 12:10	04/23/12 15:13	1
Lead	**0.50**	**J**	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 15:13	1
Selenium	5.0	U	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 15:13	1
Thallium	2.0	U	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 15:13	1
Vanadium	**0.44**	**J**	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 15:13	1
Zinc	**3.7**	**J B**	50	2.3	ug/L		04/20/12 12:10	04/23/12 15:13	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 15:13	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-JY-1031
Date Collected: 04/17/12 09:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 15:32	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-JY-1032
Date Collected: 04/17/12 09:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 15:38	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-JY-1033
Date Collected: 04/17/12 09:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 15:40	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-JY-1034
Date Collected: 04/17/12 11:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 15:42	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-JY-1035
Date Collected: 04/17/12 14:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 15:44	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-JY-1036
Date Collected: 04/17/12 11:30
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 15:46	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-CB-1037
Date Collected: 04/17/12 09:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 15:52	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-CB-1038
Date Collected: 04/17/12 11:35
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 15:54	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-CB-1039
Date Collected: 04/17/12 13:50
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 15:56	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-CB-1040
Date Collected: 04/17/12 15:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 15:58	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-DR-1041
Date Collected: 04/17/12 09:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 16:00	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-DR-1042
Date Collected: 04/17/12 10:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 16:02	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-DR-1043
Date Collected: 04/17/12 11:25
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 16:04	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-DR-1044
Date Collected: 04/17/12 14:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 16:06	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-DR-1045
Date Collected: 04/17/12 10:20
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/23/12 14:00	04/25/12 13:02	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-DR-1046
Date Collected: 04/17/12 12:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-16
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/23/12 14:00	04/25/12 13:40	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-DR-1047
Date Collected: 04/17/12 15:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-17
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/23/12 14:00	04/25/12 13:42	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041712-DR-1048
Date Collected: 04/17/12 15:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-18
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/23/12 14:00	04/25/12 13:44	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

General Chemistry

Client Sample ID: GW-17358-041712-JY-1031
Date Collected: 04/17/12 09:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Amenable	0.010	U	0.010	0.010	mg/L			04/30/12 08:37	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

General Chemistry

Client Sample ID: GW-17358-041712-JY-1032
Date Collected: 04/17/12 09:15
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Amenable	0.010	U	0.010	0.010	mg/L			04/30/12 08:37	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

General Chemistry

Client Sample ID: GW-17358-041712-JY-1033
Date Collected: 04/17/12 09:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Amenable	0.010	U	0.010	0.010	mg/L			04/30/12 08:37	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

General Chemistry

Client Sample ID: GW-17358-041712-JY-1035
Date Collected: 04/17/12 14:55
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Amenable	0.010	U	0.010	0.010	mg/L			04/30/12 08:37	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

General Chemistry

Client Sample ID: GW-17358-041712-DR-1044
Date Collected: 04/17/12 14:05
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**0.026**		0.010	0.0020	mg/L			04/18/12 11:55	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			04/24/12 04:54	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

General Chemistry

Client Sample ID: GW-17358-041712-DR-1048
Date Collected: 04/17/12 15:10
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-18
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	**0.0024**	**J**	0.010	0.0020	mg/L			04/18/12 11:55	1
Cr (III)	0.010	U	0.010	0.0050	mg/L			04/24/12 04:54	1

GC/MS VOA

Analysis Batch: 41303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-1	GW-17358-041712-JY-1031	Total/NA	Water	8260B	
240-10274-2	GW-17358-041712-JY-1032	Total/NA	Water	8260B	
240-10274-3	GW-17358-041712-JY-1033	Total/NA	Water	8260B	
240-10274-4	GW-17358-041712-JY-1034	Total/NA	Water	8260B	
240-10274-5	GW-17358-041712-JY-1035	Total/NA	Water	8260B	
240-10274-7	GW-17358-041712-CB-1037	Total/NA	Water	8260B	
240-10274-8	GW-17358-041712-CB-1038	Total/NA	Water	8260B	
240-10274-9	GW-17358-041712-CB-1039	Total/NA	Water	8260B	
240-10274-10	GW-17358-041712-CB-1040	Total/NA	Water	8260B	
240-10274-11	GW-17358-041712-DR-1041	Total/NA	Water	8260B	
240-10274-12	GW-17358-041712-DR-1042	Total/NA	Water	8260B	
240-10274-13	GW-17358-041712-DR-1043	Total/NA	Water	8260B	
240-10274-14	GW-17358-041712-DR-1044	Total/NA	Water	8260B	
240-10274-15	GW-17358-041712-DR-1045	Total/NA	Water	8260B	
LCS 240-41303/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-41303/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 41472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-6	GW-17358-041712-JY-1036	Total/NA	Water	8260B	
240-10274-16	GW-17358-041712-DR-1046	Total/NA	Water	8260B	
240-10274-17	GW-17358-041712-DR-1047	Total/NA	Water	8260B	
240-10274-18	GW-17358-041712-DR-1048	Total/NA	Water	8260B	
240-10274-19	TB-17358-041712	Total/NA	Water	8260B	
LCS 240-41472/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-41472/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 40810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-1	GW-17358-041712-JY-1031	Total/NA	Water	3520C	
LCS 240-40810/24-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-40810/23-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 40945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-2	GW-17358-041712-JY-1032	Total/NA	Water	3520C	
240-10274-3	GW-17358-041712-JY-1033	Total/NA	Water	3520C	
240-10274-4	GW-17358-041712-JY-1034	Total/NA	Water	3520C	
240-10274-5	GW-17358-041712-JY-1035	Total/NA	Water	3520C	
240-10274-6	GW-17358-041712-JY-1036	Total/NA	Water	3520C	
240-10274-7	GW-17358-041712-CB-1037	Total/NA	Water	3520C	
240-10274-8	GW-17358-041712-CB-1038	Total/NA	Water	3520C	
240-10274-9	GW-17358-041712-CB-1039	Total/NA	Water	3520C	
240-10274-10	GW-17358-041712-CB-1040	Total/NA	Water	3520C	
240-10274-11	GW-17358-041712-DR-1041	Total/NA	Water	3520C	
240-10274-12	GW-17358-041712-DR-1042	Total/NA	Water	3520C	
240-10274-13	GW-17358-041712-DR-1043	Total/NA	Water	3520C	
240-10274-14	GW-17358-041712-DR-1044	Total/NA	Water	3520C	
240-10274-15	GW-17358-041712-DR-1045	Total/NA	Water	3520C	
240-10274-16	GW-17358-041712-DR-1046	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 40945 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-17	GW-17358-041712-DR-1047	Total/NA	Water	3520C	
240-10274-18	GW-17358-041712-DR-1048	Total/NA	Water	3520C	
LCS 240-40945/22-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-40945/21-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 41147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-1	GW-17358-041712-JY-1031	Total/NA	Water	8270C	40810
LCS 240-40810/24-A	Lab Control Sample	Total/NA	Water	8270C	40810
MB 240-40810/23-A	Method Blank	Total/NA	Water	8270C	40810

Analysis Batch: 41292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-6	GW-17358-041712-JY-1036	Total/NA	Water	8270C	40945
240-10274-7	GW-17358-041712-CB-1037	Total/NA	Water	8270C	40945
240-10274-8	GW-17358-041712-CB-1038	Total/NA	Water	8270C	40945
240-10274-9	GW-17358-041712-CB-1039	Total/NA	Water	8270C	40945
240-10274-10	GW-17358-041712-CB-1040	Total/NA	Water	8270C	40945
240-10274-11	GW-17358-041712-DR-1041	Total/NA	Water	8270C	40945
240-10274-12	GW-17358-041712-DR-1042	Total/NA	Water	8270C	40945
240-10274-13	GW-17358-041712-DR-1043	Total/NA	Water	8270C	40945
240-10274-14	GW-17358-041712-DR-1044	Total/NA	Water	8270C	40945
240-10274-15	GW-17358-041712-DR-1045	Total/NA	Water	8270C	40945
240-10274-16	GW-17358-041712-DR-1046	Total/NA	Water	8270C	40945
240-10274-17	GW-17358-041712-DR-1047	Total/NA	Water	8270C	40945
240-10274-18	GW-17358-041712-DR-1048	Total/NA	Water	8270C	40945
LCS 240-40945/22-A	Lab Control Sample	Total/NA	Water	8270C	40945
MB 240-40945/21-A	Method Blank	Total/NA	Water	8270C	40945

Analysis Batch: 41486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-2	GW-17358-041712-JY-1032	Total/NA	Water	8270C	40945
240-10274-3	GW-17358-041712-JY-1033	Total/NA	Water	8270C	40945
240-10274-4	GW-17358-041712-JY-1034	Total/NA	Water	8270C	40945
240-10274-5	GW-17358-041712-JY-1035	Total/NA	Water	8270C	40945

GC Semi VOA

Prep Batch: 40800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-1	GW-17358-041712-JY-1031	Total/NA	Water	3520C	
240-10274-2	GW-17358-041712-JY-1032	Total/NA	Water	3520C	
240-10274-3	GW-17358-041712-JY-1033	Total/NA	Water	3520C	
240-10274-4	GW-17358-041712-JY-1034	Total/NA	Water	3520C	
240-10274-5	GW-17358-041712-JY-1035	Total/NA	Water	3520C	
240-10274-6	GW-17358-041712-JY-1036	Total/NA	Water	3520C	
240-10274-7	GW-17358-041712-CB-1037	Total/NA	Water	3520C	
240-10274-8	GW-17358-041712-CB-1038	Total/NA	Water	3520C	
240-10274-9	GW-17358-041712-CB-1039	Total/NA	Water	3520C	
240-10274-10	GW-17358-041712-CB-1040	Total/NA	Water	3520C	
240-10274-11	GW-17358-041712-DR-1041	Total/NA	Water	3520C	
240-10274-12	GW-17358-041712-DR-1042	Total/NA	Water	3520C	

GC Semi VOA (Continued)

Prep Batch: 40800 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-13	GW-17358-041712-DR-1043	Total/NA	Water	3520C	
240-10274-14	GW-17358-041712-DR-1044	Total/NA	Water	3520C	
240-10274-15	GW-17358-041712-DR-1045	Total/NA	Water	3520C	
240-10274-16	GW-17358-041712-DR-1046	Total/NA	Water	3520C	
240-10274-17	GW-17358-041712-DR-1047	Total/NA	Water	3520C	
240-10274-18	GW-17358-041712-DR-1048	Total/NA	Water	3520C	
LCS 240-40800/20-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-40800/19-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 41047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-1	GW-17358-041712-JY-1031	Total/NA	Water	8082	40800
240-10274-2	GW-17358-041712-JY-1032	Total/NA	Water	8082	40800
240-10274-3	GW-17358-041712-JY-1033	Total/NA	Water	8082	40800
240-10274-4	GW-17358-041712-JY-1034	Total/NA	Water	8082	40800
240-10274-5	GW-17358-041712-JY-1035	Total/NA	Water	8082	40800
240-10274-6	GW-17358-041712-JY-1036	Total/NA	Water	8082	40800
240-10274-7	GW-17358-041712-CB-1037	Total/NA	Water	8082	40800
240-10274-8	GW-17358-041712-CB-1038	Total/NA	Water	8082	40800
240-10274-9	GW-17358-041712-CB-1039	Total/NA	Water	8082	40800
240-10274-10	GW-17358-041712-CB-1040	Total/NA	Water	8082	40800
240-10274-11	GW-17358-041712-DR-1041	Total/NA	Water	8082	40800
240-10274-12	GW-17358-041712-DR-1042	Total/NA	Water	8082	40800
240-10274-14	GW-17358-041712-DR-1044	Total/NA	Water	8082	40800
240-10274-15	GW-17358-041712-DR-1045	Total/NA	Water	8082	40800
240-10274-16	GW-17358-041712-DR-1046	Total/NA	Water	8082	40800
240-10274-17	GW-17358-041712-DR-1047	Total/NA	Water	8082	40800
240-10274-18	GW-17358-041712-DR-1048	Total/NA	Water	8082	40800
LCS 240-40800/20-A	Lab Control Sample	Total/NA	Water	8082	40800
MB 240-40800/19-A	Method Blank	Total/NA	Water	8082	40800

Analysis Batch: 41263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-13	GW-17358-041712-DR-1043	Total/NA	Water	8082	40800

Metals

Prep Batch: 40931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-1	GW-17358-041712-JY-1031	Total/NA	Water	7470A	
240-10274-1 MS	GW-17358-041712-JY-1031	Total/NA	Water	7470A	
240-10274-1 MSD	GW-17358-041712-JY-1031	Total/NA	Water	7470A	
240-10274-2	GW-17358-041712-JY-1032	Total/NA	Water	7470A	
240-10274-3	GW-17358-041712-JY-1033	Total/NA	Water	7470A	
240-10274-4	GW-17358-041712-JY-1034	Total/NA	Water	7470A	
240-10274-5	GW-17358-041712-JY-1035	Total/NA	Water	7470A	
240-10274-6	GW-17358-041712-JY-1036	Total/NA	Water	7470A	
240-10274-7	GW-17358-041712-CB-1037	Total/NA	Water	7470A	
240-10274-8	GW-17358-041712-CB-1038	Total/NA	Water	7470A	
240-10274-9	GW-17358-041712-CB-1039	Total/NA	Water	7470A	
240-10274-10	GW-17358-041712-CB-1040	Total/NA	Water	7470A	
240-10274-11	GW-17358-041712-DR-1041	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 40931 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-12	GW-17358-041712-DR-1042	Total/NA	Water	7470A	
240-10274-13	GW-17358-041712-DR-1043	Total/NA	Water	7470A	
240-10274-14	GW-17358-041712-DR-1044	Total/NA	Water	7470A	
LCS 240-40931/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-40931/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 41016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-1	GW-17358-041712-JY-1031	Total Recoverable	Water	3005A	
240-10274-2	GW-17358-041712-JY-1032	Total Recoverable	Water	3005A	
240-10274-3	GW-17358-041712-JY-1033	Total Recoverable	Water	3005A	
240-10274-4	GW-17358-041712-JY-1034	Total Recoverable	Water	3005A	
240-10274-5	GW-17358-041712-JY-1035	Total Recoverable	Water	3005A	
240-10274-6	GW-17358-041712-JY-1036	Total Recoverable	Water	3005A	
240-10274-7	GW-17358-041712-CB-1037	Total Recoverable	Water	3005A	
240-10274-8	GW-17358-041712-CB-1038	Total Recoverable	Water	3005A	
240-10274-9	GW-17358-041712-CB-1039	Total Recoverable	Water	3005A	
240-10274-10	GW-17358-041712-CB-1040	Total Recoverable	Water	3005A	
240-10274-11	GW-17358-041712-DR-1041	Total Recoverable	Water	3005A	
240-10274-12	GW-17358-041712-DR-1042	Total Recoverable	Water	3005A	
240-10274-13	GW-17358-041712-DR-1043	Total Recoverable	Water	3005A	
240-10274-14	GW-17358-041712-DR-1044	Total Recoverable	Water	3005A	
240-10274-15	GW-17358-041712-DR-1045	Total Recoverable	Water	3005A	
240-10274-16	GW-17358-041712-DR-1046	Total Recoverable	Water	3005A	
240-10274-17	GW-17358-041712-DR-1047	Total Recoverable	Water	3005A	
240-10274-18	GW-17358-041712-DR-1048	Total Recoverable	Water	3005A	
LCS 240-41016/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-41016/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 41133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-1	GW-17358-041712-JY-1031	Total/NA	Water	7470A	40931
240-10274-1 MS	GW-17358-041712-JY-1031	Total/NA	Water	7470A	40931
240-10274-1 MSD	GW-17358-041712-JY-1031	Total/NA	Water	7470A	40931
240-10274-2	GW-17358-041712-JY-1032	Total/NA	Water	7470A	40931
240-10274-3	GW-17358-041712-JY-1033	Total/NA	Water	7470A	40931
240-10274-4	GW-17358-041712-JY-1034	Total/NA	Water	7470A	40931
240-10274-5	GW-17358-041712-JY-1035	Total/NA	Water	7470A	40931
240-10274-6	GW-17358-041712-JY-1036	Total/NA	Water	7470A	40931
240-10274-7	GW-17358-041712-CB-1037	Total/NA	Water	7470A	40931
240-10274-8	GW-17358-041712-CB-1038	Total/NA	Water	7470A	40931
240-10274-9	GW-17358-041712-CB-1039	Total/NA	Water	7470A	40931
240-10274-10	GW-17358-041712-CB-1040	Total/NA	Water	7470A	40931
240-10274-11	GW-17358-041712-DR-1041	Total/NA	Water	7470A	40931
240-10274-12	GW-17358-041712-DR-1042	Total/NA	Water	7470A	40931
240-10274-13	GW-17358-041712-DR-1043	Total/NA	Water	7470A	40931
240-10274-14	GW-17358-041712-DR-1044	Total/NA	Water	7470A	40931
LCS 240-40931/2-A	Lab Control Sample	Total/NA	Water	7470A	40931
MB 240-40931/1-A	Method Blank	Total/NA	Water	7470A	40931

Metals (Continued)

Prep Batch: 41164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-15	GW-17358-041712-DR-1045	Total/NA	Water	7470A	
LCS 240-41164/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-41164/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 41179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-16	GW-17358-041712-DR-1046	Total/NA	Water	7470A	
240-10274-17	GW-17358-041712-DR-1047	Total/NA	Water	7470A	
240-10274-18	GW-17358-041712-DR-1048	Total/NA	Water	7470A	
LCS 240-41179/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-41179/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 41254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-1	GW-17358-041712-JY-1031	Total Recoverable	Water	6020	41016
240-10274-2	GW-17358-041712-JY-1032	Total Recoverable	Water	6020	41016
240-10274-3	GW-17358-041712-JY-1033	Total Recoverable	Water	6020	41016
240-10274-4	GW-17358-041712-JY-1034	Total Recoverable	Water	6020	41016
240-10274-5	GW-17358-041712-JY-1035	Total Recoverable	Water	6020	41016
240-10274-6	GW-17358-041712-JY-1036	Total Recoverable	Water	6020	41016
240-10274-7	GW-17358-041712-CB-1037	Total Recoverable	Water	6020	41016
240-10274-8	GW-17358-041712-CB-1038	Total Recoverable	Water	6020	41016
240-10274-9	GW-17358-041712-CB-1039	Total Recoverable	Water	6020	41016
240-10274-10	GW-17358-041712-CB-1040	Total Recoverable	Water	6020	41016
240-10274-11	GW-17358-041712-DR-1041	Total Recoverable	Water	6020	41016
240-10274-12	GW-17358-041712-DR-1042	Total Recoverable	Water	6020	41016
240-10274-13	GW-17358-041712-DR-1043	Total Recoverable	Water	6020	41016
240-10274-14	GW-17358-041712-DR-1044	Total Recoverable	Water	6020	41016
240-10274-15	GW-17358-041712-DR-1045	Total Recoverable	Water	6020	41016
240-10274-16	GW-17358-041712-DR-1046	Total Recoverable	Water	6020	41016
240-10274-17	GW-17358-041712-DR-1047	Total Recoverable	Water	6020	41016
240-10274-18	GW-17358-041712-DR-1048	Total Recoverable	Water	6020	41016
LCS 240-41016/2-A	Lab Control Sample	Total Recoverable	Water	6020	41016
MB 240-41016/1-A	Method Blank	Total Recoverable	Water	6020	41016

Analysis Batch: 41694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-15	GW-17358-041712-DR-1045	Total/NA	Water	7470A	41164
240-10274-16	GW-17358-041712-DR-1046	Total/NA	Water	7470A	41179
240-10274-17	GW-17358-041712-DR-1047	Total/NA	Water	7470A	41179
240-10274-18	GW-17358-041712-DR-1048	Total/NA	Water	7470A	41179
LCS 240-41164/2-A	Lab Control Sample	Total/NA	Water	7470A	41164
LCS 240-41179/2-A	Lab Control Sample	Total/NA	Water	7470A	41179
MB 240-41164/1-A	Method Blank	Total/NA	Water	7470A	41164
MB 240-41179/1-A	Method Blank	Total/NA	Water	7470A	41179

General Chemistry

Analysis Batch: 40713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-14	GW-17358-041712-DR-1044	Total/NA	Water	7196A	
240-10274-18	GW-17358-041712-DR-1048	Total/NA	Water	7196A	

General Chemistry (Continued)

Analysis Batch: 40713 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-18 MS	GW-17358-041712-DR-1048	Total/NA	Water	7196A	
240-10274-18 MSD	GW-17358-041712-DR-1048	Total/NA	Water	7196A	
LCS 240-40713/4	Lab Control Sample	Total/NA	Water	7196A	
MB 240-40713/3	Method Blank	Total/NA	Water	7196A	

Analysis Batch: 41253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-14	GW-17358-041712-DR-1044	Total/NA	Water	7196A	
240-10274-18	GW-17358-041712-DR-1048	Total/NA	Water	7196A	

Analysis Batch: 42287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-10274-1	GW-17358-041712-JY-1031	Total/NA	Water	9012A	
240-10274-2	GW-17358-041712-JY-1032	Total/NA	Water	9012A	
240-10274-3	GW-17358-041712-JY-1033	Total/NA	Water	9012A	
240-10274-5	GW-17358-041712-JY-1035	Total/NA	Water	9012A	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-41303/5
Matrix: Water
Analysis Batch: 41303

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.13	J	10	1.1	ug/L			04/24/12 17:19	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/12 17:19	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/12 17:19	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/12 17:19	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/12 17:19	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/12 17:19	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/12 17:19	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/12 17:19	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 17:19	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/12 17:19	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/24/12 17:19	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/12 17:19	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/24/12 17:19	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 17:19	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 17:19	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/12 17:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/12 17:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/12 17:19	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/12 17:19	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/12 17:19	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/12 17:19	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/12 17:19	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/12 17:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/12 17:19	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/12 17:19	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/12 17:19	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 17:19	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/12 17:19	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/12 17:19	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/24/12 17:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/12 17:19	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/12 17:19	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/12 17:19	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/12 17:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/12 17:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/12 17:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/12 17:19	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/12 17:19	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/12 17:19	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/24/12 17:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/12 17:19	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/12 17:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 17:19	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/12 17:19	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/12 17:19	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/12 17:19	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/12 17:19	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/12 17:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-41303/5
Matrix: Water
Analysis Batch: 41303

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*86*		*63 - 129*		*04/24/12 17:19*	*1*
4-Bromofluorobenzene (Surr)	*89*		*66 - 117*		*04/24/12 17:19*	*1*
Toluene-d8 (Surr)	*97*		*74 - 115*		*04/24/12 17:19*	*1*
Dibromofluoromethane (Surr)	*84*		*75 - 121*		*04/24/12 17:19*	*1*

Lab Sample ID: LCS 240-41303/4
Matrix: Water
Analysis Batch: 41303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	17.9		ug/L		90	43 - 136
Benzene	10.0	8.93		ug/L		89	83 - 112
Bromodichloromethane	10.0	9.27		ug/L		93	72 - 121
Bromoform	10.0	8.61		ug/L		86	40 - 131
Bromomethane	10.0	10.2		ug/L		102	11 - 185
2-Butanone (MEK)	20.0	20.0		ug/L		100	60 - 126
Carbon disulfide	10.0	9.08		ug/L		91	62 - 142
Carbon tetrachloride	10.0	9.96		ug/L		100	66 - 128
Chlorobenzene	10.0	9.03		ug/L		90	85 - 110
Chloroethane	10.0	9.79		ug/L		98	25 - 153
Chloroform	10.0	8.64		ug/L		86	79 - 117
Chloromethane	10.0	9.69		ug/L		97	44 - 126
1,1-Dichloroethane	10.0	9.45		ug/L		95	82 - 115
1,2-Dichloroethane	10.0	9.52		ug/L		95	71 - 127
1,1-Dichloroethene	10.0	9.69		ug/L		97	78 - 131
1,2-Dichloropropane	10.0	9.51		ug/L		95	81 - 115
cis-1,3-Dichloropropene	10.0	9.11		ug/L		91	61 - 115
trans-1,3-Dichloropropene	10.0	8.66		ug/L		87	58 - 117
Ethylbenzene	10.0	9.25		ug/L		93	83 - 112
2-Hexanone	20.0	19.9		ug/L		100	55 - 133
Methylene Chloride	10.0	8.40		ug/L		84	66 - 131
4-Methyl-2-pentanone (MIBK)	20.0	21.8		ug/L		109	63 - 128
Styrene	10.0	8.86		ug/L		89	79 - 114
1,1,2,2-Tetrachloroethane	10.0	8.54		ug/L		85	68 - 118
Tetrachloroethene	10.0	9.95		ug/L		100	79 - 114
Toluene	10.0	9.11		ug/L		91	84 - 111
Trichloroethene	10.0	9.52		ug/L		95	76 - 117
Vinyl chloride	10.0	10.4		ug/L		104	53 - 127
Xylenes, Total	30.0	26.6		ug/L		89	83 - 112
1,1,1-Trichloroethane	10.0	8.81		ug/L		88	74 - 118
1,1,2-Trichloroethane	10.0	9.62		ug/L		96	80 - 112
Cyclohexane	10.0	9.68		ug/L		97	54 - 121
1,2-Dibromo-3-Chloropropane	10.0	10.2		ug/L		102	42 - 136
1,2-Dibromoethane	10.0	9.55		ug/L		96	79 - 113
Dichlorodifluoromethane	10.0	7.90		ug/L		79	19 - 129
cis-1,2-Dichloroethene	10.0	9.07		ug/L		91	80 - 113
trans-1,2-Dichloroethene	10.0	9.34		ug/L		93	83 - 117
Isopropylbenzene	10.0	8.75		ug/L		88	75 - 114
Methyl acetate	10.0	11.6		ug/L		116	58 - 131

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-41303/4
Matrix: Water
Analysis Batch: 41303

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	10.0	7.78		ug/L		78	52 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.8		ug/L		108	74 - 151
1,2,4-Trichlorobenzene	10.0	8.44		ug/L		84	48 - 135
1,2-Dichlorobenzene	10.0	9.76		ug/L		98	81 - 110
1,3-Dichlorobenzene	10.0	9.76		ug/L		98	80 - 110
1,4-Dichlorobenzene	10.0	9.44		ug/L		94	82 - 110
Trichlorofluoromethane	10.0	10.9		ug/L		109	49 - 157
Dibromochloromethane	10.0	9.58		ug/L		96	64 - 119
Methylcyclohexane	10.0	9.19		ug/L		92	56 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*63 - 129*
4-Bromofluorobenzene (Surr)	*98*		*66 - 117*
Toluene-d8 (Surr)	*97*		*74 - 115*
Dibromofluoromethane (Surr)	*91*		*75 - 121*

Lab Sample ID: MB 240-41472/5
Matrix: Water
Analysis Batch: 41472

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/25/12 11:21	1
Benzene	1.0	U	1.0	0.13	ug/L			04/25/12 11:21	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/25/12 11:21	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/25/12 11:21	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/25/12 11:21	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/25/12 11:21	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/25/12 11:21	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/25/12 11:21	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 11:21	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/25/12 11:21	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/25/12 11:21	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/25/12 11:21	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/25/12 11:21	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 11:21	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 11:21	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/25/12 11:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/25/12 11:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/25/12 11:21	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/25/12 11:21	1
2-Hexanone	10	U	10	0.41	ug/L			04/25/12 11:21	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/25/12 11:21	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/25/12 11:21	1
Styrene	1.0	U	1.0	0.11	ug/L			04/25/12 11:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/25/12 11:21	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/25/12 11:21	1
Toluene	1.0	U	1.0	0.13	ug/L			04/25/12 11:21	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 11:21	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/25/12 11:21	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-41472/5
Matrix: Water
Analysis Batch: 41472

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/25/12 11:21	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/25/12 11:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/25/12 11:21	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/25/12 11:21	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/25/12 11:21	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/25/12 11:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/25/12 11:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/25/12 11:21	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/25/12 11:21	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/25/12 11:21	1
Methyl acetate	10	U	10	0.38	ug/L			04/25/12 11:21	1
Methyl tert-butyl ether	5.0	U	5.0	0.17	ug/L			04/25/12 11:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/25/12 11:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/25/12 11:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 11:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/25/12 11:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/25/12 11:21	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/25/12 11:21	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/25/12 11:21	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/25/12 11:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*63 - 129*		*04/25/12 11:21*	*1*
4-Bromofluorobenzene (Surr)	*94*		*66 - 117*		*04/25/12 11:21*	*1*
Toluene-d8 (Surr)	*102*		*74 - 115*		*04/25/12 11:21*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 121*		*04/25/12 11:21*	*1*

Lab Sample ID: LCS 240-41472/4
Matrix: Water
Analysis Batch: 41472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	19.2		ug/L		96	43 - 136
Benzene	10.0	9.17		ug/L		92	83 - 112
Bromodichloromethane	10.0	9.43		ug/L		94	72 - 121
Bromoform	10.0	8.73		ug/L		87	40 - 131
Bromomethane	10.0	9.58		ug/L		96	11 - 185
2-Butanone (MEK)	20.0	22.0		ug/L		110	60 - 126
Carbon disulfide	10.0	9.37		ug/L		94	62 - 142
Carbon tetrachloride	10.0	9.80		ug/L		98	66 - 128
Chlorobenzene	10.0	9.52		ug/L		95	85 - 110
Chloroethane	10.0	9.53		ug/L		95	25 - 153
Chloroform	10.0	9.09		ug/L		91	79 - 117
Chloromethane	10.0	11.1		ug/L		111	44 - 126
1,1-Dichloroethane	10.0	9.69		ug/L		97	82 - 115
1,2-Dichloroethane	10.0	10.1		ug/L		101	71 - 127
1,1-Dichloroethene	10.0	9.71		ug/L		97	78 - 131
1,2-Dichloropropane	10.0	9.61		ug/L		96	81 - 115
cis-1,3-Dichloropropene	10.0	8.79		ug/L		88	61 - 115

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-41472/4
Matrix: Water
Analysis Batch: 41472

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	10.0	8.63		ug/L		86	58 - 117
Ethylbenzene	10.0	9.68		ug/L		97	83 - 112
2-Hexanone	20.0	22.1		ug/L		111	55 - 133
Methylene Chloride	10.0	8.72		ug/L		87	66 - 131
4-Methyl-2-pentanone (MIBK)	20.0	23.3		ug/L		117	63 - 128
Styrene	10.0	9.97		ug/L		100	79 - 114
1,1,2,2-Tetrachloroethane	10.0	10.2		ug/L		102	68 - 118
Tetrachloroethene	10.0	9.41		ug/L		94	79 - 114
Toluene	10.0	9.28		ug/L		93	84 - 111
Trichloroethene	10.0	9.34		ug/L		93	76 - 117
Vinyl chloride	10.0	10.3		ug/L		103	53 - 127
Xylenes, Total	30.0	29.7		ug/L		99	83 - 112
1,1,1-Trichloroethane	10.0	9.29		ug/L		93	74 - 118
1,1,2-Trichloroethane	10.0	9.66		ug/L		97	80 - 112
Cyclohexane	10.0	10.8		ug/L		108	54 - 121
1,2-Dibromo-3-Chloropropane	10.0	9.58		ug/L		96	42 - 136
1,2-Dibromoethane	10.0	9.70		ug/L		97	79 - 113
Dichlorodifluoromethane	10.0	7.84		ug/L		78	19 - 129
cis-1,2-Dichloroethene	10.0	9.07		ug/L		91	80 - 113
trans-1,2-Dichloroethene	10.0	9.09		ug/L		91	83 - 117
Isopropylbenzene	10.0	9.86		ug/L		99	75 - 114
Methyl acetate	10.0	12.5		ug/L		125	58 - 131
Methyl tert-butyl ether	10.0	7.76		ug/L		78	52 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.6		ug/L		106	74 - 151
1,2,4-Trichlorobenzene	10.0	7.86		ug/L		79	48 - 135
1,2-Dichlorobenzene	10.0	9.58		ug/L		96	81 - 110
1,3-Dichlorobenzene	10.0	9.65		ug/L		97	80 - 110
1,4-Dichlorobenzene	10.0	9.49		ug/L		95	82 - 110
Trichlorofluoromethane	10.0	10.3		ug/L		103	49 - 157
Dibromochloromethane	10.0	9.66		ug/L		97	64 - 119
Methylcyclohexane	10.0	9.14		ug/L		91	56 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*63 - 129*
4-Bromofluorobenzene (Surr)	*108*		*66 - 117*
Toluene-d8 (Surr)	*101*		*74 - 115*
Dibromofluoromethane (Surr)	*94*		*75 - 121*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Lab Sample ID: MB 240-40810/23-A
Matrix: Water
Analysis Batch: 41147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40810

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/19/12 09:14	04/23/12 10:19	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/19/12 09:14	04/23/12 10:19	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-40810/23-A
Matrix: Water
Analysis Batch: 41147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40810

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/19/12 09:14	04/23/12 10:19	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/19/12 09:14	04/23/12 10:19	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/19/12 09:14	04/23/12 10:19	1
2-Methylnaphthalene	5.0	U	5.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
2-Nitroaniline	20	U	20	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/19/12 09:14	04/23/12 10:19	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/19/12 09:14	04/23/12 10:19	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/19/12 09:14	04/23/12 10:19	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/19/12 09:14	04/23/12 10:19	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
4-Chloroaniline	10	U	10	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/19/12 09:14	04/23/12 10:19	1
4-Nitroaniline	20	U	20	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/19/12 09:14	04/23/12 10:19	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/19/12 09:14	04/23/12 10:19	1
Anthracene	5.0	U	5.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/19/12 09:14	04/23/12 10:19	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/19/12 09:14	04/23/12 10:19	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/19/12 09:14	04/23/12 10:19	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
Caprolactam	10	U	10	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
Carbazole	10	U	10	0.28	ug/L		04/19/12 09:14	04/23/12 10:19	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		04/19/12 09:14	04/23/12 10:19	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/19/12 09:14	04/23/12 10:19	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		04/19/12 09:14	04/23/12 10:19	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Fluorene	5.0	U	5.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/19/12 09:14	04/23/12 10:19	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-40810/23-A
Matrix: Water
Analysis Batch: 41147

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40810

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	5.0	U	5.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/19/12 09:14	04/23/12 10:19	1
Naphthalene	5.0	U	5.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/19/12 09:14	04/23/12 10:19	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		04/19/12 09:14	04/23/12 10:19	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/19/12 09:14	04/23/12 10:19	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/19/12 09:14	04/23/12 10:19	1
Phenol	5.0	U	5.0	0.60	ug/L		04/19/12 09:14	04/23/12 10:19	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
Pyrene	5.0	U	5.0	0.10	ug/L		04/19/12 09:14	04/23/12 10:19	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		04/19/12 09:14	04/23/12 10:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*28 - 110*	*04/19/12 09:14*	*04/23/12 10:19*	*1*
2-Fluorophenol (Surr)	*75*		*10 - 110*	*04/19/12 09:14*	*04/23/12 10:19*	*1*
2,4,6-Tribromophenol (Surr)	*68*		*22 - 120*	*04/19/12 09:14*	*04/23/12 10:19*	*1*
Nitrobenzene-d5 (Surr)	*69*		*27 - 111*	*04/19/12 09:14*	*04/23/12 10:19*	*1*
Phenol-d5 (Surr)	*78*		*10 - 110*	*04/19/12 09:14*	*04/23/12 10:19*	*1*
Terphenyl-d14 (Surr)	*89*		*37 - 119*	*04/19/12 09:14*	*04/23/12 10:19*	*1*

Lab Sample ID: LCS 240-40810/24-A
Matrix: Water
Analysis Batch: 41147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40810

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	20.0	15.6		ug/L		78	50 - 130
2,2'-oxybis[1-chloropropane]	20.0	17.1		ug/L		86	25 - 128
2,4,5-Trichlorophenol	20.0	16.3		ug/L		82	39 - 110
2,4,6-Trichlorophenol	20.0	15.7		ug/L		79	35 - 110
2,4-Dichlorophenol	20.0	16.3		ug/L		81	33 - 110
2,4-Dimethylphenol	20.0	14.1		ug/L		70	12 - 110
2,4-Dinitrophenol	20.0	12.1	J	ug/L		61	17 - 112
2,4-Dinitrotoluene	20.0	17.7		ug/L		89	52 - 123
2,6-Dinitrotoluene	20.0	18.4		ug/L		92	52 - 119
2-Chloronaphthalene	20.0	15.8		ug/L		79	39 - 110
2-Chlorophenol	20.0	16.5		ug/L		82	27 - 110
2-Methylnaphthalene	20.0	15.3		ug/L		76	35 - 110
2-Methylphenol	20.0	15.9		ug/L		79	30 - 110
2-Nitroaniline	20.0	17.6	J	ug/L		88	43 - 130
2-Nitrophenol	20.0	16.3		ug/L		81	29 - 110
3,3'-Dichlorobenzidine	20.0	9.66		ug/L		48	19 - 110
3-Nitroaniline	20.0	16.1	J	ug/L		81	45 - 116
4,6-Dinitro-2-methylphenol	20.0	14.3	J	ug/L		71	28 - 112
4-Bromophenyl phenyl ether	20.0	16.4		ug/L		82	51 - 114
4-Chloro-3-methylphenol	20.0	16.3		ug/L		82	39 - 110
4-Chloroaniline	20.0	14.5		ug/L		73	10 - 110
4-Chlorophenyl phenyl ether	20.0	16.4		ug/L		82	50 - 115
4-Nitroaniline	20.0	17.3	J	ug/L		87	45 - 120

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-40810/24-A
Matrix: Water
Analysis Batch: 41147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40810

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Nitrophenol	20.0	16.0	J	ug/L		80	12 - 130
Acenaphthene	20.0	15.7		ug/L		79	40 - 110
Acenaphthylene	20.0	15.9		ug/L		80	43 - 110
Acetophenone	20.0	16.8		ug/L		84	50 - 130
Anthracene	20.0	15.9		ug/L		80	54 - 114
Atrazine	20.0	19.9		ug/L		100	50 - 130
Benzaldehyde	20.0	16.9		ug/L		84	10 - 130
Benzo[a]anthracene	20.0	14.5		ug/L		73	55 - 115
Benzo[a]pyrene	20.0	13.2		ug/L		66	43 - 116
Benzo[b]fluoranthene	20.0	15.0		ug/L		75	43 - 122
Benzo[g,h,i]perylene	20.0	15.5		ug/L		78	45 - 120
Benzo[k]fluoranthene	20.0	16.1		ug/L		80	43 - 124
Bis(2-chloroethoxy)methane	20.0	16.8		ug/L		84	39 - 110
Bis(2-chloroethyl)ether	20.0	17.3		ug/L		87	34 - 113
Bis(2-ethylhexyl) phthalate	20.0	15.4		ug/L		77	36 - 163
Butyl benzyl phthalate	20.0	16.4		ug/L		82	53 - 126
Caprolactam	20.0	15.5		ug/L		77	50 - 130
Carbazole	20.0	16.4		ug/L		82	53 - 120
Chrysene	20.0	16.4		ug/L		82	55 - 115
Dibenz(a,h)anthracene	20.0	15.2		ug/L		76	46 - 122
Dibenzofuran	20.0	16.0		ug/L		80	46 - 111
Diethyl phthalate	20.0	17.3		ug/L		86	33 - 134
Dimethyl phthalate	20.0	16.6		ug/L		83	15 - 143
Di-n-butyl phthalate	20.0	17.9		ug/L		89	55 - 122
Di-n-octyl phthalate	20.0	15.0		ug/L		75	44 - 128
Fluoranthene	20.0	16.2		ug/L		81	54 - 122
Fluorene	20.0	15.8		ug/L		79	47 - 112
Hexachlorobenzene	20.0	15.8		ug/L		79	51 - 112
Hexachlorobutadiene	20.0	14.7		ug/L		74	13 - 110
Hexachlorocyclopentadiene	20.0	8.36		ug/L		42	10 - 110
Hexachloroethane	20.0	14.7		ug/L		74	12 - 110
Indeno[1,2,3-cd]pyrene	20.0	14.9		ug/L		75	46 - 121
Isophorone	20.0	16.7		ug/L		84	44 - 128
Naphthalene	20.0	16.0		ug/L		80	31 - 110
Nitrobenzene	20.0	17.1		ug/L		85	37 - 115
N-Nitrosodi-n-propylamine	20.0	17.4		ug/L		87	37 - 121
N-Nitrosodiphenylamine	20.0	15.7		ug/L		79	53 - 113
Pentachlorophenol	20.0	12.8		ug/L		64	26 - 110
Phenol	20.0	16.9		ug/L		85	14 - 112
Phenanthrene	20.0	15.9		ug/L		79	52 - 114
Pyrene	20.0	15.4		ug/L		77	55 - 120
3 & 4 Methylphenol	40.0	33.2		ug/L		83	32 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*78*		*28 - 110*
2-Fluorophenol (Surr)	*83*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*83*		*22 - 120*
Nitrobenzene-d5 (Surr)	*80*		*27 - 111*
Phenol-d5 (Surr)	*87*		*10 - 110*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-40810/24-A
Matrix: Water
Analysis Batch: 41147

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40810

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Terphenyl-d14 (Surr)	89		37 - 119

Lab Sample ID: MB 240-40945/21-A
Matrix: Water
Analysis Batch: 41292

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40945

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/20/12 08:47	04/24/12 10:39	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 10:39	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 10:39	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 10:39	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 10:39	1
2-Methylnaphthalene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
2-Nitroaniline	20	U	20	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/20/12 08:47	04/24/12 10:39	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/20/12 08:47	04/24/12 10:39	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/20/12 08:47	04/24/12 10:39	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 10:39	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
4-Chloroaniline	10	U	10	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/20/12 08:47	04/24/12 10:39	1
4-Nitroaniline	20	U	20	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/12 08:47	04/24/12 10:39	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/20/12 08:47	04/24/12 10:39	1
Anthracene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/20/12 08:47	04/24/12 10:39	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/20/12 08:47	04/24/12 10:39	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/20/12 08:47	04/24/12 10:39	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
Caprolactam	10	U	10	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
Carbazole	10	U	10	0.28	ug/L		04/20/12 08:47	04/24/12 10:39	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-40945/21-A
Matrix: Water
Analysis Batch: 41292

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40945

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		04/20/12 08:47	04/24/12 10:39	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/20/12 08:47	04/24/12 10:39	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		04/20/12 08:47	04/24/12 10:39	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Fluorene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/20/12 08:47	04/24/12 10:39	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
Hexachloroethane	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/20/12 08:47	04/24/12 10:39	1
Naphthalene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/20/12 08:47	04/24/12 10:39	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		04/20/12 08:47	04/24/12 10:39	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/20/12 08:47	04/24/12 10:39	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/20/12 08:47	04/24/12 10:39	1
Phenol	5.0	U	5.0	0.60	ug/L		04/20/12 08:47	04/24/12 10:39	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
Pyrene	5.0	U	5.0	0.10	ug/L		04/20/12 08:47	04/24/12 10:39	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		04/20/12 08:47	04/24/12 10:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*28 - 110*	*04/20/12 08:47*	*04/24/12 10:39*	*1*
2-Fluorophenol (Surr)	*75*		*10 - 110*	*04/20/12 08:47*	*04/24/12 10:39*	*1*
2,4,6-Tribromophenol (Surr)	*64*		*22 - 120*	*04/20/12 08:47*	*04/24/12 10:39*	*1*
Nitrobenzene-d5 (Surr)	*72*		*27 - 111*	*04/20/12 08:47*	*04/24/12 10:39*	*1*
Phenol-d5 (Surr)	*76*		*10 - 110*	*04/20/12 08:47*	*04/24/12 10:39*	*1*
Terphenyl-d14 (Surr)	*88*		*37 - 119*	*04/20/12 08:47*	*04/24/12 10:39*	*1*

Lab Sample ID: LCS 240-40945/22-A
Matrix: Water
Analysis Batch: 41292

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40945

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	20.0	14.4		ug/L		72	50 - 130
2,2'-oxybis[1-chloropropane]	20.0	16.1		ug/L		81	25 - 128
2,4,5-Trichlorophenol	20.0	14.8		ug/L		74	39 - 110
2,4,6-Trichlorophenol	20.0	14.4		ug/L		72	35 - 110
2,4-Dichlorophenol	20.0	15.2		ug/L		76	33 - 110
2,4-Dimethylphenol	20.0	12.7		ug/L		64	12 - 110
2,4-Dinitrophenol	20.0	10.4	J	ug/L		52	17 - 112
2,4-Dinitrotoluene	20.0	16.7		ug/L		83	52 - 123
2,6-Dinitrotoluene	20.0	17.3		ug/L		87	52 - 119
2-Chloronaphthalene	20.0	14.7		ug/L		74	39 - 110
2-Chlorophenol	20.0	15.3		ug/L		77	27 - 110
2-Methylnaphthalene	20.0	14.3		ug/L		72	35 - 110

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-40945/22-A
Matrix: Water
Analysis Batch: 41292

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40945

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylphenol	20.0	15.1		ug/L		76	30 - 110
2-Nitroaniline	20.0	16.6	J	ug/L		83	43 - 130
2-Nitrophenol	20.0	14.8		ug/L		74	29 - 110
3,3'-Dichlorobenzidine	20.0	10.1		ug/L		50	19 - 110
3-Nitroaniline	20.0	15.6	J	ug/L		78	45 - 116
4,6-Dinitro-2-methylphenol	20.0	13.8	J	ug/L		69	28 - 112
4-Bromophenyl phenyl ether	20.0	15.1		ug/L		75	51 - 114
4-Chloro-3-methylphenol	20.0	15.4		ug/L		77	39 - 110
4-Chloroaniline	20.0	13.5		ug/L		68	10 - 110
4-Chlorophenyl phenyl ether	20.0	15.4		ug/L		77	50 - 115
4-Nitroaniline	20.0	15.7	J	ug/L		79	45 - 120
4-Nitrophenol	20.0	14.9	J	ug/L		74	12 - 130
Acenaphthene	20.0	14.4		ug/L		72	40 - 110
Acenaphthylene	20.0	14.8		ug/L		74	43 - 110
Acetophenone	20.0	15.6		ug/L		78	50 - 130
Anthracene	20.0	14.9		ug/L		75	54 - 114
Atrazine	20.0	18.8		ug/L		94	50 - 130
Benzaldehyde	20.0	15.8		ug/L		79	10 - 130
Benzo[a]anthracene	20.0	14.1		ug/L		71	55 - 115
Benzo[a]pyrene	20.0	12.8		ug/L		64	43 - 116
Benzo[b]fluoranthene	20.0	14.0		ug/L		70	43 - 122
Benzo[g,h,i]perylene	20.0	15.1		ug/L		75	45 - 120
Benzo[k]fluoranthene	20.0	15.7		ug/L		78	43 - 124
Bis(2-chloroethoxy)methane	20.0	15.2		ug/L		76	39 - 110
Bis(2-chloroethyl)ether	20.0	15.6		ug/L		78	34 - 113
Bis(2-ethylhexyl) phthalate	20.0	15.7		ug/L		78	36 - 163
Butyl benzyl phthalate	20.0	15.7		ug/L		78	53 - 126
Caprolactam	20.0	14.9		ug/L		75	50 - 130
Carbazole	20.0	15.6		ug/L		78	53 - 120
Chrysene	20.0	15.9		ug/L		79	55 - 115
Dibenz(a,h)anthracene	20.0	15.1		ug/L		76	46 - 122
Dibenzofuran	20.0	15.0		ug/L		75	46 - 111
Diethyl phthalate	20.0	16.3		ug/L		82	33 - 134
Dimethyl phthalate	20.0	15.6		ug/L		78	15 - 143
Di-n-butyl phthalate	20.0	16.8		ug/L		84	55 - 122
Di-n-octyl phthalate	20.0	14.5		ug/L		73	44 - 128
Fluoranthene	20.0	15.5		ug/L		78	54 - 122
Fluorene	20.0	15.0		ug/L		75	47 - 112
Hexachlorobenzene	20.0	15.0		ug/L		75	51 - 112
Hexachlorobutadiene	20.0	14.0		ug/L		70	13 - 110
Hexachlorocyclopentadiene	20.0	8.70		ug/L		44	10 - 110
Hexachloroethane	20.0	14.2		ug/L		71	12 - 110
Indeno[1,2,3-cd]pyrene	20.0	14.7		ug/L		74	46 - 121
Isophorone	20.0	15.4		ug/L		77	44 - 128
Naphthalene	20.0	14.7		ug/L		74	31 - 110
Nitrobenzene	20.0	15.9		ug/L		79	37 - 115
N-Nitrosodi-n-propylamine	20.0	16.1		ug/L		80	37 - 121
N-Nitrosodiphenylamine	20.0	14.7		ug/L		74	53 - 113
Pentachlorophenol	20.0	10.8		ug/L		54	26 - 110
Phenol	20.0	15.6		ug/L		78	14 - 112

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-40945/22-A
Matrix: Water
Analysis Batch: 41292

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40945

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenanthrene	20.0	15.2		ug/L		76	52 - 114
Pyrene	20.0	14.7		ug/L		73	55 - 120
3 & 4 Methylphenol	40.0	31.2		ug/L		78	32 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*72*		*28 - 110*
2-Fluorophenol (Surr)	*78*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*76*		*22 - 120*
Nitrobenzene-d5 (Surr)	*72*		*27 - 111*
Phenol-d5 (Surr)	*80*		*10 - 110*
Terphenyl-d14 (Surr)	*85*		*37 - 119*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-40800/19-A
Matrix: Water
Analysis Batch: 41047

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40800

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/19/12 08:41	04/20/12 22:01	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/19/12 08:41	04/20/12 22:01	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		04/19/12 08:41	04/20/12 22:01	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		04/19/12 08:41	04/20/12 22:01	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		04/19/12 08:41	04/20/12 22:01	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/19/12 08:41	04/20/12 22:01	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/19/12 08:41	04/20/12 22:01	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/19/12 08:41	04/20/12 22:01	1
Aroclor-1268	0.10	U	0.10	0.055	ug/L		04/19/12 08:41	04/20/12 22:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*64*		*23 - 136*	*04/19/12 08:41*	*04/20/12 22:01*	*1*
DCB Decachlorobiphenyl	*71*		*10 - 130*	*04/19/12 08:41*	*04/20/12 22:01*	*1*

Lab Sample ID: LCS 240-40800/20-A
Matrix: Water
Analysis Batch: 41047

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	2.50	1.82		ug/L		73	66 - 120
Aroclor-1260	2.50	2.10		ug/L		84	55 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*65*		*23 - 136*
DCB Decachlorobiphenyl	*59*		*10 - 130*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-41016/1-A
Matrix: Water
Analysis Batch: 41254

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 41016

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/20/12 12:10	04/23/12 12:41	1
Antimony	2.0	U	2.0	0.13	ug/L		04/20/12 12:10	04/23/12 12:41	1
Arsenic	5.0	U	5.0	0.40	ug/L		04/20/12 12:10	04/23/12 12:41	1
Barium	0.815	J	100	0.19	ug/L		04/20/12 12:10	04/23/12 12:41	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/20/12 12:10	04/23/12 12:41	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/20/12 12:10	04/23/12 12:41	1
Cobalt	20	U	20	0.058	ug/L		04/20/12 12:10	04/23/12 12:41	1
Chromium	10	U	10	0.71	ug/L		04/20/12 12:10	04/23/12 12:41	1
Copper	0.524	J	4.0	0.29	ug/L		04/20/12 12:10	04/23/12 12:41	1
Iron	200	U	200	26	ug/L		04/20/12 12:10	04/23/12 12:41	1
Manganese	50	U	50	0.83	ug/L		04/20/12 12:10	04/23/12 12:41	1
Nickel	20	U	20	0.20	ug/L		04/20/12 12:10	04/23/12 12:41	1
Lead	3.0	U	3.0	0.18	ug/L		04/20/12 12:10	04/23/12 12:41	1
Selenium	5.0	U	5.0	0.57	ug/L		04/20/12 12:10	04/23/12 12:41	1
Thallium	0.181	J	2.0	0.14	ug/L		04/20/12 12:10	04/23/12 12:41	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/20/12 12:10	04/23/12 12:41	1
Zinc	5.38	J	50	2.3	ug/L		04/20/12 12:10	04/23/12 12:41	1
Silver	0.20	U	0.20	0.080	ug/L		04/20/12 12:10	04/23/12 12:41	1

Lab Sample ID: LCS 240-41016/2-A
Matrix: Water
Analysis Batch: 41254

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 41016

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9870		ug/L		99	80 - 120
Antimony	100	96.6		ug/L		97	80 - 120
Arsenic	1000	947		ug/L		95	80 - 120
Barium	1000	968		ug/L		97	80 - 120
Beryllium	1000	912		ug/L		91	80 - 120
Cadmium	1000	967		ug/L		97	80 - 120
Cobalt	1000	940		ug/L		94	80 - 120
Chromium	1000	942		ug/L		94	80 - 120
Copper	1000	974		ug/L		97	80 - 120
Iron	10000	9790		ug/L		98	80 - 120
Manganese	1000	984		ug/L		98	80 - 120
Nickel	1000	961		ug/L		96	80 - 120
Lead	1000	984		ug/L		98	80 - 120
Selenium	1000	967		ug/L		97	80 - 120
Thallium	250	238		ug/L		95	80 - 120
Vanadium	1000	932		ug/L		93	80 - 120
Zinc	1000	979		ug/L		98	80 - 120
Silver	100	102		ug/L		102	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-40931/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 41133 — **Prep Batch: 40931**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/20/12 12:45	04/20/12 15:28	1

Lab Sample ID: LCS 240-40931/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 41133 — **Prep Batch: 40931**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.05	J	ug/L		101	81 - 123

Lab Sample ID: 240-10274-1 MS — **Client Sample ID: GW-17358-041712-JY-1031**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 41133 — **Prep Batch: 40931**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	40	U	1.00	1.05	J	ug/L		105	69 - 134

Lab Sample ID: 240-10274-1 MSD — **Client Sample ID: GW-17358-041712-JY-1031**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 41133 — **Prep Batch: 40931**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	40	U	1.00	1.02	J	ug/L		102	69 - 134	3	20

Lab Sample ID: MB 240-41164/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 41694 — **Prep Batch: 41164**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/23/12 14:00	04/25/12 12:21	1

Lab Sample ID: LCS 240-41164/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 41694 — **Prep Batch: 41164**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.61	J	ug/L		92	81 - 123

Lab Sample ID: MB 240-41179/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 41694 — **Prep Batch: 41179**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	40	U	40	0.12	ug/L		04/23/12 14:00	04/25/12 13:19	1

Lab Sample ID: LCS 240-41179/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 41694 — **Prep Batch: 41179**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.55	J	ug/L		91	81 - 123

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 240-40713/3
Matrix: Water
Analysis Batch: 40713

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cr (VI)	0.010	U	0.010	0.0020	mg/L			04/18/12 11:53	1

Lab Sample ID: LCS 240-40713/4
Matrix: Water
Analysis Batch: 40713

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)			0.250	0.255		mg/L		102	80 - 118		

Lab Sample ID: 240-10274-18 MS
Matrix: Water
Analysis Batch: 40713

Client Sample ID: GW-17358-041712-DR-1048
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Cr (VI)	0.0024	J	0.250	0.260		mg/L		103	41 - 136		

Lab Sample ID: 240-10274-18 MSD
Matrix: Water
Analysis Batch: 40713

Client Sample ID: GW-17358-041712-DR-1048
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cr (VI)	0.0024	J	0.250	0.243		mg/L		96	41 - 136	6.90	20

Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(63-129)	(66-117)	(74-115)	(75-121)
240-10274-1	GW-17358-041712-JY-1031	93	84	93	95
240-10274-2	GW-17358-041712-JY-1032	92	85	90	91
240-10274-3	GW-17358-041712-JY-1033	92	88	90	90
240-10274-4	GW-17358-041712-JY-1034	92	90	91	96
240-10274-5	GW-17358-041712-JY-1035	93	88	93	96
240-10274-6	GW-17358-041712-JY-1036	94	96	96	96
240-10274-7	GW-17358-041712-CB-1037	95	88	89	93
240-10274-8	GW-17358-041712-CB-1038	97	90	88	94
240-10274-9	GW-17358-041712-CB-1039	93	88	89	91
240-10274-10	GW-17358-041712-CB-1040	95	87	90	94
240-10274-11	GW-17358-041712-DR-1041	96	86	92	94
240-10274-12	GW-17358-041712-DR-1042	95	85	90	91
240-10274-13	GW-17358-041712-DR-1043	94	88	92	94
240-10274-14	GW-17358-041712-DR-1044	96	85	92	96
240-10274-15	GW-17358-041712-DR-1045	96	89	91	93
240-10274-16	GW-17358-041712-DR-1046	92	94	99	95
240-10274-17	GW-17358-041712-DR-1047	94	89	99	96
240-10274-18	GW-17358-041712-DR-1048	95	94	99	95
240-10274-19	TB-17358-041712	94	89	98	96
LCS 240-41303/4	Lab Control Sample	87	98	97	91
LCS 240-41472/4	Lab Control Sample	89	108	101	94
MB 240-41303/5	Method Blank	86	89	97	84
MB 240-41472/5	Method Blank	93	94	102	94

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(28-110)	(10-110)	(22-120)	(27-111)	(10-110)	(37-119)
240-10274-1	GW-17358-041712-JY-1031	52	53	48	50	48	75
240-10274-2	GW-17358-041712-JY-1032	56	60	59	56	60	66
240-10274-3	GW-17358-041712-JY-1033	55	58	62	54	60	69
240-10274-4	GW-17358-041712-JY-1034	52	53	56	52	55	64
240-10274-5	GW-17358-041712-JY-1035	49	52	53	50	53	60
240-10274-6	GW-17358-041712-JY-1036	39	41	50	39	43	46
240-10274-7	GW-17358-041712-CB-1037	34	32	45	34	35	42
240-10274-8	GW-17358-041712-CB-1038	45	47	49	44	47	59
240-10274-9	GW-17358-041712-CB-1039	34	32	46	34	35	31 X
240-10274-10	GW-17358-041712-CB-1040	48	48	54	48	49	60
240-10274-11	GW-17358-041712-DR-1041	43	46	58	45	49	57
240-10274-12	GW-17358-041712-DR-1042	43	44	59	44	48	53
240-10274-13	GW-17358-041712-DR-1043	46	49	56	47	51	52
240-10274-14	GW-17358-041712-DR-1044	42	45	51	42	46	54
240-10274-15	GW-17358-041712-DR-1045	49	49	58	49	51	61

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(28-110)	(10-110)	(22-120)	(27-111)	(10-110)	(37-119)
240-10274-16	GW-17358-041712-DR-1046	47	51	56	47	54	49
240-10274-17	GW-17358-041712-DR-1047	52	60	64	55	60	69
240-10274-18	GW-17358-041712-DR-1048	47	47	56	46	50	58
LCS 240-40810/24-A	Lab Control Sample	78	83	83	80	87	89
LCS 240-40945/22-A	Lab Control Sample	72	78	76	72	80	85
MB 240-40810/23-A	Method Blank	71	75	68	69	78	89
MB 240-40945/21-A	Method Blank	72	75	64	72	76	88

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCB2
Lab Sample ID	Client Sample ID	(23-136)	(10-130)
240-10274-1	GW-17358-041712-JY-1031	65	61
240-10274-2	GW-17358-041712-JY-1032	60	63
240-10274-3	GW-17358-041712-JY-1033	59	47
240-10274-4	GW-17358-041712-JY-1034	66	62
240-10274-5	GW-17358-041712-JY-1035	62	63
240-10274-6	GW-17358-041712-JY-1036	61	58
240-10274-7	GW-17358-041712-CB-1037	66	44
240-10274-8	GW-17358-041712-CB-1038	65	63
240-10274-9	GW-17358-041712-CB-1039	63	23
240-10274-10	GW-17358-041712-CB-1040	62	60
240-10274-11	GW-17358-041712-DR-1041	62	40
240-10274-12	GW-17358-041712-DR-1042	61	51
240-10274-13	GW-17358-041712-DR-1043	48	35
240-10274-14	GW-17358-041712-DR-1044	71	42
240-10274-15	GW-17358-041712-DR-1045	74	36
240-10274-16	GW-17358-041712-DR-1046	63	45
240-10274-17	GW-17358-041712-DR-1047	56	50
240-10274-18	GW-17358-041712-DR-1048	54	54
LCS 240-40800/20-A	Lab Control Sample	65	59
MB 240-40800/19-A	Method Blank	64	71

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Client Sample ID: GW-17358-041712-JY-1031

Lab Sample ID: 240-10274-1

Date Collected: 04/17/12 09:10

Matrix: Water

Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		8.33	41303	04/24/12 19:34	LE	TAL NC
Total/NA	Prep	3520C			40810	04/19/12 09:14	BM	TAL NC
Total/NA	Analysis	8270C		1	41147	04/23/12 15:15	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 17:17	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 15:32	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 13:19	KC	TAL NC
Total/NA	Analysis	9012A		1	42287	04/30/12 08:37	BR	TAL NC

Client Sample ID: GW-17358-041712-JY-1032

Lab Sample ID: 240-10274-2

Date Collected: 04/17/12 09:15

Matrix: Water

Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		8.33	41303	04/24/12 19:57	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41486	04/25/12 10:57	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 17:33	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 15:38	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 13:24	KC	TAL NC
Total/NA	Analysis	9012A		1	42287	04/30/12 08:37	BR	TAL NC

Client Sample ID: GW-17358-041712-JY-1033

Lab Sample ID: 240-10274-3

Date Collected: 04/17/12 09:55

Matrix: Water

Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41303	04/24/12 20:20	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41486	04/25/12 11:16	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 17:48	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 15:40	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 13:30	KC	TAL NC
Total/NA	Analysis	9012A		1	42287	04/30/12 08:37	BR	TAL NC

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Client Sample ID: GW-17358-041712-JY-1034

Lab Sample ID: 240-10274-4

Date Collected: 04/17/12 11:50
Matrix: Water
Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41303	04/24/12 20:42	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41486	04/25/12 11:35	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 18:04	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 15:42	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 13:35	KC	TAL NC

Client Sample ID: GW-17358-041712-JY-1035

Lab Sample ID: 240-10274-5

Date Collected: 04/17/12 14:55
Matrix: Water
Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41303	04/24/12 21:05	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41486	04/25/12 11:53	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 19:07	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 15:44	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 13:52	KC	TAL NC
Total/NA	Analysis	9012A		1	42287	04/30/12 08:37	BR	TAL NC

Client Sample ID: GW-17358-041712-JY-1036

Lab Sample ID: 240-10274-6

Date Collected: 04/17/12 11:30
Matrix: Water
Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		6.67	41472	04/25/12 11:44	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 16:14	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 18:52	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 15:46	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 13:57	KC	TAL NC

Client Sample ID: GW-17358-041712-CB-1037

Lab Sample ID: 240-10274-7

Date Collected: 04/17/12 09:25

Matrix: Water

Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41303	04/24/12 21:50	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 16:32	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 18:36	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 15:52	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 14:03	KC	TAL NC

Client Sample ID: GW-17358-041712-CB-1038

Lab Sample ID: 240-10274-8

Date Collected: 04/17/12 11:35

Matrix: Water

Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41303	04/24/12 22:13	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 21:11	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 18:20	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 15:54	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 14:08	KC	TAL NC

Client Sample ID: GW-17358-041712-CB-1039

Lab Sample ID: 240-10274-9

Date Collected: 04/17/12 13:50

Matrix: Water

Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41303	04/24/12 22:36	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 16:51	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 19:23	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 15:56	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 14:13	KC	TAL NC

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Client Sample ID: GW-17358-041712-CB-1040

Lab Sample ID: 240-10274-10

Date Collected: 04/17/12 15:05
Matrix: Water
Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41303	04/24/12 22:58	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 15:18	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 19:39	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 15:58	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 14:19	KC	TAL NC

Client Sample ID: GW-17358-041712-DR-1041

Lab Sample ID: 240-10274-11

Date Collected: 04/17/12 09:00
Matrix: Water
Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41303	04/24/12 23:21	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 17:47	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 19:55	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 16:00	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 14:24	KC	TAL NC

Client Sample ID: GW-17358-041712-DR-1042

Lab Sample ID: 240-10274-12

Date Collected: 04/17/12 10:15
Matrix: Water
Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41303	04/24/12 23:44	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 17:28	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 20:10	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 16:02	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 14:30	KC	TAL NC

Client Sample ID: GW-17358-041712-DR-1043

Lab Sample ID: 240-10274-13

Date Collected: 04/17/12 11:25

Matrix: Water

Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41303	04/25/12 00:06	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 18:05	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41263	04/24/12 09:05	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 16:04	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 14:35	KC	TAL NC

Client Sample ID: GW-17358-041712-DR-1044

Lab Sample ID: 240-10274-14

Date Collected: 04/17/12 14:05

Matrix: Water

Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41303	04/25/12 00:28	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 20:34	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 20:58	LH	TAL NC
Total/NA	Prep	7470A			40931	04/20/12 12:45	CN	TAL NC
Total/NA	Analysis	7470A		1	41133	04/20/12 16:06	AS	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 14:40	KC	TAL NC
Total/NA	Analysis	7196A		1	40713	04/18/12 11:55	KH	TAL NC
Total/NA	Analysis	7196A		1	41253	04/24/12 04:54	KC	TAL NC

Client Sample ID: GW-17358-041712-DR-1045

Lab Sample ID: 240-10274-15

Date Collected: 04/17/12 10:20

Matrix: Water

Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41303	04/25/12 00:51	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 15:55	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 20:42	LH	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 14:57	KC	TAL NC
Total/NA	Prep	7470A			41164	04/23/12 14:00	AS	TAL NC
Total/NA	Analysis	7470A		1	41694	04/25/12 13:02	AS	TAL NC

Client Sample ID: GW-17358-041712-DR-1046

Lab Sample ID: 240-10274-16

Date Collected: 04/17/12 12:00

Matrix: Water

Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41472	04/25/12 12:06	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 17:09	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 20:26	LH	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 15:03	KC	TAL NC
Total/NA	Prep	7470A			41179	04/23/12 14:00	AS	TAL NC
Total/NA	Analysis	7470A		1	41694	04/25/12 13:40	AS	TAL NC

Client Sample ID: GW-17358-041712-DR-1047

Lab Sample ID: 240-10274-17

Date Collected: 04/17/12 15:15

Matrix: Water

Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41472	04/25/12 12:28	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 15:36	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 21:29	LH	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 15:08	KC	TAL NC
Total/NA	Prep	7470A			41179	04/23/12 14:00	AS	TAL NC
Total/NA	Analysis	7470A		1	41694	04/25/12 13:42	AS	TAL NC

Client Sample ID: GW-17358-041712-DR-1048

Lab Sample ID: 240-10274-18

Date Collected: 04/17/12 15:10

Matrix: Water

Date Received: 04/18/12 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41472	04/25/12 12:51	LE	TAL NC
Total/NA	Prep	3520C			40945	04/20/12 08:47	AK	TAL NC
Total/NA	Analysis	8270C		1	41292	04/24/12 20:53	JG	TAL NC
Total/NA	Prep	3520C			40800	04/19/12 08:41	CB	TAL NC
Total/NA	Analysis	8082		1	41047	04/20/12 21:45	LH	TAL NC
Total Recoverable	Prep	3005A			41016	04/20/12 12:10	CN	TAL NC
Total Recoverable	Analysis	6020		1	41254	04/23/12 15:13	KC	TAL NC
Total/NA	Prep	7470A			41179	04/23/12 14:00	AS	TAL NC
Total/NA	Analysis	7470A		1	41694	04/25/12 13:44	AS	TAL NC
Total/NA	Analysis	7196A		1	40713	04/18/12 11:55	KH	TAL NC
Total/NA	Analysis	7196A		1	41253	04/24/12 04:54	KC	TAL NC

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Client Sample ID: TB-17358-041712
Date Collected: 04/17/12 00:00
Date Received: 04/18/12 09:00

Lab Sample ID: 240-10274-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	41472	04/25/12 13:14	LE	TAL NC

Laboratory References:

TAL NC = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-008, RACER Willow Run

TestAmerica Job ID: 240-10274-1

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica Canton	California	NELAC	9	01144CA
TestAmerica Canton	Connecticut	State Program	1	PH-0590
TestAmerica Canton	Florida	NELAC	4	E87225
TestAmerica Canton	Georgia	State Program	4	N/A
TestAmerica Canton	Illinois	NELAC	5	200004
TestAmerica Canton	Kansas	NELAC	7	E-10336
TestAmerica Canton	Kentucky	State Program	4	58
TestAmerica Canton	L-A-B	DoD ELAP		L2315
TestAmerica Canton	Minnesota	NELAC	5	039-999-348
TestAmerica Canton	Nevada	State Program	9	OH-000482008A
TestAmerica Canton	New Jersey	NELAC	2	OH001
TestAmerica Canton	New York	NELAC	2	10975
TestAmerica Canton	Ohio VAP	State Program	5	CL0024
TestAmerica Canton	Pennsylvania	NELAC	3	68-00340
TestAmerica Canton	USDA	Federal		P330-11-00328
TestAmerica Canton	Virginia	NELAC	3	460175
TestAmerica Canton	Washington	State Program	10	C971
TestAmerica Canton	West Virginia DEP	State Program	3	210
TestAmerica Canton	Wisconsin	State Program	5	999518190

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

CHAIN OF CUSTODY RECORD

COC NO.: PL- 08412
PAGE 1 OF 2
(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES
14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170
Phone: (734) 453-5123 Fax: (734) 453-5201

Project No/ Phase/Task Code: 017358-TO1-08412	Laboratory Name: TestAmerica
Project Name: Racer-Willow Run	Lab Contact: Denise Hechler
Project Location: Ypsilanti, MI	Lab Location: North Canton, OH
Chemistry Contact: Paul Wiseman	Lab Quote No:
Sampler(s): C. Bondy, D. Rivers, J. York, E. Mickelson	SSOW ID: 11991-TO1-008
	Cooler No:
	Carrier: FedEx
	Airbill No:
	Date Shipped: 4/17/12

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd//yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOC	TCL SVOC	Site specific TAL Metals	PCB	hexavalent chromium	trivalent chromium	Amenable cyanide			MS/MSD Request	Comments/ Special Instructions:
1	GW-17358-041712-JY -1031	4/17/12	910	WG	G	4	3	1		1				9	X	X	X	X			X				
2	-1032		915			4	3	1		1				9	X	X	X	X			X				
3	-1033		9~~55~~			4	3	1		1				9	X	X	X	X			X				
4	-1034		1150			4	3	1						8	X	X	X	X							
5	-1035		1455			4	3	1		1				9	X	X	X	X			X				
6	-1036		1130			4	3	1						8	X	X	X	X							
7	CB -1037		925			4	3	1						8	X	X	X	X							
8	-1038		1135			4	3	1						8	X	X	X	X							
9	-1039		1350			4	3	1						8	X	X	X	X							
10	-1040		1505			4	3	1						8	X	X	X	X							
11	DR -1041		900			4	3	1						8	X	X	X	X							
12	-1042		1015			4	3	1						8	X	X	X	X							
13	-1043		1125			4	3	1						8	X	X	X	X							
14	-1044		1405			5	3	1						9	X	X	X	X	X	X					
15	DR ~~MS~~ -1045		1020			4	3	1						8	X	X	X	X							

Page 184 of 188

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☑ 2 Week ☐ Other:

Total Number of Containers: 117

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. C. Bondy	CRA	4/17/12	1730	1.	TAL	4-18-12	900
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

5/2/2012

CHAIN OF CUSTODY RECORD

CONESTOGA-ROVERS & ASSOCIATES

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170
Phone: (734) 453-5123 Fax: (734) 453-5201

COC NO.: PL- 08413
PAGE 2 OF 2
(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 017358-TO1-08412	Laboratory Name: Test America
Project Name: Racer-Willow Run	Lab Contact: Denise Heckler
Project Location: Ypsilanti, MI	Lab Location: North Canton, OH
Chemistry Contact: Paul Wiseman	Lab Quote No:
Sampler(s): C. Bondy, D. Rivers, J. York, E Mickelson	SSOW ID: 11991-TO1-008
	Cooler No:
	Carrier: FedEx
	Airbill No:
	Date Shipped: 4/17/12

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd//yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	HCl	HNO_3	H_2SO_4	NaOH	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	Analysis Requested: TCL VOC	TCL SVOC	Site specific TAL Metals	PCB	hexavalent chromium	trivalent chromium				MS/MSD Request
1	GW-17358-041712-DR-1046	4/17/12	1200	WG	G	4	3	1						8	X	X	X	X						
2	DR-1047		1515			4	3	1						8	X	X	X	X						
3	DR-1048		1510			5 MS	3	1						9	X	X	X	X	X	X				
4	TB-17358-041712		—	WQ	—		1							1	X									
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								
13																								
14																								
15																								

Comments/ Special Instructions:

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☑ 2 Week ☐ Other:

Total Number of Containers:

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. C. Bondy	CRA	4/17/12	1730	1.	TAL	4-18-12	900
				2.			
				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

TestAmerica North Canton Sample Receipt Form/Narrative **Login # : 10274**

Client CRA Site Name Racer Willow Run By: _____

Cooler Received on 4-18-12 Opened on 4-18-12 (Signature)

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # BACK Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF -2°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 4G	(CF -1°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	(X) Multiple on Back
IR GUN# 5G	(CF -1°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	
IR GUN# 6Y	(CF -2°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity_____ Yes (No)
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No (NA)
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? (Yes) No NA
11. Were VOAs on the COC? (Yes) No
12. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

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# 110410-HNO3; Sulfuric Acid Lot# 041911-H2SO4; Sodium Hydroxide Lot# 121809 - NaOH; Hydrochloric Acid Lot# 041911-HCl; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH. What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
1031	<2 712	4.18.12	JS
2	<2 712		
3	<2 712		
4	<2		
5	<2 712		
6	<2		
7	<2		
8	<2		
9	<2		
40	<2		
1	<2		
2	<2		
3	<2		
4	<2		
5	<2		
6	<2		
7	<2		
8	<2		

Cooler #	Observed Sample Temp. °C	Corrected Sample Temp. °C	IR #	Coolant
260-053	5.3	4.3	44	Ice
241-2048	3.7	2.7		
260-007	4.2	3.2		
NOT	3.6	2.6		
241-2507	4.5	3.5		
260-058	2.1	1.1		
241-2523	2.9	1.9		
260-015	3.6	2.6		
241-2520	4.0	3.0		
260-002	4.8	3.8		

Login Sample Receipt Checklist

Client: Conestoga-Rovers & Associates, Inc.

Job Number: 240-10274-1

Login Number: 10274

List Source: TestAmerica Canton

List Number: 1

Creator: Sutek, Nick

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

CONESTOGA-ROVERS
& ASSOCIATES

14496 Sheldon Road, Suite #200
Plymouth, Michigan 48170
Telephone: (734) 453-5123 Fax: (734) 453-5201
www.CRAworld.com

MEMORANDUM

TO: Beth Landale

REF. NO.: 17358

FROM: Rawa Fleisher/Paul Wiseman/tl/105/D

DATE: June 7, 2013

E-Mail and Hard Copy if Requested

RE: Analytical Results and Reduced Validation
RFI Work Plan Addendum 1 – Groundwater Monitoring
Willow Run Powertrain
Ypsilanti, Michigan
April 2013

INTRODUCTION

The following document details a reduced validation of analytical results for water samples collected in support of the groundwater monitoring program at the Willow Run Powertrain Site during April 2013. Samples were submitted to TestAmerica Laboratories, Inc., located in North Canton, Ohio (TA-NC). A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard CRA report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, duplicate data, recovery data from surrogate spikes, laboratory control samples (LCS), and matrix spikes; and field QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and the documents entitled:

i) "RFI Work Plan QAPP", Revision 1, February 2012

ii) "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", United States Environmental Protection Agency (USEPA) 540/R-99-008, October 1999

iii) "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", USEPA 540/R-94-013, February 1994

Items ii) and iii) will subsequently be referred to as the "Guidelines" in this Memorandum.

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SAMPLE HOLDING TIME AND PRESERVATION

The sample holding time criteria and sample preservation requirements for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were prepared and analyzed within the required holding times with the exception of sample GW-17358-040113-JY-001 presented with qualification in Table 4.

All samples were properly preserved and delivered on ice, stored by the laboratory at the required temperature (0-6°C) and analyzed within the specified holding time periods.

CONTINUING CALIBRATION - INORGANIC ANALYSES

To ensure that instrument calibration is acceptable throughout the sample analysis period, continuing calibration verification (CCV) standards are analyzed on a regular basis. Each CCV is deemed acceptable if all analyte recoveries are within the control limits specified above for the ICVs. If some of the CCV analyte recoveries are outside the control limits, samples analyzed before and after the CCV, up until the previous and proceeding CCV analyses, are affected.

For this study, CCVs were analyzed at the proper frequency. Based on information supplied by TA-NC in the analytical report case narratives the samples presented Table 5 were qualified due to outlying CCV recoveries.

LABORATORY METHOD BLANK ANALYSES

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

For this study, laboratory method blanks were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical batch.

The samples presented in Table 6 should be qualified due to laboratory contamination. The laboratory flagged these concentrations with a "B" which may be disregarded. The remaining method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

SURROGATE SPIKE RECOVERIES - ORGANIC ANALYSES

In accordance with the methods employed, all samples, blanks and QC samples analyzed for organics are spiked with surrogate compounds prior to sample extraction and/or analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for VOC, SVOC and PCB determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/analysis.

SURROGATE SPIKE RECOVERIES - ORGANIC ANALYSES (CONTINUED)

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries met the above criteria with the exception of the qualified samples presented in Table 7.

LABORATORY CONTROL SAMPLE (LCS) ANALYSES

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

For this study, LCS were analyzed at a minimum frequency of one per 20 investigative samples and/or one per analytical batch.

Organic Analyses
The LCS contained all compounds of interest. All LCS recoveries were within the laboratory control limits, demonstrating acceptable analytical accuracy with the exception of the qualified samples presented in Table 8.

Inorganic Analyses
The LCS contained all analytes of interest. LCS recoveries were assessed per the "Guidelines". All LCS recoveries were within the control limits, demonstrating acceptable analytical accuracy.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) ANALYSES

To evaluate the effects of sample matrices on the extraction or digestion process, measurement procedures, and accuracy of a particular analysis, samples are spiked with a known concentration of the analyte of concern and analyzed as MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in Table 1.

Organic Analyses
The MS/MSD samples were spiked with all compounds of interest (or the PCB Aroclors specified in the method). All percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision with the exception of the qualified samples presented in Table 9.

Inorganic Analyses
The MS/MSD samples were spiked with the analytes of interest and the results were evaluated using the "Guidelines". All percent recoveries and RPD values were within the control limits, demonstrating acceptable analytical accuracy and precision.

FIELD QA/QC samples

The field QA/QC consisted of 11 trip blank samples and six (6) field duplicate sample sets.

Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, 11 trip blanks were collected and submitted to the laboratory for VOC analysis. The samples that should be qualified due to the presence of analytes in the trip blank samples are summarized in Table 10. No additional target analytes were reported as detected in the trip blank samples.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, six (6) field duplicate samples were collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50 percent. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criteria is one times the RL value.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision.

ANALYTE REPORTING

The laboratory reported detected results down to the laboratory's method detection limit (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were qualified as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2.

CONCLUSION

Based on this assessment of the information provided, the data produced by TA-NC were found to exhibit acceptable levels of accuracy and precision and may be used with the qualification(s) noted with the exception of the following:

- PCB non-detect data were rejected in one of sample due to outlying surrogate recovery
- SVOC non-detect data were rejected in a number of samples due to outlying MS/MSD recoveries

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

					Analysis/Parameters						
Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*TCL VOC*	*TCL SVOC*	*PCB*	*TAL Metals*	*Phosphorus*	*Cyanide (Amenable)*	*Comments*
TestAmerica Job No.: 240-22639-1											
GW-17358-040113-JY-001	CRA-529M	water	4/1/2013	2:00:00 PM	X	X	X	X	X		
GW-17358-040113-CT-003	CRA-739I	water	4/1/2013	2:20:00 PM	X	X	X	X	X		
GW-17358-040113-DR-006	CRA-731I	water	4/1/2013	2:30:00 PM	X	X	X	X			
GW-17358-040113-CT-004	CRA-739I	water	4/1/2013	2:35:00 PM	X	X	X	X	X		Field Duplicate - CRA-739I
GW-17358-040113-CT-005	CRA-787I	water	4/1/2013	3:00:00 PM	X	X	X	X			
GW-17358-040113-JY-002	CRA-732I	water	4/1/2013	3:05:00 PM	X	X	X	X	X		MS/MSD
GW-17358-040113-DR-007	CRA-737M	water	4/1/2013	4:35:00 PM	X	X	X	X			
GW-17358-040213-CT-008	CRA-828M	water	4/2/2013	9:40:00 AM	X	X	X	X			
GW-17358-040213-CT-009	CRA-829M	water	4/2/2013	9:50:00 AM	X	X	X	X			
GW-17358-040213-CT-010	CRA-209M	water	4/2/2013	11:15:00 AM	X	X	X	X			
GW-17358-040213-CT-011	CRA-342M	water	4/2/2013	11:16:00 AM	X	X	X	X	X		
GW-17358-040213-CT-013	CRA-826ML	water	4/2/2013	3:10:00 PM	X	X	X	X			
GW-17358-040213-CT-012	CRA-320M	water	4/2/2013	3:15:00 PM	X	X	X	X			
GW-17358-040213-CT-014	CRA-837ML	water	4/2/2013	4:20:00 PM	X	X	X	X	X		
TB-17358-040213	–	water	4/2/2013	4/2/2013	X						Trip Blank
TestAmerica Job No.: 240-22773-1											
GW-17358-040313-CT-015	CRA-729I	water	4/3/2013	10:00:00 AM	X	X	X	X			MS/MSD
GW-17358-040313-CT-016	CRA-729M	water	4/3/2013	10:05:00 AM	X	X	X	X			
GW-17358-040313-CT-017	CRA-740I	water	4/3/2013	11:15:00 AM	X	X	X	X	X		
GW-17358-040313-CT-018	CRA-740M	water	4/3/2013	11:25:00 AM	X	X	X	X	X		
GW-17358-040313-CT-020	CRA-741I	water	4/3/2013	3:30:00 PM	X	X	X	X			
GW-17358-040313-CT-019	CRA-744M	water	4/3/2013	3:55:00 PM	X	X	X	X		X	
TB-17358-040313	–	water	4/3/2013	4/3/2013	X						Trip Blank

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

					Analysis/Parameters						
Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*TCL VOC*	*TCL SVOC*	*PCB*	*TAL Metals*	*Phosphorus*	*Cyanide (Amenable)*	*Comments*
TestAmerica Job No.: 240-22816-1											
GW-17358-040413-CT-021	CRA-743M	water	4/4/2013	8:30:00 AM	X	X	X	X			
GW-17358-040413-CT-024	CRA-749M	water	4/4/2013	9:20:00 AM	X	X	X	X		X	
GW-17358-040413-CT-025	CRA-741M	water	4/4/2013	9:25:00 AM	X	X	X	X			
GW-17358-040413-CT-022	CRA-745M	water	4/4/2013	9:50:00 AM	X	X	X	X	X	X	
GW-17358-040413-CT-023	CRA-745M	water	4/4/2013	10:00:00 AM	X	X	X	X	X	X	Field Duplicata - CRA-745M
GW-17358-040413-CT-027	CRA-750M	water	4/4/2013	11:00:00 AM	X	X	X	X		X	
GW-17358-040413-CT-026	CRA-784I	water	4/4/2013	11:20:00 AM	X	X	X	X			
GW-17358-040413-CT-028	CRA-751M	water	4/4/2013	11:40:00 AM	X	X	X	X		X	
GW-17358-040413-CT-030	CRA-753M	water	4/4/2013	2:50:00 PM	X	X	X	X		X	
GW-17358-040413-CT-032	CRA-609M	water	4/4/2013	2:55:00 PM	X	X	X	X			
GW-17358-040413-CT-029	CRA-752M	water	4/4/2013	3:05:00 PM	X	X	X	X			
GW-17358-040413-CT-031	CRA-267M	water	4/4/2013	3:06:00 PM	X	X	X	X			
TB-17358-040413	--	water	4/4/2013	4/4/2013	X						Trip Blank
TestAmerica Job No.: 240-22882-1											
GW-17358-040513-CT-033	CRA-791M	water	4/5/2013	9:15:00 AM	X	X	X	X			
GW-17358-040513-DR-039	CRA-801M	water	4/5/2013	9:20:00 AM	X	X	X	X			
GW-17358-040513-JY-036	CRA-798M	water	4/5/2013	9:45:00 AM	X	X	X	X			
GW-17358-040513-DR-040	CRA-801M	water	4/5/2013	9:50:00 AM	X	X	X	X			Field Duplicate - CRA-801M
GW-17358-040513-DR-041	CRA-800M	water	4/5/2013	10:30:00 AM	X	X	X	X	X		
GW-17358-040513-CT-034	CRA-755M	water	4/5/2013	10:40:00 AM	X	X	X	X			
GW-17358-040513-JY-037	CRA-799M	water	4/5/2013	10:50:00 AM	X	X	X	X			
GW-17358-040513-CT-035	CRA-060M	water	4/5/2013	11:15:00 AM	X	X	X	X			
GW-17358-040513-CT-044	CRA-137M	water	4/5/2013	2:10:00 PM	X	X	X	X			
GW-17358-040513-JY-038	CRA-263M	water	4/5/2013	2:30:00 PM	X	X	X	X			MS/MSD
GW-17358-040513-DR-042	CRA-711I	water	4/5/2013	2:50:00 PM	X	X	X	X			
GW-17358-040513-DR-043	CRA-856M	water	4/5/2013	3:00:00 PM	X	X	X	X			
TB-17358-040513	--	water	4/5/2013	4/5/2013	X						Trip Blank

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

					Analysis/Parameters						
Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*TCL VOC*	*TCL SVOC*	*PCB*	*TAL Metals*	*Phosphorus*	*Cyanide (Amenable)*	*Comments*
TestAmerica Job No.: 240-22929-1											
GW-17358-040813-JY-045	CRA-618M	water	4/8/2013	8:40:00 AM	X	X	X	X			MS/MSD
GW-17358-040813-DR-049	CRA-795M	water	4/8/2013	9:00:00 AM	X	X	X	X			
GW-17358-040813-DR-050	CRA-074M	water	4/8/2013	9:25:00 AM	X	X	X	X			
GW-17358-040813-DR-051	CRA-073M	water	4/8/2013	10:15:00 AM	X	X	X	X			
GW-17358-040813-JY-048	CRA-610M	water	4/8/2013	10:30:00 AM	X	X	X	X			
GW-17358-040813-JY-046	CRA-712I	water	4/8/2013	10:35:00 AM	X	X	X	X	X		MS/MSD
GW-17358-040813-DR-052	CRA-072M	water	4/8/2013	11:15:00 AM	X	X	X	X	X		
GW-17358-040813-JY-053	CRA-827ML	water	4/8/2013	11:40:00 AM	X	X	X	X			
GW-17358-040813-JY-047	CRA-325M	water	4/8/2013	12:00:00 PM	X	X	X	X			
GW-17358-040813-JY-054	CRA-756M	water	4/8/2013	2:55:00 PM	X	X	X	X	X		
GW-17358-040813-JY-056	CRA-757M	water	4/8/2013	3:05:00 PM	X	X	X	X			
GW-17358-040813-JY-057	CRA-757M	water	4/8/2013	3:10:00 PM	X	X	X	X			
GW-17358-040813-JY-055	CRA-806M	water	4/8/2013	3:45:00 PM	X	X	X	X	X		
TB-17358-040813	--	water	4/8/2013	4/8/2013	X						Trip Blank
TestAmerica Job No.: 240-22975-1											
GW-17358-040913-JY-058	CRA-792M	water	4/9/2013	9:00:00 AM	X	X	X	X			MS/MSD
GW-17358-040913-JY-059	CRA-071M	water	4/9/2013	9:10:00 AM	X	X	X	X			
GW-17358-040913-EM-061	CRA-804I	water	4/9/2013	9:45:00 AM	X	X	X	X	X		
GW-17358-040913-EM-064	CRA-803M	water	4/9/2013	9:50:00 AM	X	X	X	X			
GW-17358-040913-EM-062	CRA-804I	water	4/9/2013	10:00:00 AM	X	X	X	X	X		Field Duplicate - CRA-804I
GW-17358-040913-JY-060	CRA-790M	water	4/9/2013	10:35:00 AM	X	X	X	X			MS/MSD
GW-17358-040913-EM-063	CRA-804M	water	4/9/2013	10:35:00 AM	X	X	X	X	X		MS/MSD
GW-17358-040913-EM-065	CRA-094M	water	4/9/2013	10:55:00 AM	X	X	X	X			
GW-17358-040913-JY-066	CRA-789M	water	4/9/2013	11:00:00 AM	X	X	X	X			
GW-17358-040913-JY-069	CRA-807M	water	4/9/2013	2:35:00 PM	X	X	X	X			
GW-17358-040913-JY-070	CRA-307M	water	4/9/2013	2:50:00 PM	X	X	X	X			
GW-17358-040913-EM-068	CRA-314M	water	4/9/2013	3:10:00 PM	X	X	X	X			
GW-17358-040913-EM-067	CRA-110M	water	4/9/2013	3:25:00 PM	X	X	X	X			
TB-17358-040913	--	water	4/9/2013	4/9/2013	X						Trip Blank

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

					Analysis/Parameters						
Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*TCL VOC*	*TCL SVOC*	*PCB*	*TAL Metals*	*Phosphorus*	*Cyanide (Amenable)*	*Comments*
TestAmerica Job No.: 240-23046-1											
GW-17358-041013-JY-074	CRA-704I	water	4/10/2013	9:10:00 AM	X	X	X	X	X		
GW-17358-041013-DR-071	CRA-742D	water	4/10/2013	9:35:00 AM	X	X	X	X	X	X	
GW-17358-041013-JY-075	CRA-704D	water	4/10/2013	9:45:00 AM	X	X	X	X	X		
GW-17358-041013-DR-072	CRA-742I	water	4/10/2013	9:55:00 AM	X	X	X	X	X	X	
GW-17358-041013-JY-076	CRA-704M	water	4/10/2013	11:25:00 AM	X	X	X	X	X		
GW-17358-041013-DR-073	CRA-605M	water	4/10/2013	11:35:00 AM	X	X	X	X			
GW-17358-041013-DR-080	CRA-726I	water	4/10/2013	2:25:00 PM	X	X	X	X	X		
GW-17358-041013-DR-081	CRA-726D	water	4/10/2013	2:30:00 PM	X	X	X	X	X		
GW-17358-041013-JY-077	CRA-785D	water	4/10/2013	2:38:00 PM	X	X	X	X	X		
GW-17358-041013-JY-078	CRA-785I	water	4/10/2013	2:45:00 PM	X	X	X	X	X		MS/MSD
GW-17358-041013-DR-082	CRA-726M	water	4/10/2013	3:25:00 PM	X	X	X	X	X		
GW-17358-041013-JY-079	CRA-133M	water	4/10/2013	3:35:00 PM	X	X	X	X	X		
TB-17358-041013	--	water	4/10/2013	4/10/2013	X						Trip Blank
TestAmerica Job No.: 240-23103-1											
GW-17358-041113-DR-084	CRA-742D	water	4/11/2013	9:05:00 AM	X	X	X	X	X	X	
GW-17358-041113-JY-088	CRA-113M	water	4/11/2013	9:35:00 AM	X	X	X	X			MS/MSD
GW-17358-041113-JY-089	CRA-315M	water	4/11/2013	9:40:00 AM	X	X	X	X			
GW-17358-041113-EM-083	CRA-808M	water	4/11/2013	9:45:00 AM	X	X	X	X	X		
GW-17358-041113-DR-085	CRA-704D	water	4/11/2013	10:05:00 AM	X	X	X	X	X		
GW-17358-041113-DR-086	CRA-785D	water	4/11/2013	11:00:00 AM	X	X	X	X	X		
GW-17358-041113-EM-092	CRA-103M	water	4/11/2013	11:15:00 AM	X	X	X	X			
GW-17358-041113-JY-090	CRA-238M	water	4/11/2013	11:25:00 AM	X	X	X	X			
GW-17358-041113-DR-087	CRA-726D	water	4/11/2013	2:15:00 PM	X	X	X	X	X		
GW-17358-041113-JY-091	CRA-124M	water	4/11/2013	2:55:00 PM	X	X	X	X			
GW-17358-041113-EM-093	CRA-775M	water	4/11/2013	3:15:00 PM	X	X	X	X	X		
GW-17358-041113-EM-094	CRA-775M	water	4/11/2013	3:30:00 PM	X	X	X	X	X		Field Duplicate - CRA-775M
TB-17358-041113	--	water	4/11/2013	4/11/2013	X						Trip Blank

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

					Analysis/Parameters						
Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*TCL VOC*	*TCL SVOC*	*PCB*	*TAL Metals*	*Phosphorus*	*Cyanide (Amenable)*	*Comments*
TestAmerica Job No.: 240-23180-1											
GW-17358-041213-DR-099	CRA-735I	water	4/12/2013	9:05:00 AM	X	X	X	X			
GW-17358-041213-EM-095	CRA-703I	water	4/12/2013	9:30:00 AM	X	X	X	X	X		
GW-17358-041213-EM-096	CRA-703M	water	4/12/2013	9:35:00 AM	X	X	X	X	X		
GW-17358-041213-DR-100	CRA-736I	water	4/12/2013	9:40:00 AM	X	X	X	X			
GW-17358-041213-JY-098	CRA-720I	water	4/12/2013	10:00:00 AM	X	X	X	X			
GW-17358-041213-JY-097	CRA-721M	water	4/12/2013	11:00:00 AM	X	X	X	X			
GW-17358-041213-EM-101	CRA-701M	water	4/12/2013	11:25:00 AM	X	X	X	X			
TB-17358-041213	–	water	4/12/2013	4/12/2013	X						Trip Blank
TestAmerica Job No.: 240-23245-1											
GW-17358-041513-DR-102	CRA-717I	water	4/15/2013	8:05:00 AM	X	X	X	X	X		
GW-17358-041513-DR-103	CRA-725I	water	4/15/2013	9:30:00 AM	X	X	X	X			
GW-17358-041513-DR-104	CRA-725I	water	4/15/2013	9:45:00 AM	X	X	X	X			Field Duplicate - CRA-725I
GW-17358-041513-DR-105	CRA-724I	water	4/15/2013	10:10:00 AM	X	X	X	X			
GW-17358-041513-DR-106	CRA-722M	water	4/15/2013	11:30:00 AM	X	X	X	X	X		
GW-17358-041513-DR-107	CRA-725M	water	4/15/2013	1:10:00 PM	X	X	X	X			
GW-17358-041613-DR-109	CRA-311M	water	4/16/2013	9:05:00 AM	X	X	X	X			
GW-17358-041613-DR-110	CRA-805M	water	4/16/2013	9:25:00 AM	X	X	X	X			
GW-17358-041613-DR-108	CRA-109M	water	4/16/2013	9:30:00 AM	X	X	X	X			MS/MSD
GW-17358-041613-DR-111	CRA-710M	water	4/16/2013	10:55:00 AM	X	X	X	X	X		
GW-17358-041613-DR-112	CRA-709M	water	4/16/2013	11:10:00 AM	X	X	X	X			
GW-17358-041613-DR-113	CRA-713M	water	4/16/2013	1:30:00 PM	X	X	X	X	X		
GW-17358-041613-DR-114	CRA-706M	water	4/16/2013	1:50:00 PM	X	X	X	X	X		
GW-17358-041613-DR-115	CRA-705M	water	4/16/2013	2:45:00 PM	X	X	X	X			
TB-17358-041613	–	water	4/16/2013	4/16/2013	X						Trip Blank

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Identification	*Location*	*Matrix*	*Collection Date (mm/dd/yyyy)*	*Collection Time (hr:min)*	*Analysis/Parameters*						*Comments*
					TCL VOC	*TCL SVOC*	*PCB*	*TAL Metals*	*Phosphorus*	*Cyanide (Amenable)*	
TestAmerica Job No.: 240-23368-1											
GW-17358-041713-DR-116	CRA-264M	water	4/17/2013	2:10:00 PM	X	X	X	X	X		
GW-17358-041713-DR-117	CRA-834M	water	4/17/2013	2:30:00 PM	X	X	X	X			
GW-17358-041713-DR-118	CRA-833M	water	4/17/2013	3:25:00 PM	X	X	X	X			MS/MSD
TB-17358-041713	--	water	4/17/2013	4/17/2013	X						Trip Blank

Notes:

MS/MSD - Matrix spike/matrix spike duplicate
PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target anaylte list
TCL - Target control list
VOC - Volatile organic compound

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-060M*	*CRA-071M*	*CRA-072M*	*CRA-073M*	*CRA-074M*	*CRA-094M*	*CRA-103M*	*CRA-109M*
Sample ID:		*GW-17358-040513-CT-035*	*GW-17358-040913-JY-059*	*GW-17358-040813-DR-052*	*GW-17358-040813-DR-051*	*GW-17358-040813-DR-050*	*GW-17358-040913-EM-065*	*GW-17358-041113-EM-092*	*GW-17358-041613-DR-108*
Sample Date:		*4/5/2013*	*4/9/2013*	*4/8/2013*	*4/8/2013*	*4/8/2013*	*4/9/2013*	*4/11/2013*	*4/16/2013*
Sample Type:									
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.0017 U	0.001 U	0.001 U	0.00068 J	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.017 U	0.01 U	0.01 U	0.014 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.017 U	0.01 U	0.01 U	0.014 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.017 U	0.01 U	0.01 U	0.014 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.017 U	0.01 U	0.01 U	0.014 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.0083 U	0.005 U	0.005 U	0.0072 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.0057	0.001 U	0.001 U	0.00091 J	0.0015	0.0041	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.017 U	0.01 U	0.01 U	0.014 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.0083 U	0.005 U	0.005 U	0.0072 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.00068 J
trans-1,2-Dichloroethene	mg/L	0.0011 J	0.001 U	0.001 U	0.0014 U	0.001 U	0.00028 J	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.047	0.001 U	0.001 U	0.031	0.001 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.0017 U	0.001 U	0.001 U	0.0014 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.003	0.001 U	0.001 U	0.0014 U	0.0029	0.001	0.001 U	0.0035
Xylenes (total)	mg/L	0.0033 U	0.002 U	0.002 U	0.0029 U	0.002 U	0.00071 J	0.002 U	0.002 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-060M*	*CRA-071M*	*CRA-072M*	*CRA-073M*	*CRA-074M*	*CRA-094M*	*CRA-103M*	*CRA-109M*
Sample ID:		*GW-17358-040513-CT-035*	*GW-17358-040913-JY-059*	*GW-17358-040813-DR-052*	*GW-17358-040813-DR-051*	*GW-17358-040813-DR-050*	*GW-17358-040913-EM-065*	*GW-17358-041113-EM-092*	*GW-17358-041613-DR-108*
Sample Date:		*4/5/2013*	*4/9/2013*	*4/8/2013*	*4/8/2013*	*4/8/2013*	*4/9/2013*	*4/11/2013*	*4/16/2013*
Sample Type:									
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
2,4,5-Trichlorophenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
2,4,6-Trichlorophenol	mg/L	0.004 U	0.0039 U	0.0038 U	0.0041 U	0.0041 U	0.0038 U	0.0039 U	0.0038 U
2,4-Dichlorophenol	mg/L	0.01 U	0.0098 U	0.0095 U	0.01 U	0.01 U	0.0095 U	0.0097 U	0.0095 U
2,4-Dimethylphenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
2,4-Dinitrophenol	mg/L	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.019 U	0.019 U
2,4-Dinitrotoluene	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
2,6-Dinitrotoluene	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
2-Chloronaphthalene	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
2-Chlorophenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
2-Methylnaphthalene	mg/L	0.005 U	0.0025 J	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.00022 J
2-Methylphenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
2-Nitroaniline	mg/L	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.019 U	0.019 U
2-Nitrophenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
3&4-Methylphenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
3,3'-Dichlorobenzidine	mg/L	0.001 U	0.00098 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00097 U	R
3-Nitroaniline	mg/L	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.019 U	R
4,6-Dinitro-2-methylphenol	mg/L	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.019 U	0.019 U
4-Bromophenyl phenyl ether	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
4-Chloro-3-methylphenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
4-Chloroaniline	mg/L	0.01 U	0.0098 U	0.0095 U	0.01 U	0.01 U	0.0095 U	0.0097 U	R
4-Chlorophenyl phenyl ether	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
4-Nitroaniline	mg/L	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.019 U	R
4-Nitrophenol	mg/L	0.02 U	0.02 U	0.019 U	0.02 U	0.02 U	0.019 U	0.019 U	0.019 U
Acenaphthene	mg/L	0.005 U	0.015	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Acenaphthylene	mg/L	0.005 U	0.00029 J	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Acetophenone	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Anthracene	mg/L	0.005 U	0.0049	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Atrazine	mg/L	0.003 U	0.0029 U	0.0029 U	0.0031 U	0.0031 U	0.0029 U	0.0029 U	0.0029 UJ
Benzaldehyde	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Benzo(a)anthracene	mg/L	0.001 U	0.00057 J	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00097 U	0.00095 U
Benzo(a)pyrene	mg/L	0.001 U	0.00028 J	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00097 U	0.00095 U
Benzo(b)fluoranthene	mg/L	0.001 U	0.000098 J	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00097 U	0.00095 U
Benzo(g,h,i)perylene	mg/L	0.001 U	0.00098 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00097 U	0.00095 U
Benzo(k)fluoranthene	mg/L	0.001 U	0.00098 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00097 U	0.00095 U
Biphenyl (1,1-Biphenyl)	mg/L	0.005 U	0.0016 J	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
bis(2-Chloroethoxy)methane	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
bis(2-Chloroethyl)ether	mg/L	0.001 U	0.00098 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00097 U	0.00095 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0011 J	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.00097 J	0.0048 U
Butyl benzylphthalate	mg/L	0.005 U	0.002 J	0.00083 J	0.0011 J	0.00093 J	0.0048 U	0.0049 U	0.0048 U
Caprolactam	mg/L	0.01 U	0.0098 U	0.0095 U	0.01 U	0.01 U	0.0095 U	0.0097 U	0.0095 U
Carbazole	mg/L	0.01 U	0.012	0.0095 U	0.01 U	0.01 U	0.0095 U	0.0097 U	0.0095 U
Chrysene	mg/L	0.001 U	0.00054 J	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00097 U	0.00095 U
Dibenz(a,h)anthracene	mg/L	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0019 U	0.0019 U
Dibenzofuran	mg/L	0.004 U	0.015	0.0038 U	0.0041 U	0.0041 U	0.0038 U	0.0039 U	0.0038 U
Diethyl phthalate	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Dimethyl phthalate	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Di-n-butylphthalate	mg/L	0.005 U	0.00069 J	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Di-n-octyl phthalate	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-060M*	*CRA-071M*	*CRA-072M*	*CRA-073M*	*CRA-074M*	*CRA-094M*	*CRA-103M*	*CRA-109M*
Sample ID:		*GW-17358-040513-CT-035*	*GW-17358-040913-JY-059*	*GW-17358-040813-DR-052*	*GW-17358-040813-DR-051*	*GW-17358-040813-DR-050*	*GW-17358-040913-EM-065*	*GW-17358-041113-EM-092*	*GW-17358-041613-DR-108*
Sample Date:		*4/5/2013*	*4/9/2013*	*4/8/2013*	*4/8/2013*	*4/8/2013*	*4/9/2013*	*4/11/2013*	*4/16/2013*
Sample Type:									
Parameters	*Units*								
Fluoranthene	mg/L	0.001 U	0.012	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00097 U	0.00095 U
Fluorene	mg/L	0.005 U	0.016	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.00069 J
Hexachlorobenzene	mg/L	0.0002 U	0.0002 U	0.00019 U	0.0002 U	0.0002 U	0.00019 U	0.00019 U	0.00019 U
Hexachlorobutadiene	mg/L	0.001 U	0.00098 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00097 U	0.00095 U
Hexachlorocyclopentadiene	mg/L	0.005 U	R	R	R	R	R	0.0049 U	R
Hexachloroethane	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Indeno(1,2,3-cd)pyrene	mg/L	0.002 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0019 U	0.0019 U
Isophorone	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Naphthalene	mg/L	0.005 U	0.0043 J	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.00028 J
Nitrobenzene	mg/L	0.003 U	0.0029 U	0.0029 U	0.0031 U	0.0031 U	0.0029 U	0.0029 U	0.0029 U
N-Nitrosodi-n-propylamine	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
N-Nitrosodiphenylamine	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Pentachlorophenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Phenanthrene	mg/L	0.002 U	0.0069	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0019 U	0.0019
Phenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
Pyrene	mg/L	0.005 U	0.0067	0.0048 U	0.0051 U	0.0051 U	0.0048 U	0.0049 U	0.0048 U
PCBs									
Aroclor-1016	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1221	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1232	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1242	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1248	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1254	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1260	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1262	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1268	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000095 U
Total PCBs	mg/L	0	0	0	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.022 J	0.05 U	0.0077 J
Aluminum (dissolved)	mg/L	-	-	-	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	0.00085 J	0.0054	0.0027 J	0.005 U	0.0022 J	0.0068	0.0042 J	0.027
Arsenic (dissolved)	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	0.049 J	0.23	0.22	0.23	0.33	0.19	0.18	0.18
Barium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00016 J
Beryllium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.00021 J	0.0016	0.001 U	0.001 U	0.00014 J
Cadmium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	0.00083 J	0.01 U	0.01 U	0.01 U	0.01 U	0.0023 J	0.01 U	0.01 U
Chromium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	0.003 J	0.00012 J	0.00051 J	0.0011 J	0.02 U	0.00015 J	0.00051 J	0.0015 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	0.0029 J	0.00092 J	0.00085 J	0.0013 J	0.00098 J	0.004 U	0.004 U	0.004 U
Copper (dissolved)	mg/L	-	-	-	-	-	-	-	-
Iron	mg/L	0.2 U	1.3	0.44	0.2 U	5.2	5.3	12	14

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-060M*	*CRA-071M*	*CRA-072M*	*CRA-073M*	*CRA-074M*	*CRA-094M*	*CRA-103M*	*CRA-109M*
Sample ID:		*GW-17358-040513-CT-035*	*GW-17358-040913-JY-059*	*GW-17358-040813-DR-052*	*GW-17358-040813-DR-051*	*GW-17358-040813-DR-050*	*GW-17358-040913-EM-065*	*GW-17358-041113-EM-092*	*GW-17358-041613-DR-108*
Sample Date:		*4/5/2013*	*4/9/2013*	*4/8/2013*	*4/8/2013*	*4/8/2013*	*4/9/2013*	*4/11/2013*	*4/16/2013*
Sample Type:									
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	0.0003 J	0.00019 J	0.003 U	0.003 U	0.00044 J	0.003 U	0.003 U	0.00034 J
Lead (dissolved)	mg/L	-	-	-	-	-	-	-	-
Manganese	mg/L	0.61	0.2	0.047 J	0.6	0.18	0.3	0.21	0.14
Manganese (dissolved)	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	0.013 J	0.0029 J	0.0024 J	0.0022 J	0.0038 J	0.0029 J	0.042	0.027
Nickel (dissolved)	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	0.00059 J	0.005 U	0.0018 J	0.0012 J	0.005 U	0.005 U	0.005 U	0.00047 J
Selenium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.000013 J
Silver (dissolved)	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	0.00014 J	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.0011 J
Thallium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.00062 J	0.004 U	0.0011 J
Vanadium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	-	-	-
General Chemistry									
Cyanide (amenable)	mg/L	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	0.1 U	-	-	-	-	-

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-110M*	*CRA-113M*	*CRA-124M*	*CRA-133M*	*CRA-137M*	*CRA-209M*	*CRA-238M*	*CRA-263M*
Sample ID:		*GW-17358-040913-EM-067*	*GW-17358-041113-JY-088*	*GW-17358-041113-JY-091*	*GW-17358-041013-JY-079*	*GW-17358-040513-CT-044*	*GW-17358-040213-CT-010*	*GW-17358-041113-JY-090*	*GW-17358-040513-JY-038*
Sample Date:		*4/9/2013*	*4/11/2013*	*4/11/2013*	*4/10/2013*	*4/5/2013*	*4/2/2013*	*4/11/2013*	*4/5/2013*
Sample Type:									
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.00018 J	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.00053 J	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.067 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.067 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.067 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.0014 J	0.01 U	0.01 U	0.067 U	0.01 U	0.0013 J	0.01 UJ
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.15	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.033 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.0092	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.00058 J	0.019
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.013	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0025 J	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.067 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0049 J	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0072	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.033 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0034 J	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.00041 J	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.0019
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.0056	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0067 U	0.001 U	0.0031	0.001
Xylenes (total)	mg/L	0.0012 J	0.002 U	0.002 U	0.002 U	0.013 U	0.002 U	0.002 U	0.002 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-110M*	*CRA-113M*	*CRA-124M*	*CRA-133M*	*CRA-137M*	*CRA-209M*	*CRA-238M*	*CRA-263M*
Sample ID:		*GW-17358-040913-EM-067*	*GW-17358-041113-JY-088*	*GW-17358-041113-JY-091*	*GW-17358-041013-JY-079*	*GW-17358-040513-CT-044*	*GW-17358-040213-CT-010*	*GW-17358-041113-JY-090*	*GW-17358-040513-JY-038*
Sample Date:		*4/9/2013*	*4/11/2013*	*4/11/2013*	*4/10/2013*	*4/5/2013*	*4/2/2013*	*4/11/2013*	*4/5/2013*
Sample Type:									
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
2,4,5-Trichlorophenol	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
2,4,6-Trichlorophenol	mg/L	0.0039 U	0.02 U	0.004 U	0.0038 U	0.0039 U	0.0039 U	0.0039 U	0.0038 U
2,4-Dichlorophenol	mg/L	0.0097 U	0.05 U	0.01 U	0.0095 U	0.0098 U	0.0097 U	0.0097 U	0.0096 U
2,4-Dimethylphenol	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
2,4-Dinitrophenol	mg/L	0.019 U	0.1 U	0.02 U	0.019 U	0.02 U	0.019 U	0.019 U	0.019 U
2,4-Dinitrotoluene	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
2,6-Dinitrotoluene	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
2-Chloronaphthalene	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
2-Chlorophenol	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
2-Methylnaphthalene	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
2-Methylphenol	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
2-Nitroaniline	mg/L	0.019 U	0.1 U	0.02 U	0.019 U	0.02 U	0.019 U	0.019 U	0.019 U
2-Nitrophenol	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
3&4-Methylphenol	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
3,3'-Dichlorobenzidine	mg/L	0.00097 U	R	0.001 U	0.00095 U	0.00098 U	0.00097 U	0.00097 U	R
3-Nitroaniline	mg/L	0.019 U	0.1 UJ	0.02 U	0.019 U	0.02 U	0.019 U	0.019 U	0.019 U
4,6-Dinitro-2-methylphenol	mg/L	0.019 U	0.1 U	0.02 U	0.019 U	0.02 U	0.019 U	0.019 U	0.019 U
4-Bromophenyl phenyl ether	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
4-Chloro-3-methylphenol	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
4-Chloroaniline	mg/L	0.0097 U	R	0.01 U	0.0095 U	0.0098 U	0.0097 U	0.0097 U	0.0096 U
4-Chlorophenyl phenyl ether	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
4-Nitroaniline	mg/L	0.019 U	0.1 U	0.02 U	0.019 U	0.02 U	0.019 U	0.019 U	0.019 U
4-Nitrophenol	mg/L	0.019 U	0.1 U	0.02 U	0.019 U	0.02 U	0.019 U	0.019 U	0.019 U
Acenaphthene	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Acenaphthylene	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Acetophenone	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Anthracene	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Atrazine	mg/L	0.0029 U	0.015 U	0.003 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U
Benzaldehyde	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Benzo(a)anthracene	mg/L	0.00097 U	0.005 U	0.001 U	0.00095 U	0.00098 U	0.00097 U	0.00097 U	0.00096 U
Benzo(a)pyrene	mg/L	0.00097 U	0.005 U	0.001 U	0.00095 U	0.00098 U	0.00097 U	0.00097 U	0.00096 U
Benzo(b)fluoranthene	mg/L	0.00097 U	0.005 U	0.001 U	0.00095 U	0.00098 U	0.00097 U	0.00097 U	0.00096 U
Benzo(g,h,i)perylene	mg/L	0.00097 U	0.005 U	0.001 U	0.00095 U	0.00098 U	0.00097 U	0.00097 U	0.00096 U
Benzo(k)fluoranthene	mg/L	0.00097 U	0.005 U	0.001 U	0.00095 U	0.00098 U	0.00097 U	0.00097 U	0.00096 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
bis(2-Chloroethoxy)methane	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
bis(2-Chloroethyl)ether	mg/L	0.00097 U	0.005 U	0.001 U	0.00095 U	0.00098 U	0.00097 U	0.00097 U	0.00096 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.00079 J	0.0049 U	0.0049 U	0.0048 U
Butyl benzylphthalate	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Caprolactam	mg/L	0.0097 U	0.05 U	0.01 U	0.0095 U	0.0098 U	0.0097 U	0.0097 U	0.0096 U
Carbazole	mg/L	0.0097 U	0.05 U	0.01 U	0.0095 U	0.0098 U	0.0097 U	0.0097 U	0.0096 U
Chrysene	mg/L	0.00097 U	0.005 U	0.001 U	0.00095 U	0.00098 U	0.00097 U	0.00097 U	0.00096 U
Dibenz(a,h)anthracene	mg/L	0.0019 U	0.01 U	0.002 U	0.0019 U	0.002 U	0.0019 U	0.0019 U	0.0019 U
Dibenzofuran	mg/L	0.0039 U	0.02 U	0.004 U	0.0038 U	0.0039 U	0.0039 U	0.0039 U	0.0038 U
Diethyl phthalate	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Dimethyl phthalate	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Di-n-butylphthalate	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Di-n-octyl phthalate	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-110M*	*CRA-113M*	*CRA-124M*	*CRA-133M*	*CRA-137M*	*CRA-209M*	*CRA-238M*	*CRA-263M*
Sample ID:		*GW-17358-040913-EM-067*	*GW-17358-041113-JY-088*	*GW-17358-041113-JY-091*	*GW-17358-041013-JY-079*	*GW-17358-040513-CT-044*	*GW-17358-040213-CT-010*	*GW-17358-041113-JY-090*	*GW-17358-040513-JY-038*
Sample Date:		*4/9/2013*	*4/11/2013*	*4/11/2013*	*4/10/2013*	*4/5/2013*	*4/2/2013*	*4/11/2013*	*4/5/2013*
Sample Type:									
Parameters	*Units*								
Fluoranthene	mg/L	0.00097 U	0.005 U	0.001 U	0.00095 U	0.00098 U	0.00097 U	0.00097 U	0.00096 U
Fluorene	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Hexachlorobenzene	mg/L	0.00019 U	0.001 U	0.0002 U	0.00019 U	0.0002 U	0.00019 U	0.00019 U	0.00019 U
Hexachlorobutadiene	mg/L	0.00097 U	0.005 U	0.001 U	0.00095 U	0.00098 U	0.00097 U	0.00097 U	0.00096 U
Hexachlorocyclopentadiene	mg/L	R	R	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Hexachloroethane	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0019 U	0.01 U	0.002 U	0.0019 U	0.002 U	0.0019 U	0.0019 U	0.0019 U
Isophorone	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Naphthalene	mg/L	0.0049 U	0.025 U	0.005 U	0.00039 J	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Nitrobenzene	mg/L	0.0029 U	0.015 U	0.003 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U
N-Nitrosodi-n-propylamine	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
N-Nitrosodiphenylamine	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Pentachlorophenol	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
Phenanthrene	mg/L	0.0019 U	0.01 U	0.002 U	0.0019 U	0.002 U	0.0019 U	0.0019 U	0.0019 U
Phenol	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.005	0.0049 U	0.0049 U	0.0048 U
Pyrene	mg/L	0.0049 U	0.025 U	0.005 U	0.0048 U	0.0049 U	0.0049 U	0.0049 U	0.0048 U
PCBs									
Aroclor-1016	mg/L	0.000095 U	0.000095 U	0.000099 U	0.000095 U	0.000098 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1221	mg/L	0.000095 U	0.000095 U	0.000099 U	0.000095 U	0.000098 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1232	mg/L	0.000095 U	0.000095 U	0.000099 U	0.000095 U	0.000098 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1242	mg/L	0.000095 U	0.000095 U	0.000099 U	0.000095 U	0.000098 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1248	mg/L	0.000095 U	0.000095 U	0.000099 U	0.000095 U	0.000098 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1254	mg/L	0.000095 U	0.000095 U	0.000099 U	0.000095 U	0.000098 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1260	mg/L	0.000095 U	0.000095 U	0.000099 U	0.000095 U	0.000098 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1262	mg/L	0.000095 U	0.000095 U	0.000099 U	0.000095 U	0.000098 U	0.000095 U	0.0001 U	0.000095 U
Aroclor-1268	mg/L	0.000095 U	0.000095 U	0.000099 U	0.000095 U	0.000098 U	0.000095 U	0.0001 U	0.000095 U
Total PCBs	mg/L	0	0	0	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.023 J	0.05 U	0.05 U	0.05 U	0.05 U	0.036 J	0.05 U	0.23
Aluminum (dissolved)	mg/L	-	-	-	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	0.01	0.0092	0.0041 J	0.0038 J	0.001 J	0.0052	0.0098	0.034
Arsenic (dissolved)	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	0.3	0.15	1	0.26	0.19	0.19	0.038 J	0.024 J
Barium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Beryllium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.00015 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	0.0008 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0011 J
Chromium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	0.00066 J	0.00039 J	0.02 U	0.0015 J	0.00013 J	0.00059 J	0.00093 J	0.00039 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.001 J	0.004 U	0.0028 J
Copper (dissolved)	mg/L	-	-	-	-	-	-	-	-
Iron	mg/L	5.1	5.2	7.3	3	7	2	1.3	0.26

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-110M*	*CRA-113M*	*CRA-124M*	*CRA-133M*	*CRA-137M*	*CRA-209M*	*CRA-238M*	*CRA-263M*
Sample ID:		*GW-17358-040913-EM-067*	*GW-17358-041113-JY-088*	*GW-17358-041113-JY-091*	*GW-17358-041013-JY-079*	*GW-17358-040513-CT-044*	*GW-17358-040213-CT-010*	*GW-17358-041113-JY-090*	*GW-17358-040513-JY-038*
Sample Date:		*4/9/2013*	*4/11/2013*	*4/11/2013*	*4/10/2013*	*4/5/2013*	*4/2/2013*	*4/11/2013*	*4/5/2013*
Sample Type:									
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	0.003 U	0.00039 J	0.003 U	0.00045 J	0.00063 J	0.00049 J	0.003 U	0.003 U
Lead (dissolved)	mg/L	-	-	-	-	-	-	-	-
Manganese	mg/L	0.25	0.32	0.29	0.56	0.57	0.35	0.38	0.037 J
Manganese (dissolved)	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	0.0018 J	0.0028 J	0.02 U	0.0044 J	0.0003 J	0.0016 J	0.039	0.0024 J
Nickel (dissolved)	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.0072
Selenium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	0.002 U	0.0011 J	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.00086 J
Thallium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.004 U	0.0015 J	0.004 U	0.004 U	0.00077 J	0.004 U	0.0013 J	0.015
Vanadium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	-	-	-
General Chemistry									
Cyanide (amenable)	mg/L	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	0.1 U	-	-	-	-

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-264M*	*CRA-267M*	*CRA-307M*	*CRA-311M*	*CRA-314M*	*CRA-315M*	*CRA-320M*	*CRA-325M*
Sample ID:		*GW-17358-041713-DR-116*	*GW-17358-040413-CT-031*	*GW-17358-040913-JY-070*	*GW-17358-041613-DR-109*	*GW-17358-040913-EM-068*	*GW-17358-041113-JY-089*	*GW-17358-040213-CT-012*	*GW-17358-040813-JY-047*
Sample Date:		*4/17/2013*	*4/4/2013*	*4/9/2013*	*4/16/2013*	*4/9/2013*	*4/11/2013*	*4/2/2013*	*4/8/2013*
Sample Type:									
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0024
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.00023 J	0.001 U	0.019
1,1-Dichloroethene	mg/L	0.001 U	0.013 U	0.001 U	0.00042 J	0.001 U	0.001 U	0.001 U	0.0017
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.13 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.01 U	0.13 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.13 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.13 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.063 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00055 J
Chloroform	mg/L	0.001 U	0.0098 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.0067 J	0.001 U	0.00076 J	0.0005 J	0.0049	0.001 U	0.013
cis-1,3-Dichloropropene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.13 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.063 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.27	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.0016	0.0011	0.001 U	0.0013
trans-1,3-Dichloropropene	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.0051 J	0.00026 J	0.018	0.001 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.013 U	0.001 U	0.001 U	0.003	0.0033	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.025 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

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WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-264M*	*CRA-267M*	*CRA-307M*	*CRA-311M*	*CRA-314M*	*CRA-315M*	*CRA-320M*	*CRA-325M*
Sample ID:		*GW-17358-041713-DR-116*	*GW-17358-040413-CT-031*	*GW-17358-040913-JY-070*	*GW-17358-041613-DR-109*	*GW-17358-040913-EM-068*	*GW-17358-041113-JY-089*	*GW-17358-040213-CT-012*	*GW-17358-040813-JY-047*
Sample Date:		*4/17/2013*	*4/4/2013*	*4/9/2013*	*4/16/2013*	*4/9/2013*	*4/11/2013*	*4/2/2013*	*4/8/2013*
Sample Type:									
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
2,4,5-Trichlorophenol	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
2,4,6-Trichlorophenol	mg/L	0.004 U	0.0044 U	0.0042 U	0.004 U	0.0039 U	0.004 U	0.0038 U	0.004 U
2,4-Dichlorophenol	mg/L	0.01 U	0.011 U	0.011 U	0.01 U	0.0098 U	0.0099 U	0.0096 U	0.01 U
2,4-Dimethylphenol	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
2,4-Dinitrophenol	mg/L	0.02 U	0.022 U	0.021 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U
2,4-Dinitrotoluene	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
2,6-Dinitrotoluene	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
2-Chloronaphthalene	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
2-Chlorophenol	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
2-Methylnaphthalene	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
2-Methylphenol	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
2-Nitroaniline	mg/L	0.02 U	0.022 U	0.021 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U
2-Nitrophenol	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
3&4-Methylphenol	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
3,3'-Dichlorobenzidine	mg/L	0.001 U	0.0011 U	0.0011 U	0.001 U	0.00098 U	0.00099 U	0.00096 U	0.001 U
3-Nitroaniline	mg/L	0.02 U	0.022 U	0.021 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U
4,6-Dinitro-2-methylphenol	mg/L	0.02 U	0.022 U	0.021 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U
4-Bromophenyl phenyl ether	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
4-Chloro-3-methylphenol	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
4-Chloroaniline	mg/L	0.01 U	0.011 U	0.011 U	0.01 U	0.0098 U	0.0099 U	0.0096 U	0.01 U
4-Chlorophenyl phenyl ether	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
4-Nitroaniline	mg/L	0.02 U	0.022 U	0.021 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U
4-Nitrophenol	mg/L	0.02 U	0.022 U	0.021 U	0.02 U	0.02 U	0.02 U	0.019 U	0.02 U
Acenaphthene	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Acenaphthylene	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Acetophenone	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Anthracene	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Atrazine	mg/L	0.003 U	0.0033 U	0.0032 U	0.003 U	0.0029 U	0.003 U	0.0029 U	0.003 U
Benzaldehyde	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Benzo(a)anthracene	mg/L	0.001 U	0.0011 U	0.0011 U	0.001 U	0.00098 U	0.00099 U	0.00096 U	0.001 U
Benzo(a)pyrene	mg/L	0.001 U	0.0011 U	0.0011 U	0.001 U	0.00098 U	0.00099 U	0.00096 U	0.001 U
Benzo(b)fluoranthene	mg/L	0.001 U	0.0011 U	0.0011 U	0.001 U	0.00098 U	0.00099 U	0.00096 U	0.001 U
Benzo(g,h,i)perylene	mg/L	0.001 U	0.0011 U	0.0011 U	0.001 U	0.00098 U	0.00099 U	0.00096 U	0.001 U
Benzo(k)fluoranthene	mg/L	0.001 U	0.0011 U	0.0011 U	0.001 U	0.00098 U	0.00099 U	0.00096 U	0.001 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
bis(2-Chloroethoxy)methane	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
bis(2-Chloroethyl)ether	mg/L	0.001 U	0.0011 U	0.0011 U	0.001 U	0.00098 U	0.00099 U	0.00096 U	0.001 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Butyl benzylphthalate	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.00095 J
Caprolactam	mg/L	0.01 U	0.011 U	0.011 U	0.01 U	0.0098 U	0.0099 U	0.0096 U	0.01 U
Carbazole	mg/L	0.01 U	0.011 U	0.011 U	0.01 U	0.0098 U	0.0099 U	0.0096 U	0.01 U
Chrysene	mg/L	0.001 U	0.0011 U	0.0011 U	0.001 U	0.00098 U	0.00099 U	0.00096 U	0.001 U
Dibenz(a,h)anthracene	mg/L	0.002 U	0.0022 U	0.0021 U	0.002 U	0.002 U	0.002 U	0.0019 U	0.002 U
Dibenzofuran	mg/L	0.004 U	0.0044 U	0.0042 U	0.004 U	0.0039 U	0.004 U	0.0038 U	0.004 U
Diethyl phthalate	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Dimethyl phthalate	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Di-n-butylphthalate	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Di-n-octyl phthalate	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-264M*	*CRA-267M*	*CRA-307M*	*CRA-311M*	*CRA-314M*	*CRA-315M*	*CRA-320M*	*CRA-325M*
Sample ID:		*GW-17358-041713-DR-116*	*GW-17358-040413-CT-031*	*GW-17358-040913-JY-070*	*GW-17358-041613-DR-109*	*GW-17358-040913-EM-068*	*GW-17358-041113-JY-089*	*GW-17358-040213-CT-012*	*GW-17358-040813-JY-047*
Sample Date:		*4/17/2013*	*4/4/2013*	*4/9/2013*	*4/16/2013*	*4/9/2013*	*4/11/2013*	*4/2/2013*	*4/8/2013*
Sample Type:									
Parameters	*Units*								
Fluoranthene	mg/L	0.001 U	0.0011 U	0.0011 U	0.001 U	0.00098 U	0.00099 U	0.00096 U	0.001 U
Fluorene	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Hexachlorobenzene	mg/L	0.0002 U	0.00022 U	0.00021 U	0.0002 U	0.0002 U	0.0002 U	0.00019 U	0.0002 U
Hexachlorobutadiene	mg/L	0.001 U	0.0011 U	0.0011 U	0.001 U	0.00098 U	0.00099 U	0.00096 U	0.001 U
Hexachlorocyclopentadiene	mg/L	R	0.0056 U	R	R	R	0.005 U	0.0048 U	R
Hexachloroethane	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Indeno(1,2,3-cd)pyrene	mg/L	0.002 U	0.0022 U	0.0021 U	0.002 U	0.002 U	0.002 U	0.0019 U	0.002 U
Isophorone	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Naphthalene	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Nitrobenzene	mg/L	0.003 U	0.0033 U	0.0032 U	0.003 U	0.0029 U	0.003 U	0.0029 U	0.003 U
N-Nitrosodi-n-propylamine	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
N-Nitrosodiphenylamine	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Pentachlorophenol	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Phenanthrene	mg/L	0.002 U	0.0022 U	0.0021 U	0.002 U	0.002 U	0.002 U	0.0019 U	0.002 U
Phenol	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
Pyrene	mg/L	0.0051 U	0.0056 U	0.0053 U	0.0051 U	0.0049 U	0.005 U	0.0048 U	0.005 U
PCBs									
Aroclor-1016	mg/L	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.0001 U	0.000098 U	0.000095 U	0.000096 U
Aroclor-1221	mg/L	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.0001 U	0.000098 U	0.000095 U	0.000096 U
Aroclor-1232	mg/L	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.0001 U	0.000098 U	0.000095 U	0.000096 U
Aroclor-1242	mg/L	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.0001 U	0.000098 U	0.000095 U	0.000096 U
Aroclor-1248	mg/L	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.0001 U	0.000098 U	0.000095 U	0.000096 U
Aroclor-1254	mg/L	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.0001 U	0.000098 U	0.000095 U	0.000096 U
Aroclor-1260	mg/L	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.0001 U	0.000098 U	0.000095 U	0.000096 U
Aroclor-1262	mg/L	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.0001 U	0.000098 U	0.000095 U	0.000096 U
Aroclor-1268	mg/L	0.0001 U	0.000099 U	0.0001 U	0.0001 U	0.0001 U	0.000098 U	0.000095 U	0.000096 U
Total PCBs	mg/L	0	0	0	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.05 U	0.088	0.15	0.0088 J	0.05 U	0.05 U	0.05 U	0.022 J
Aluminum (dissolved)	mg/L	-	-	-	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	0.005 U	0.00087 J	0.005 U	0.0012 J	0.023	0.019	0.0011 J	0.0066
Arsenic (dissolved)	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	0.081 J	0.043 J	0.09 J	0.053 J	0.37	0.14	0.14	0.073 J
Barium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Beryllium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.00033 J	0.001 U	0.0003 J	0.001 U	0.001 U
Cadmium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	0.01 U	0.01 U	0.01 U	0.001 J	0.01 U	0.01 U	0.01 U	0.01 U
Chromium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	0.02 U	0.00016 J	0.00089 J	0.0017 J	0.0021 J	0.0086 J	0.02 U	0.0035 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	0.004 U	0.0019 J	0.004 U	0.004 U	0.004 U	0.004 U	0.0012 J	0.00068 J
Copper (dissolved)	mg/L	-	-	-	-	-	-	-	-
Iron	mg/L	0.44	0.45	0.22	0.2 U	14	4.5	0.2 U	5.1

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-264M*	*CRA-267M*	*CRA-307M*	*CRA-311M*	*CRA-314M*	*CRA-315M*	*CRA-320M*	*CRA-325M*
Sample ID:		*GW-17358-041713-DR-116*	*GW-17358-040413-CT-031*	*GW-17358-040913-JY-070*	*GW-17358-041613-DR-109*	*GW-17358-040913-EM-068*	*GW-17358-041113-JY-089*	*GW-17358-040213-CT-012*	*GW-17358-040813-JY-047*
Sample Date:		*4/17/2013*	*4/4/2013*	*4/9/2013*	*4/16/2013*	*4/9/2013*	*4/11/2013*	*4/2/2013*	*4/8/2013*
Sample Type:									
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	0.003 U	0.0012 J	0.00054 J	0.00026 J	0.003 U	0.00074 J	0.003 U	0.00023 J
Lead (dissolved)	mg/L	-	-	-	-	-	-	-	-
Manganese	mg/L	0.19	0.04 J	0.012 J	1.4	0.26	0.19	0.05 U	0.41
Manganese (dissolved)	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	0.02 U	0.0014 J	0.023	0.012 J	0.0061 J	0.019 J	0.00064 J	0.0048 J
Nickel (dissolved)	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	0.0013 J	0.002 J	0.0091	0.00024 J	0.005 U	0.005 U	0.0052	0.005 U
Selenium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	0.002 U	0.00023 J	0.002 U	0.002 U	0.002 U	0.00017 J	0.002 U	0.002 U
Thallium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.004 U	0.004 U	0.00073 J	0.00021 J	0.00088 J	0.004 U	0.00061 J	0.004 U
Vanadium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	-	-	-
General Chemistry									
Cyanide (amenable)	mg/L	-	-	-	-	-	-	-	-
Phosphorus	mg/L	0.1 U	-	-	-	-	-	-	-

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-342M*	*CRA-529M*	*CRA-605M*	*CRA-609M*	*CRA-610M*	*CRA-618M*	*CRA-701M*	*CRA-703I*
Sample ID:		*GW-17358-040213-CT-011*	*GW-17358-040113-JY-001*	*GW-17358-041013-DR-073*	*GW-17358-040413-CT-032*	*GW-17358-040813-JY-048*	*GW-17358-040813-JY-045*	*GW-17358-041213-EM-101*	*GW-17358-041213-EM-095*
Sample Date:		*4/2/2013*	*4/1/2013*	*4/10/2013*	*4/4/2013*	*4/8/2013*	*4/8/2013*	*4/12/2013*	*4/12/2013*
Sample Type:									
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.0012	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.00081 J	0.01 U	0.01 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.00013 J	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.00019 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.022	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0017	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00025 J	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.02	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.00069 J	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.00022 J	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.0057	0.001 U	0.00085 J	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.0073	0.002 U	0.002 U	0.002 U

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-342M*	*CRA-529M*	*CRA-605M*	*CRA-609M*	*CRA-610M*	*CRA-618M*	*CRA-701M*	*CRA-703I*
Sample ID:		*GW-17358-040213-CT-011*	*GW-17358-040113-JY-001*	*GW-17358-041013-DR-073*	*GW-17358-040413-CT-032*	*GW-17358-040813-JY-048*	*GW-17358-040813-JY-045*	*GW-17358-041213-EM-101*	*GW-17358-041213-EM-095*
Sample Date:		*4/2/2013*	*4/1/2013*	*4/10/2013*	*4/4/2013*	*4/8/2013*	*4/8/2013*	*4/12/2013*	*4/12/2013*
Sample Type:									
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
2,4,5-Trichlorophenol	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
2,4,6-Trichlorophenol	mg/L	0.0038 U	0.0038 U	0.0039 U	0.004 U	0.0038 U	0.0095 U	0.0038 U	0.0039 U
2,4-Dichlorophenol	mg/L	0.0095 U	0.0096 U	0.0098 U	0.01 U	0.0095 U	0.024 U	0.0095 U	0.0098 U
2,4-Dimethylphenol	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
2,4-Dinitrophenol	mg/L	0.019 U	0.019 U	0.02 U	0.02 U	0.019 U	0.048 U	0.019 U	0.02 U
2,4-Dinitrotoluene	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
2,6-Dinitrotoluene	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
2-Chloronaphthalene	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
2-Chlorophenol	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
2-Methylnaphthalene	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
2-Methylphenol	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
2-Nitroaniline	mg/L	0.019 U	0.019 U	0.02 U	0.02 U	0.019 U	0.048 U	0.019 U	0.02 U
2-Nitrophenol	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
3&4-Methylphenol	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
3,3'-Dichlorobenzidine	mg/L	0.00095 U	0.00096 U	0.00098 U	0.001 U	0.00095 U	0.0024 U	0.00095 U	0.00098 U
3-Nitroaniline	mg/L	0.019 U	0.019 U	0.02 U	0.02 U	0.019 U	0.048 U	0.019 U	0.02 U
4,6-Dinitro-2-methylphenol	mg/L	0.019 U	0.019 U	0.02 U	0.02 U	0.019 U	0.048 U	0.019 U	0.02 U
4-Bromophenyl phenyl ether	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
4-Chloro-3-methylphenol	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
4-Chloroaniline	mg/L	0.0095 U	0.0096 U	0.0098 U	0.01 U	0.0095 U	0.024 U	0.0095 U	0.0098 U
4-Chlorophenyl phenyl ether	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
4-Nitroaniline	mg/L	0.019 U	0.019 U	0.02 U	0.02 U	0.019 U	0.048 U	0.019 U	0.02 U
4-Nitrophenol	mg/L	0.019 U	0.019 U	0.02 U	0.02 U	0.019 U	0.048 U	0.019 U	0.02 U
Acenaphthene	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Acenaphthylene	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Acetophenone	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Anthracene	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Atrazine	mg/L	0.0029 U	0.0029 U	0.0029 U	0.003 U	0.0029 U	0.0071 U	0.0029 U	0.0029 U
Benzaldehyde	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Benzo(a)anthracene	mg/L	0.00095 U	0.00096 U	0.00098 U	0.001 U	0.00095 U	0.0024 U	0.00095 U	0.00098 U
Benzo(a)pyrene	mg/L	0.00095 U	0.00096 U	0.00098 U	0.001 U	0.00095 U	0.0024 U	0.00095 U	0.00098 U
Benzo(b)fluoranthene	mg/L	0.00095 U	0.00096 U	0.00098 U	0.001 U	0.00095 U	0.0024 U	0.00095 U	0.00098 U
Benzo(g,h,i)perylene	mg/L	0.00095 U	0.00096 U	0.00098 U	0.001 U	0.00095 U	0.0024 U	0.00095 U	0.00098 U
Benzo(k)fluoranthene	mg/L	0.00095 U	0.00096 U	0.00098 U	0.001 U	0.00095 U	0.0024 U	0.00095 U	0.00098 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
bis(2-Chloroethoxy)methane	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
bis(2-Chloroethyl)ether	mg/L	0.00095 U	0.00096 U	0.00098 U	0.001 U	0.00095 U	0.0024 U	0.00095 U	0.00098 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0016 J	0.0049 U
Butyl benzylphthalate	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.00091 J	0.012 U	0.0048 U	0.0049 U
Caprolactam	mg/L	0.0095 U	0.0096 U	0.0098 U	0.01 U	0.0095 U	0.024 U	0.0095 U	0.0098 U
Carbazole	mg/L	0.0095 U	0.0096 U	0.0098 U	0.01 U	0.0095 U	0.024 U	0.0095 U	0.0098 U
Chrysene	mg/L	0.00095 U	0.00096 U	0.00098 U	0.001 U	0.00095 U	0.0024 U	0.00095 U	0.00098 U
Dibenz(a,h)anthracene	mg/L	0.0019 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0048 U	0.0019 U	0.002 U
Dibenzofuran	mg/L	0.0038 U	0.0038 U	0.0039 U	0.004 U	0.0038 U	0.0095 U	0.0038 U	0.0039 U
Diethyl phthalate	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Dimethyl phthalate	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Di-n-butylphthalate	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Di-n-octyl phthalate	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-342M*	*CRA-529M*	*CRA-605M*	*CRA-609M*	*CRA-610M*	*CRA-618M*	*CRA-701M*	*CRA-703I*
Sample ID:		*GW-17358-040213-CT-011*	*GW-17358-040113-JY-001*	*GW-17358-041013-DR-073*	*GW-17358-040413-CT-032*	*GW-17358-040813-JY-048*	*GW-17358-040813-JY-045*	*GW-17358-041213-EM-101*	*GW-17358-041213-EM-095*
Sample Date:		*4/2/2013*	*4/1/2013*	*4/10/2013*	*4/4/2013*	*4/8/2013*	*4/8/2013*	*4/12/2013*	*4/12/2013*
Sample Type:									
Parameters	*Units*								
Fluoranthene	mg/L	0.00095 U	0.00096 U	0.00098 U	0.001 U	0.00095 U	0.0024 U	0.00095 U	0.00098 U
Fluorene	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Hexachlorobenzene	mg/L	0.00019 U	0.00019 U	0.0002 U	0.0002 U	0.00019 U	0.00048 U	0.00019 U	0.0002 U
Hexachlorobutadiene	mg/L	0.00095 U	0.00096 U	0.00098 U	0.001 U	0.00095 U	0.0024 U	0.00095 U	0.00098 U
Hexachlorocyclopentadiene	mg/L	0.0048 U	R	0.0049 U	0.005 U	R	R	0.0048 U	0.0049 U
Hexachloroethane	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0019 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0048 U	0.0019 U	0.002 U
Isophorone	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Naphthalene	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Nitrobenzene	mg/L	0.0029 U	0.0029 U	0.0029 U	0.003 U	0.0029 U	0.0071 U	0.0029 U	0.0029 U
N-Nitrosodi-n-propylamine	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
N-Nitrosodiphenylamine	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Pentachlorophenol	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
Phenanthrene	mg/L	0.0019 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0048 U	0.0019 U	0.002 U
Phenol	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0013 J	0.012 U	0.0048 U	0.0049 U
Pyrene	mg/L	0.0048 U	0.0048 U	0.0049 U	0.005 U	0.0048 U	0.012 U	0.0048 U	0.0049 U
PCBs									
Aroclor-1016	mg/L	0.000096 U	0.000095 UJ	0.000097 U	0.000099 U	0.000095 U	0.000097 U	0.000095 U	0.000098 U
Aroclor-1221	mg/L	0.000096 U	0.000095 UJ	0.000097 U	0.000099 U	0.000095 U	0.000097 U	0.000095 U	0.000098 U
Aroclor-1232	mg/L	0.000096 U	0.000095 UJ	0.000097 U	0.000099 U	0.000095 U	0.000097 U	0.000095 U	0.000098 U
Aroclor-1242	mg/L	0.000096 U	0.000095 UJ	0.000097 U	0.000099 U	0.000095 U	0.000097 U	0.000095 U	0.000098 U
Aroclor-1248	mg/L	0.000096 U	0.000095 UJ	0.000097 U	0.000099 U	0.000095 U	0.000097 U	0.000095 U	0.000098 U
Aroclor-1254	mg/L	0.000096 U	0.000095 UJ	0.000097 U	0.000099 U	0.000095 U	0.000097 U	0.000095 U	0.000098 U
Aroclor-1260	mg/L	0.000096 U	0.000095 UJ	0.000097 U	0.000099 U	0.000095 U	0.000097 U	0.000095 U	0.000098 U
Aroclor-1262	mg/L	0.000096 U	0.000095 UJ	0.000097 U	0.000099 U	0.000095 U	0.000097 U	0.000095 U	0.000098 U
Aroclor-1268	mg/L	0.000096 U	0.000095 UJ	0.000097 U	0.000099 U	0.000095 U	0.000097 U	0.000095 U	0.000098 U
Total PCBs	mg/L	0	0 UJ	0	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.051	0.05 U	0.028 J	0.05 U	0.15	0.019 J	0.05 U	0.05 U
Aluminum (dissolved)	mg/L	-	-	-	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	0.00092 J	0.048	0.0031 J	0.005 U	0.005 U	0.0026 J	0.005 U	0.016
Arsenic (dissolved)	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	0.038 J	0.61	0.087 J	0.1	0.007 J	0.12	0.094 J	0.48
Barium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Beryllium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.001 U	0.00021 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	0.01 U	0.0015 J	0.01 U	0.01 U	0.0011 J	0.0008 J	0.01 U	0.01 U
Chromium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	0.00026 J	0.00052 J	0.00019 J	0.00015 J	0.00035 J	0.00023 J	0.000055 J	0.000022 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	0.0017 J	0.004 U	0.004 U	0.0011 J	0.0031 J	0.00061 J	0.004 U	0.004 U
Copper (dissolved)	mg/L	-	-	-	-	-	-	-	-
Iron	mg/L	0.2 U	20	1.4	0.2 U	0.15 J	17	0.2 U	2.7

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-342M*	*CRA-529M*	*CRA-605M*	*CRA-609M*	*CRA-610M*	*CRA-618M*	*CRA-701M*	*CRA-703I*
Sample ID:		*GW-17358-040213-CT-011*	*GW-17358-040113-JY-001*	*GW-17358-041013-DR-073*	*GW-17358-040413-CT-032*	*GW-17358-040813-JY-048*	*GW-17358-040813-JY-045*	*GW-17358-041213-EM-101*	*GW-17358-041213-EM-095*
Sample Date:		*4/2/2013*	*4/1/2013*	*4/10/2013*	*4/4/2013*	*4/8/2013*	*4/8/2013*	*4/12/2013*	*4/12/2013*
Sample Type:									
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	0.00019 J	0.003 U	0.0005 J	0.00044 J	0.00038 J	0.0013 J	0.003 U	0.003 U
Lead (dissolved)	mg/L	-	-	-	-	-	-	-	-
Manganese	mg/L	0.073	0.28	0.42	0.028 J	0.031 J	0.47	0.05 U	0.12
Manganese (dissolved)	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	0.0022 J	0.0032 J	0.00089 J	0.0011 J	0.0011 J	0.0015 J	0.02 U	0.02 U
Nickel (dissolved)	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	0.0011 J	0.005 U	0.005 U	0.0027 J	0.0013 J	0.005 U	0.001 J	0.005 U
Selenium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	0.002 U	0.00029 J	0.002 U	0.00018 J	0.002 U	0.002 U	0.002 U	0.002 U
Thallium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.00099 J	0.00073 J	0.004 U	0.004 U
Vanadium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	-	-	-
General Chemistry									
Cyanide (amenable)	mg/L	-	-	-	-	-	-	-	-
Phosphorus	mg/L	0.1 U	0.11	-	-	-	-	-	0.1 U

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-703M*	*CRA-704D*	*CRA-704D*	*CRA-704I*	*CRA-704M*	*CRA-705M*	*CRA-706M*	*CRA-709M*
Sample ID:		*GW-17358-041213-EM-096*	*GW-17358-041013-JY-075*	*GW-17358-041113-DR-085*	*GW-17358-041013-JY-074*	*GW-17358-041013-JY-076*	*GW-17358-041613-DR-115*	*GW-17358-041613-DR-114*	*GW-17358-041613-DR-112*
Sample Date:		*4/12/2013*	*4/10/2013*	*4/11/2013*	*4/10/2013*	*4/10/2013*	*4/16/2013*	*4/16/2013*	*4/16/2013*
Sample Type:									
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.00077 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.004 J	0.0011 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	mg/L	0.001 U	0.00084 J	0.00026 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.00069 J	0.0011 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.00048 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-703M*	*CRA-704D*	*CRA-704D*	*CRA-704I*	*CRA-704M*	*CRA-705M*	*CRA-706M*	*CRA-709M*
Sample ID:		*GW-17358-041213-EM-096*	*GW-17358-041013-JY-075*	*GW-17358-041113-DR-085*	*GW-17358-041013-JY-074*	*GW-17358-041013-JY-076*	*GW-17358-041613-DR-115*	*GW-17358-041613-DR-114*	*GW-17358-041613-DR-112*
Sample Date:		*4/12/2013*	*4/10/2013*	*4/11/2013*	*4/10/2013*	*4/10/2013*	*4/16/2013*	*4/16/2013*	*4/16/2013*
Sample Type:									
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
2,4,5-Trichlorophenol	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
2,4,6-Trichlorophenol	mg/L	0.0038 U	0.004 U	0.0042 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0041 U
2,4-Dichlorophenol	mg/L	0.0095 U	0.01 U	0.01 U	0.0095 U	0.0095 U	0.0095 U	0.0095 U	0.01 U
2,4-Dimethylphenol	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
2,4-Dinitrophenol	mg/L	0.019 U	0.02 U	0.021 U	0.019 U	0.019 U	0.019 U	0.019 U	0.02 U
2,4-Dinitrotoluene	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
2,6-Dinitrotoluene	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
2-Chloronaphthalene	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
2-Chlorophenol	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
2-Methylnaphthalene	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
2-Methylphenol	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
2-Nitroaniline	mg/L	0.019 U	0.02 U	0.021 U	0.019 U	0.019 U	0.019 U	0.019 U	0.02 U
2-Nitrophenol	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
3&4-Methylphenol	mg/L	0.0048 U	0.005 U	0.0014 J	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
3,3'-Dichlorobenzidine	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.001 U
3-Nitroaniline	mg/L	0.019 U	0.02 U	0.021 U	0.019 U	0.019 U	0.019 U	0.019 U	0.02 U
4,6-Dinitro-2-methylphenol	mg/L	0.019 U	0.02 U	0.021 U	0.019 U	0.019 U	0.019 U	0.019 U	0.02 U
4-Bromophenyl phenyl ether	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
4-Chloro-3-methylphenol	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
4-Chloroaniline	mg/L	0.0095 U	0.01 U	0.01 U	0.0095 U	0.0095 U	0.0095 U	0.0095 U	0.01 U
4-Chlorophenyl phenyl ether	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
4-Nitroaniline	mg/L	0.019 U	0.02 U	0.021 U	0.019 U	0.019 U	0.019 U	0.019 U	0.02 U
4-Nitrophenol	mg/L	0.019 U	0.02 U	0.021 U	0.019 U	0.019 U	0.019 U	0.019 U	0.02 U
Acenaphthene	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Acenaphthylene	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Acetophenone	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Anthracene	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Atrazine	mg/L	0.0029 U	0.003 U	0.0031 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.0031 U
Benzaldehyde	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Benzo(a)anthracene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.001 U
Benzo(a)pyrene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.001 U
Benzo(b)fluoranthene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.001 U
Benzo(g,h,i)perylene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.001 U
Benzo(k)fluoranthene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.001 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
bis(2-Chloroethoxy)methane	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
bis(2-Chloroethyl)ether	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.001 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Butyl benzylphthalate	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Caprolactam	mg/L	0.0095 U	0.01 U	0.0078 J	0.0015 J	0.0095 U	0.0095 U	0.0095 U	0.01 U
Carbazole	mg/L	0.0095 U	0.01 U	0.01 U	0.0095 U	0.0095 U	0.0095 U	0.0095 U	0.01 U
Chrysene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.001 U
Dibenz(a,h)anthracene	mg/L	0.0019 U	0.002 U	0.0021 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.002 U
Dibenzofuran	mg/L	0.0038 U	0.004 U	0.0042 U	0.0038 U	0.0038 U	0.0038 U	0.0038 U	0.0041 U
Diethyl phthalate	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Dimethyl phthalate	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Di-n-butylphthalate	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Di-n-octyl phthalate	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U

TABLE 2

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RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-703M*	*CRA-704D*	*CRA-704D*	*CRA-704I*	*CRA-704M*	*CRA-705M*	*CRA-706M*	*CRA-709M*
Sample ID:		*GW-17358-041213-EM-096*	*GW-17358-041013-JY-075*	*GW-17358-041113-DR-085*	*GW-17358-041013-JY-074*	*GW-17358-041013-JY-076*	*GW-17358-041613-DR-115*	*GW-17358-041613-DR-114*	*GW-17358-041613-DR-112*
Sample Date:		*4/12/2013*	*4/10/2013*	*4/11/2013*	*4/10/2013*	*4/10/2013*	*4/16/2013*	*4/16/2013*	*4/16/2013*
Sample Type:									
Parameters	*Units*								
Fluoranthene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.001 U
Fluorene	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Hexachlorobenzene	mg/L	0.00019 U	0.0002 U	0.00021 U	0.00019 U	0.00019 U	0.00019 U	0.00019 U	0.0002 U
Hexachlorobutadiene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.00095 U	0.00095 U	0.00095 U	0.001 U
Hexachlorocyclopentadiene	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	R	R	R
Hexachloroethane	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0019 U	0.002 U	0.0021 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.002 U
Isophorone	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Naphthalene	mg/L	0.0048 U	0.00013 J	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Nitrobenzene	mg/L	0.0029 U	0.003 U	0.0031 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.0031 U
N-Nitrosodi-n-propylamine	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
N-Nitrosodiphenylamine	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Pentachlorophenol	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Phenanthrene	mg/L	0.0019 U	0.002 U	0.0021 U	0.0019 U	0.0019 U	0.0019 U	0.0019 U	0.002 U
Phenol	mg/L	0.0048 U	0.0035 J	0.0036 J	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
Pyrene	mg/L	0.0048 U	0.005 U	0.0052 U	0.0048 U	0.0048 U	0.0048 U	0.0048 U	0.0051 U
PCBs									
Aroclor-1016	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0001 U
Aroclor-1221	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0001 U
Aroclor-1232	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0001 U
Aroclor-1242	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0001 U
Aroclor-1248	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0001 U
Aroclor-1254	mg/L	0.000095 U	0.0001 U	R	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0001 U
Aroclor-1260	mg/L	0.000095 U	0.0001 U	R	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0001 U
Aroclor-1262	mg/L	0.000095 U	0.0001 U	R	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0001 U
Aroclor-1268	mg/L	0.000095 U	0.0001 U	R	0.000095 U	0.000095 U	0.000095 U	0.000095 U	0.0001 U
Total PCBs	mg/L	0	0	R	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.05 U	1.2	1.4 J	0.03 J	0.05 U	0.027 J	0.0078 J	0.14 J
Aluminum (dissolved)	mg/L	-	-	0.032 J	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	0.002 U	-	-	-	-	-
Arsenic	mg/L	0.00076 J	0.0038 J	0.0052	0.0095	0.0025 J	0.00048 J	0.00086 J	0.0017 J
Arsenic (dissolved)	mg/L	-	-	0.0026 J	-	-	-	-	-
Barium	mg/L	0.11	0.059 J	0.047 J	0.41	0.35	0.043 J	0.067 J	0.16
Barium (dissolved)	mg/L	-	-	0.054 J	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Beryllium (dissolved)	mg/L	-	-	0.001 U	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium (dissolved)	mg/L	-	-	0.001 U	-	-	-	-	-
Chromium	mg/L	0.01 U	0.0023 J	0.0026 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium (dissolved)	mg/L	-	-	0.00075 J	-	-	-	-	-
Cobalt	mg/L	0.00024 J	0.00053 J	0.00069 J	0.00031 J	0.0007 J	0.00022 J	0.00029 J	0.0012 J
Cobalt (dissolved)	mg/L	-	-	0.000099 J	-	-	-	-	-
Copper	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Copper (dissolved)	mg/L	-	-	0.004 U	-	-	-	-	-
Iron	mg/L	0.2 U	1.4	1.4	0.52	0.82	0.2 U	0.18 J	0.96

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-703M*	*CRA-704D*	*CRA-704D*	*CRA-704I*	*CRA-704M*	*CRA-705M*	*CRA-706M*	*CRA-709M*
Sample ID:		*GW-17358-041213-EM-096*	*GW-17358-041013-JY-075*	*GW-17358-041113-DR-085*	*GW-17358-041013-JY-074*	*GW-17358-041013-JY-076*	*GW-17358-041613-DR-115*	*GW-17358-041613-DR-114*	*GW-17358-041613-DR-112*
Sample Date:		*4/12/2013*	*4/10/2013*	*4/11/2013*	*4/10/2013*	*4/10/2013*	*4/16/2013*	*4/16/2013*	*4/16/2013*
Sample Type:									
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	0.2 U	-	-	-	-	-
Lead	mg/L	0.003 U	0.00092 J	0.00099 J	0.0018 J	0.003 U	0.003 U	0.003 U	0.00034 J
Lead (dissolved)	mg/L	-	-	0.003 U	-	-	-	-	-
Manganese	mg/L	0.11	0.06	0.037 J	0.11	0.27	0.061	0.11	0.28
Manganese (dissolved)	mg/L	-	-	0.042 J	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	0.0002 U	-	-	-	-	-
Nickel	mg/L	0.02 U	0.004 J	0.0021 J	0.0013 J	0.0018 J	0.0014 J	0.0014 J	0.0021 J
Nickel (dissolved)	mg/L	-	-	0.0017 J	-	-	-	-	-
Selenium	mg/L	0.0015 J	0.005 U	0.005 U	0.005 U	0.005 U	0.00039 J	0.00061 J	0.005 U
Selenium (dissolved)	mg/L	-	-	0.005 U	-	-	-	-	-
Silver	mg/L	0.000018 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	-	0.0002 U	-	-	-	-	-
Thallium	mg/L	0.002 U	0.002 U	0.0002 J	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Thallium (dissolved)	mg/L	-	-	0.00027 J	-	-	-	-	-
Vanadium	mg/L	0.004 U	0.0029 J	0.0034 J	0.004 U	0.004 U	0.004 U	0.00015 J	0.0005 J
Vanadium (dissolved)	mg/L	-	-	0.004 U	-	-	-	-	-
Zinc	mg/L	0.05 U	0.051 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	0.05 U	-	-	-	-	-
General Chemistry									
Cyanide (amenable)	mg/L	-	-	-	-	-	-	-	-
Phosphorus	mg/L	0.1 U	0.06 J	0.1	0.1 U	0.1 U	-	0.1 U	-

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-710M*	*CRA-711I*	*CRA-712I*	*CRA-713M*	*CRA-717I*	*CRA-720I*	*CRA-721M*	*CRA-722M*
Sample ID:		*GW-17358-041613-DR-111*	*GW-17358-040513-DR-042*	*GW-17358-040813-JY-046*	*GW-17358-041613-DR-113*	*GW-17358-041513-DR-102*	*GW-17358-041213-JY-098*	*GW-17358-041213-JY-097*	*GW-17358-041513-DR-106*
Sample Date:		*4/16/2013*	*4/5/2013*	*4/8/2013*	*4/16/2013*	*4/15/2013*	*4/12/2013*	*4/12/2013*	*4/15/2013*
Sample Type:									
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.01 UJ	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.01	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-710M*	*CRA-711I*	*CRA-712I*	*CRA-713M*	*CRA-717I*	*CRA-720I*	*CRA-721M*	*CRA-722M*
Sample ID:		*GW-17358-041613-DR-111*	*GW-17358-040513-DR-042*	*GW-17358-040813-JY-046*	*GW-17358-041613-DR-113*	*GW-17358-041513-DR-102*	*GW-17358-041213-JY-098*	*GW-17358-041213-JY-097*	*GW-17358-041513-DR-106*
Sample Date:		*4/16/2013*	*4/5/2013*	*4/8/2013*	*4/16/2013*	*4/15/2013*	*4/12/2013*	*4/12/2013*	*4/15/2013*
Sample Type:									
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
2,4,5-Trichlorophenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
2,4,6-Trichlorophenol	mg/L	0.0038 U	0.0043 U	0.0038 U	0.0042 U	0.004 U	0.0038 U	0.004 U	0.0042 U
2,4-Dichlorophenol	mg/L	0.0095 U	0.011 U	0.0095 U	0.01 U	0.01 U	0.0095 U	0.01 U	0.011 U
2,4-Dimethylphenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
2,4-Dinitrophenol	mg/L	0.019 U	0.022 U	0.019 U	0.021 U	0.02 U	0.019 U	0.02 U	0.021 U
2,4-Dinitrotoluene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
2,6-Dinitrotoluene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
2-Chloronaphthalene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
2-Chlorophenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
2-Methylnaphthalene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
2-Methylphenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
2-Nitroaniline	mg/L	0.019 U	0.022 U	0.019 U	0.021 U	0.02 U	0.019 U	0.02 U	0.021 U
2-Nitrophenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
3&4-Methylphenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
3,3'-Dichlorobenzidine	mg/L	0.00095 U	0.0011 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.001 U	0.0011 U
3-Nitroaniline	mg/L	0.019 U	0.022 U	0.019 U	0.021 U	0.02 U	0.019 U	0.02 U	0.021 U
4,6-Dinitro-2-methylphenol	mg/L	0.019 U	0.022 U	0.019 U	0.021 U	0.02 U	0.019 U	0.02 U	0.021 U
4-Bromophenyl phenyl ether	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
4-Chloro-3-methylphenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
4-Chloroaniline	mg/L	0.0095 U	0.011 U	0.0095 U	0.01 U	0.01 U	0.0095 U	0.01 U	0.011 U
4-Chlorophenyl phenyl ether	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
4-Nitroaniline	mg/L	0.019 U	0.022 U	0.019 U	0.021 U	0.02 U	0.019 U	0.02 U	0.021 U
4-Nitrophenol	mg/L	0.019 U	0.022 U	0.019 U	0.021 U	0.02 U	0.019 U	0.02 U	0.021 U
Acenaphthene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Acenaphthylene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Acetophenone	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Anthracene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Atrazine	mg/L	0.0029 U	0.0032 U	0.0029 U	0.0031 U	0.003 U	0.0029 U	0.003 U	0.0032 U
Benzaldehyde	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Benzo(a)anthracene	mg/L	0.00095 U	0.0011 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.001 U	0.0011 U
Benzo(a)pyrene	mg/L	0.00095 U	0.0011 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.001 U	0.0011 U
Benzo(b)fluoranthene	mg/L	0.00095 U	0.0011 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.001 U	0.0011 U
Benzo(g,h,i)perylene	mg/L	0.00095 U	0.0011 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.001 U	0.0011 U
Benzo(k)fluoranthene	mg/L	0.00095 U	0.0011 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.001 U	0.0011 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
bis(2-Chloroethoxy)methane	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
bis(2-Chloroethyl)ether	mg/L	0.00095 U	0.0011 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.001 U	0.0011 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0009 J	0.0053 U
Butyl benzylphthalate	mg/L	0.0048 U	0.0054 U	0.00092 J	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Caprolactam	mg/L	0.0095 U	0.0021 J	0.0095 U	0.01 U	0.0022 J	0.0095 U	0.01 U	0.011 U
Carbazole	mg/L	0.0095 U	0.011 U	0.0095 U	0.01 U	0.01 U	0.0095 U	0.01 U	0.011 U
Chrysene	mg/L	0.00095 U	0.0011 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.001 U	0.0011 U
Dibenz(a,h)anthracene	mg/L	0.0019 U	0.0022 U	0.0019 U	0.0021 U	0.002 U	0.0019 U	0.002 U	0.0021 U
Dibenzofuran	mg/L	0.0038 U	0.0043 U	0.0038 U	0.0042 U	0.004 U	0.0038 U	0.004 U	0.0042 U
Diethyl phthalate	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Dimethyl phthalate	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Di-n-butylphthalate	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Di-n-octyl phthalate	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-710M*	*CRA-711I*	*CRA-712I*	*CRA-713M*	*CRA-717I*	*CRA-720I*	*CRA-721M*	*CRA-722M*
Sample ID:		*GW-17358-041613-DR-111*	*GW-17358-040513-DR-042*	*GW-17358-040813-JY-046*	*GW-17358-041613-DR-113*	*GW-17358-041513-DR-102*	*GW-17358-041213-JY-098*	*GW-17358-041213-JY-097*	*GW-17358-041513-DR-106*
Sample Date:		*4/16/2013*	*4/5/2013*	*4/8/2013*	*4/16/2013*	*4/15/2013*	*4/12/2013*	*4/12/2013*	*4/15/2013*
Sample Type:									
Parameters	*Units*								
Fluoranthene	mg/L	0.00095 U	0.0011 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.001 U	0.0011 U
Fluorene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Hexachlorobenzene	mg/L	0.00019 U	0.00022 U	0.00019 U	0.00021 U	0.0002 U	0.00019 U	0.0002 U	0.00021 U
Hexachlorobutadiene	mg/L	0.00095 U	0.0011 U	0.00095 U	0.001 U	0.001 U	0.00095 U	0.001 U	0.0011 U
Hexachlorocyclopentadiene	mg/L	R	0.0054 U	R	R	0.0051 U	0.0048 U	0.005 U	0.0053 U
Hexachloroethane	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0019 U	0.0022 U	0.0019 U	0.0021 U	0.002 U	0.0019 U	0.002 U	0.0021 U
Isophorone	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Naphthalene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Nitrobenzene	mg/L	0.0029 U	0.0032 U	0.0029 U	0.0031 U	0.003 U	0.0029 U	0.003 U	0.0032 U
N-Nitrosodi-n-propylamine	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
N-Nitrosodiphenylamine	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Pentachlorophenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Phenanthrene	mg/L	0.0019 U	0.0022 U	0.0019 U	0.0021 U	0.002 U	0.0019 U	0.002 U	0.0021 U
Phenol	mg/L	0.0048 U	0.0012 J	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
Pyrene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.005 U	0.0053 U
PCBs									
Aroclor-1016	mg/L	0.000095 U	0.000095 U	0.000096 U	0.00011 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U
Aroclor-1221	mg/L	0.000095 U	0.000095 U	0.000096 U	0.00011 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U
Aroclor-1232	mg/L	0.000095 U	0.000095 U	0.000096 U	0.00011 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U
Aroclor-1242	mg/L	0.000095 U	0.000095 U	0.000096 U	0.00011 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U
Aroclor-1248	mg/L	0.000095 U	0.000095 U	0.000096 U	0.00011 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U
Aroclor-1254	mg/L	0.000095 U	0.000095 U	0.000096 U	0.00011 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U
Aroclor-1260	mg/L	0.000095 U	0.000095 U	0.00004 J	0.00011 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U
Aroclor-1262	mg/L	0.000095 U	0.000095 U	0.000096 U	0.00011 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U
Aroclor-1268	mg/L	0.000095 U	0.000095 U	0.000096 U	0.00011 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U
Total PCBs	mg/L	0	0	0.00004 J	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.024 J	0.028 J	0.05 U	0.24 J	0.13 J	0.05 U	0.13 J	0.021 J
Aluminum (dissolved)	mg/L	-	-	-	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	0.0012 J	0.025	0.02	0.00052 J	0.015	0.018	0.005 U	0.00035 J
Arsenic (dissolved)	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	0.077 J	0.11	0.44	0.055 J	0.46	0.26	0.28	0.26
Barium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Beryllium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.000055 J	0.001 U	0.001 U	0.000057 J	0.000042 J
Cadmium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	0.01 U	0.01 U	0.01 U	0.0009 J	0.01 U	0.01 U	0.0021 J	0.0033 J
Chromium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	0.0003 J	0.02 U	0.00036 J	0.00081 J	0.00043 J	0.0002 J	0.0003 J	0.000078 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	0.004 U	0.004 U	0.00099 J	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Copper (dissolved)	mg/L	-	-	-	-	-	-	-	-
Iron	mg/L	0.24	1.5	2.2	0.39	0.9	2.9	0.2 U	0.2 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-710M*	*CRA-711I*	*CRA-712I*	*CRA-713M*	*CRA-717I*	*CRA-720I*	*CRA-721M*	*CRA-722M*
Sample ID:		*GW-17358-041613-DR-111*	*GW-17358-040513-DR-042*	*GW-17358-040813-JY-046*	*GW-17358-041613-DR-113*	*GW-17358-041513-DR-102*	*GW-17358-041213-JY-098*	*GW-17358-041213-JY-097*	*GW-17358-041513-DR-106*
Sample Date:		*4/16/2013*	*4/5/2013*	*4/8/2013*	*4/16/2013*	*4/15/2013*	*4/12/2013*	*4/12/2013*	*4/15/2013*
Sample Type:									
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	0.0002 J	0.0002 J	0.0005 J	0.00059 J	0.00041 J	0.0022 J	0.00022 J	0.00037 J
Lead (dissolved)	mg/L	-	-	-	-	-	-	-	-
Manganese	mg/L	0.11	0.029 J	0.091	0.11	0.089	0.12	0.074	0.0056 J
Manganese (dissolved)	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	0.0013 J	0.00047 J	0.00066 J	0.0025 J	0.02 J	0.02 U	0.0022 J	0.0011 J
Nickel (dissolved)	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	0.00099 J	0.005 U	0.005 U	0.0043 J	0.005 U	0.005 U	0.00079 J	0.00074 J
Selenium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.000023 J
Silver (dissolved)	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Thallium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.004 U	0.004 U	0.004 U	0.0013 J	0.00053 J	0.004 U	0.00016 J	0.004 U
Vanadium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	-	-	-
General Chemistry									
Cyanide (amenable)	mg/L	-	-	-	-	-	-	-	-
Phosphorus	mg/L	0.1 U	-	0.1 U	0.1 U	0.037 J	-	-	0.037 J

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-724I*	*CRA-725I*	*CRA-725I*	*CRA-725M*	*CRA-726D*	*CRA-726D*	*CRA-726I*	*CRA-726M*
Sample ID:		*GW-17358-041513-DR-105*	*GW-17358-041513-DR-103*	*GW-17358-041513-DR-104*	*GW-17358-041513-DR-107*	*GW-17358-041013-DR-081*	*GW-17358-041113-DR-087*	*GW-17358-041013-DR-080*	*GW-17358-041013-DR-082*
Sample Date:		*4/15/2013*	*4/15/2013*	*4/15/2013*	*4/15/2013*	*4/10/2013*	*4/11/2013*	*4/10/2013*	*4/10/2013*
Sample Type:				*Duplicate*					
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.01 U	0.01 U	0.0014 J	0.01 U	0.003 J	0.01 U	0.01 U
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.00022 J	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-724I*	*CRA-725I*	*CRA-725I*	*CRA-725M*	*CRA-726D*	*CRA-726D*	*CRA-726I*	*CRA-726M*
Sample ID:		*GW-17358-041513-DR-105*	*GW-17358-041513-DR-103*	*GW-17358-041513-DR-104*	*GW-17358-041513-DR-107*	*GW-17358-041013-DR-081*	*GW-17358-041113-DR-087*	*GW-17358-041013-DR-080*	*GW-17358-041013-DR-082*
Sample Date:		*4/15/2013*	*4/15/2013*	*4/15/2013*	*4/15/2013*	*4/10/2013*	*4/11/2013*	*4/10/2013*	*4/10/2013*
Sample Type:				*Duplicate*					
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
2,4,5-Trichlorophenol	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
2,4,6-Trichlorophenol	mg/L	0.0042 U	0.0038 U	0.004 U	0.0042 U	0.004 U	0.0041 U	0.0039 U	0.0042 U
2,4-Dichlorophenol	mg/L	0.01 U	0.0096 U	0.01 U	0.011 U	0.01 U	0.01 U	0.0098 U	0.011 U
2,4-Dimethylphenol	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
2,4-Dinitrophenol	mg/L	0.021 U	0.019 U	0.02 U	0.021 U	0.02 U	0.02 U	0.02 U	0.021 U
2,4-Dinitrotoluene	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
2,6-Dinitrotoluene	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
2-Chloronaphthalene	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
2-Chlorophenol	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
2-Methylnaphthalene	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
2-Methylphenol	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
2-Nitroaniline	mg/L	0.021 U	0.019 U	0.02 U	0.021 U	0.02 U	0.02 U	0.02 U	0.021 U
2-Nitrophenol	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
3&4-Methylphenol	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
3,3'-Dichlorobenzidine	mg/L	0.001 U	0.00096 U	0.001 U	0.0011 U	0.001 U	0.001 U	0.00098 U	0.0011 U
3-Nitroaniline	mg/L	0.021 U	0.019 U	0.02 U	0.021 U	0.02 U	0.02 U	0.02 U	0.021 U
4,6-Dinitro-2-methylphenol	mg/L	0.021 U	0.019 U	0.02 U	0.021 U	0.02 U	0.02 U	0.02 U	0.021 U
4-Bromophenyl phenyl ether	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
4-Chloro-3-methylphenol	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
4-Chloroaniline	mg/L	0.01 U	0.0096 U	0.01 U	0.011 U	0.01 U	0.01 U	0.0098 U	0.011 U
4-Chlorophenyl phenyl ether	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
4-Nitroaniline	mg/L	0.021 U	0.019 U	0.02 U	0.021 U	0.02 U	0.02 U	0.02 U	0.021 U
4-Nitrophenol	mg/L	0.021 U	0.019 U	0.02 U	0.021 U	0.02 U	0.02 U	0.02 U	0.021 U
Acenaphthene	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Acenaphthylene	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Acetophenone	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Anthracene	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Atrazine	mg/L	0.0031 U	0.0029 U	0.003 U	0.0032 U	0.003 U	0.0031 U	0.0029 U	0.0032 U
Benzaldehyde	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Benzo(a)anthracene	mg/L	0.001 U	0.00096 U	0.001 U	0.0011 U	0.001 U	0.001 U	0.00098 U	0.0011 U
Benzo(a)pyrene	mg/L	0.001 U	0.00096 U	0.001 U	0.0011 U	0.001 U	0.001 U	0.00098 U	0.0011 U
Benzo(b)fluoranthene	mg/L	0.001 U	0.00096 U	0.001 U	0.0011 U	0.001 U	0.001 U	0.00098 U	0.0011 U
Benzo(g,h,i)perylene	mg/L	0.001 U	0.00096 U	0.001 U	0.0011 U	0.001 U	0.001 U	0.00098 U	0.0011 U
Benzo(k)fluoranthene	mg/L	0.001 U	0.00096 U	0.001 U	0.0011 U	0.001 U	0.001 U	0.00098 U	0.0011 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
bis(2-Chloroethoxy)methane	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
bis(2-Chloroethyl)ether	mg/L	0.001 U	0.00096 U	0.001 U	0.0011 U	0.001 U	0.001 U	0.00098 U	0.0011 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Butyl benzylphthalate	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Caprolactam	mg/L	0.00096 J	0.0096 U	0.01 U	0.011 U	0.01 U	0.01 U	0.0098 U	0.011 U
Carbazole	mg/L	0.01 U	0.0096 U	0.01 U	0.011 U	0.01 U	0.01 U	0.0098 U	0.011 U
Chrysene	mg/L	0.001 U	0.00096 U	0.001 U	0.0011 U	0.001 U	0.001 U	0.00098 U	0.0011 U
Dibenz(a,h)anthracene	mg/L	0.0021 U	0.0019 U	0.002 U	0.0021 U	0.002 U	0.002 U	0.002 U	0.0021 U
Dibenzofuran	mg/L	0.0042 U	0.0038 U	0.004 U	0.0042 U	0.004 U	0.0041 U	0.0039 U	0.0042 U
Diethyl phthalate	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Dimethyl phthalate	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Di-n-butylphthalate	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Di-n-octyl phthalate	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-724I*	*CRA-725I*	*CRA-725I*	*CRA-725M*	*CRA-726D*	*CRA-726D*	*CRA-726I*	*CRA-726M*
Sample ID:		*GW-17358-041513-DR-105*	*GW-17358-041513-DR-103*	*GW-17358-041513-DR-104*	*GW-17358-041513-DR-107*	*GW-17358-041013-DR-081*	*GW-17358-041113-DR-087*	*GW-17358-041013-DR-080*	*GW-17358-041013-DR-082*
Sample Date:		*4/15/2013*	*4/15/2013*	*4/15/2013*	*4/15/2013*	*4/10/2013*	*4/11/2013*	*4/10/2013*	*4/10/2013*
Sample Type:				*Duplicate*					
Parameters	*Units*								
Fluoranthene	mg/L	0.001 U	0.00096 U	0.001 U	0.0011 U	0.001 U	0.001 U	0.00098 U	0.0011 U
Fluorene	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Hexachlorobenzene	mg/L	0.00021 U	0.00019 U	0.0002 U	0.00021 U	0.0002 U	0.0002 U	0.0002 U	0.00021 U
Hexachlorobutadiene	mg/L	0.001 U	0.00096 U	0.001 U	0.0011 U	0.001 U	0.001 U	0.00098 U	0.0011 U
Hexachlorocyclopentadiene	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Hexachloroethane	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0021 U	0.0019 U	0.002 U	0.0021 U	0.002 U	0.002 U	0.002 U	0.0021 U
Isophorone	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Naphthalene	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Nitrobenzene	mg/L	0.0031 U	0.0029 U	0.003 U	0.0032 U	0.003 U	0.0031 U	0.0029 U	0.0032 U
N-Nitrosodi-n-propylamine	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
N-Nitrosodiphenylamine	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Pentachlorophenol	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Phenanthrene	mg/L	0.0021 U	0.0019 U	0.002 U	0.0021 U	0.002 U	0.002 U	0.002 U	0.0021 U
Phenol	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
Pyrene	mg/L	0.0052 U	0.0048 U	0.0051 U	0.0053 U	0.0051 U	0.0051 U	0.0049 U	0.0053 U
PCBs									
Aroclor-1016	mg/L	0.000099 U	0.0001 U	0.0001 U	0.00011 U	0.000098 U	0.000096 U	0.000097 U	0.0001 U
Aroclor-1221	mg/L	0.000099 U	0.0001 U	0.0001 U	0.00011 U	0.000098 U	0.000096 U	0.000097 U	0.0001 U
Aroclor-1232	mg/L	0.000099 U	0.0001 U	0.0001 U	0.00011 U	0.000098 U	0.000096 U	0.000097 U	0.0001 U
Aroclor-1242	mg/L	0.000099 U	0.0001 U	0.0001 U	0.00011 U	0.000098 U	0.000096 U	0.000097 U	0.0001 U
Aroclor-1248	mg/L	0.000099 U	0.0001 U	0.0001 U	0.00011 U	0.000098 U	0.000096 U	0.000097 U	0.0001 U
Aroclor-1254	mg/L	0.000099 U	0.0001 U	0.0001 U	0.00011 U	0.000098 U	0.000096 U	0.000097 U	0.0001 U
Aroclor-1260	mg/L	0.000099 U	0.0001 U	0.0001 U	0.00011 U	0.000098 U	0.000096 U	0.000097 U	0.0001 U
Aroclor-1262	mg/L	0.000099 U	0.0001 U	0.0001 U	0.00011 U	0.000098 U	0.000096 U	0.000097 U	0.0001 U
Aroclor-1268	mg/L	0.000099 U	0.0001 U	0.0001 U	0.00011 U	0.000098 U	0.000096 U	0.000097 U	0.0001 U
Total PCBs	mg/L	0	0	0	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.036 J	0.0099 J	0.011 J	0.11 J	3.5 J	29 J	0.019 J	0.05 U
Aluminum (dissolved)	mg/L	-	-	-	-	-	11	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	0.002 U	-	-
Arsenic	mg/L	0.0057	0.00036 J	0.00042 J	0.00062 J	0.012	0.02	0.0008 J	0.005 U
Arsenic (dissolved)	mg/L	-	-	-	-	-	0.014	-	-
Barium	mg/L	0.066 J	0.16	0.17	0.024 J	0.077 J	0.28	0.11	0.016 J
Barium (dissolved)	mg/L	-	-	-	-	-	0.15	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.00022 J	0.0014	0.00057 J	0.001 U
Beryllium (dissolved)	mg/L	-	-	-	-	-	0.00053 J	-	-
Cadmium	mg/L	0.001 U	0.00012 J	0.00011 J	0.0001 J	0.00014 J	0.00031 J	0.00033 J	0.001 U
Cadmium (dissolved)	mg/L	-	-	-	-	-	0.001 U	-	-
Chromium	mg/L	0.01 U	0.001 J	0.0011 J	0.0019 J	0.008 J	0.053	0.01 U	0.01 U
Chromium (dissolved)	mg/L	-	-	-	-	-	0.021	-	-
Cobalt	mg/L	0.000051 J	0.00041 J	0.00046 J	0.00017 J	0.0028 J	0.019 J	0.00049 J	0.00008 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	0.0089 J	-	-
Copper	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.0067 J	0.034	0.004 U	0.004 U
Copper (dissolved)	mg/L	-	-	-	-	-	0.019	-	-
Iron	mg/L	0.46	0.2 U	0.2 U	0.23	5.2	44	0.2 U	0.2 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-724I*	*CRA-725I*	*CRA-725I*	*CRA-725M*	*CRA-726D*	*CRA-726D*	*CRA-726I*	*CRA-726M*
Sample ID:		*GW-17358-041513-DR-105*	*GW-17358-041513-DR-103*	*GW-17358-041513-DR-104*	*GW-17358-041513-DR-107*	*GW-17358-041013-DR-081*	*GW-17358-041113-DR-087*	*GW-17358-041013-DR-080*	*GW-17358-041013-DR-082*
Sample Date:		*4/15/2013*	*4/15/2013*	*4/15/2013*	*4/15/2013*	*4/10/2013*	*4/11/2013*	*4/10/2013*	*4/10/2013*
Sample Type:				*Duplicate*					
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	-	-	-	19	-	-
Lead	mg/L	0.00032 J	0.00015 J	0.003 U	0.00035 J	0.0038	0.015	0.0004 J	0.003 U
Lead (dissolved)	mg/L	-	-	-	-	-	0.0069	-	-
Manganese	mg/L	0.084	0.11	0.12	0.0067 J	0.072	0.69	0.052	0.05 U
Manganese (dissolved)	mg/L	-	-	-	-	-	0.33	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	-	-	-	0.0002 U	-	-
Nickel	mg/L	0.02 U	0.0013 J	0.0013 J	0.00087 J	0.0092 J	0.055	0.0012 J	0.02 U
Nickel (dissolved)	mg/L	-	-	-	-	-	0.028	-	-
Selenium	mg/L	0.005 U	0.00061 J	0.0006 J	0.0012 J	0.005 U	0.0026 J	0.0012 J	0.00062 J
Selenium (dissolved)	mg/L	-	-	-	-	-	0.0019 J	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.00001 J	0.0002 U	0.0002 U	0.000089 J	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	-	-	-	-	0.0002 U	-	-
Thallium	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.00087 J	0.00083 J	0.0013 J	0.00046 J
Thallium (dissolved)	mg/L	-	-	-	-	-	0.00051 J	-	-
Vanadium	mg/L	0.004 U	0.00035 J	0.00034 J	0.0005 J	0.01	0.078	0.004 U	0.004 U
Vanadium (dissolved)	mg/L	-	-	-	-	-	0.028	-	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.16	0.15 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	0.11 U	-	-
General Chemistry									
Cyanide (amenable)	mg/L	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	0.095 J	0.79	0.1 U	0.1 U

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-729I*	*CRA-729M*	*CRA-731I*	*CRA-732I*	*CRA-735I*	*CRA-736I*	*CRA-737M*	*CRA-739I*
Sample ID:		*GW-17358-040313-CT-015*	*GW-17358-040313-CT-016*	*GW-17358-040113-DR-006*	*GW-17358-040113-JY-002*	*GW-17358-041213-DR-099*	*GW-17358-041213-DR-100*	*GW-17358-040113-DR-007*	*GW-17358-040113-CT-003*
Sample Date:		*4/3/2013*	*4/3/2013*	*4/1/2013*	*4/1/2013*	*4/12/2013*	*4/12/2013*	*4/1/2013*	*4/1/2013*
Sample Type:									
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.013 U	0.005 U	0.0019 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.058	0.001 U	0.00036 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0015	0.001 U
Methylene chloride	mg/L	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.0032	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.0076	0.005	0.001 U	0.0036	0.001 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.065	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.005 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-729I*	*CRA-729M*	*CRA-731I*	*CRA-732I*	*CRA-735I*	*CRA-736I*	*CRA-737M*	*CRA-739I*
Sample ID:		*GW-17358-040313-CT-015*	*GW-17358-040313-CT-016*	*GW-17358-040113-DR-006*	*GW-17358-040113-JY-002*	*GW-17358-041213-DR-099*	*GW-17358-041213-DR-100*	*GW-17358-040113-DR-007*	*GW-17358-040113-CT-003*
Sample Date:		*4/3/2013*	*4/3/2013*	*4/1/2013*	*4/1/2013*	*4/12/2013*	*4/12/2013*	*4/1/2013*	*4/1/2013*
Sample Type:									
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
2,4,5-Trichlorophenol	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
2,4,6-Trichlorophenol	mg/L	0.0038 U	0.0041 U	0.004 U	0.0038 U	0.0042 U	0.0041 U	0.0042 U	0.0038 U
2,4-Dichlorophenol	mg/L	0.0095 U	0.01 U	0.01 U	0.0095 U	0.011 U	0.01 U	0.01 U	0.0095 U
2,4-Dimethylphenol	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
2,4-Dinitrophenol	mg/L	0.019 U	0.021 U	0.02 U	0.019 U	0.021 U	0.021 U	0.021 U	0.019 U
2,4-Dinitrotoluene	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
2,6-Dinitrotoluene	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
2-Chloronaphthalene	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
2-Chlorophenol	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
2-Methylnaphthalene	mg/L	0.0048 U	0.0052 U	0.00022 J	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
2-Methylphenol	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
2-Nitroaniline	mg/L	0.019 U	0.021 U	0.02 U	0.019 U	0.021 U	0.021 U	0.021 U	0.019 U
2-Nitrophenol	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
3&4-Methylphenol	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
3,3'-Dichlorobenzidine	mg/L	R	0.001 U	0.001 U	0.00095 U	0.0011 U	0.001 U	0.001 U	0.00095 U
3-Nitroaniline	mg/L	0.019 U	0.021 U	0.02 U	0.019 U	0.021 U	0.021 U	0.021 U	0.019 U
4,6-Dinitro-2-methylphenol	mg/L	0.019 U	0.021 U	0.02 U	0.019 U	0.021 U	0.021 U	0.021 U	0.019 U
4-Bromophenyl phenyl ether	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
4-Chloro-3-methylphenol	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
4-Chloroaniline	mg/L	0.0095 U	0.01 U	0.01 U	0.0095 U	0.011 U	0.01 U	0.01 U	0.0095 U
4-Chlorophenyl phenyl ether	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
4-Nitroaniline	mg/L	0.019 U	0.021 U	0.02 U	0.019 U	0.021 U	0.021 U	0.021 U	0.019 U
4-Nitrophenol	mg/L	0.019 U	0.021 U	0.02 U	0.019 U	0.021 U	0.021 U	0.021 U	0.019 U
Acenaphthene	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Acenaphthylene	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Acetophenone	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Anthracene	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Atrazine	mg/L	0.0029 U	0.0031 U	0.003 U	0.0029 U	0.0032 U	0.0031 U	0.0031 U	0.0029 U
Benzaldehyde	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Benzo(a)anthracene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.0011 U	0.001 U	0.001 U	0.00095 U
Benzo(a)pyrene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.0011 U	0.001 U	0.001 U	0.00095 U
Benzo(b)fluoranthene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.0011 U	0.001 U	0.001 U	0.00095 U
Benzo(g,h,i)perylene	mg/L	0.00095 U	0.00013 J	0.001 U	0.00095 U	0.0011 U	0.001 U	0.001 U	0.00095 U
Benzo(k)fluoranthene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.0011 U	0.001 U	0.001 U	0.00095 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
bis(2-Chloroethoxy)methane	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
bis(2-Chloroethyl)ether	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.0011 U	0.001 U	0.001 U	0.00095 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.001 J	0.0013 J	0.0052 U	0.0048 U
Butyl benzylphthalate	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Caprolactam	mg/L	0.0095 U	0.01 U	0.01 U	0.0095 U	0.011 U	0.01 U	0.01 U	0.0095 U
Carbazole	mg/L	0.0095 U	0.01 U	0.01 U	0.0095 U	0.011 U	0.01 U	0.01 U	0.0095 U
Chrysene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.0011 U	0.001 U	0.001 U	0.00095 U
Dibenz(a,h)anthracene	mg/L	0.0019 U	0.00021 J	0.002 U	0.0019 U	0.0021 U	0.0021 U	0.0021 U	0.0019 U
Dibenzofuran	mg/L	0.0038 U	0.0041 U	0.004 U	0.0038 U	0.0042 U	0.0041 U	0.0042 U	0.0038 U
Diethyl phthalate	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Dimethyl phthalate	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Di-n-butylphthalate	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Di-n-octyl phthalate	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-729I*	*CRA-729M*	*CRA-731I*	*CRA-732I*	*CRA-735I*	*CRA-736I*	*CRA-737M*	*CRA-739I*
Sample ID:		*GW-17358-040313-CT-015*	*GW-17358-040313-CT-016*	*GW-17358-040113-DR-006*	*GW-17358-040113-JY-002*	*GW-17358-041213-DR-099*	*GW-17358-041213-DR-100*	*GW-17358-040113-DR-007*	*GW-17358-040113-CT-003*
Sample Date:		*4/3/2013*	*4/3/2013*	*4/1/2013*	*4/1/2013*	*4/12/2013*	*4/12/2013*	*4/1/2013*	*4/1/2013*
Sample Type:									
Parameters	*Units*								
Fluoranthene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.0011 U	0.001 U	0.001 U	0.00095 U
Fluorene	mg/L	0.0048 U	0.0052 U	0.0002 J	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Hexachlorobenzene	mg/L	0.00019 U	0.00021 U	0.0002 U	0.00019 U	0.00021 U	0.00021 U	0.00021 U	0.00019 U
Hexachlorobutadiene	mg/L	0.00095 U	0.001 U	0.001 U	0.00095 U	0.0011 U	0.001 U	0.001 U	0.00095 U
Hexachlorocyclopentadiene	mg/L	0.0048 U	0.0052 U	R	R	0.0053 U	0.0052 U	R	R
Hexachloroethane	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0019 U	0.00015 J	0.002 U	0.0019 U	0.0021 U	0.0021 U	0.0021 U	0.0019 U
Isophorone	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Naphthalene	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Nitrobenzene	mg/L	0.0029 U	0.0031 U	0.003 U	0.0029 U	0.0032 U	0.0031 U	0.0031 U	0.0029 U
N-Nitrosodi-n-propylamine	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
N-Nitrosodiphenylamine	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Pentachlorophenol	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Phenanthrene	mg/L	0.0019 U	0.0021 U	0.00023 J	0.0019 U	0.0021 U	0.0021 U	0.0021 U	0.0019 U
Phenol	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
Pyrene	mg/L	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0053 U	0.0052 U	0.0052 U	0.0048 U
PCBs									
Aroclor-1016	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U	0.000098 U	0.000098 U
Aroclor-1221	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U	0.000098 U	0.000098 U
Aroclor-1232	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U	0.000098 U	0.000098 U
Aroclor-1242	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U	0.000098 U	0.000098 U
Aroclor-1248	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U	0.000098 U	0.000098 U
Aroclor-1254	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U	0.000098 U	0.000098 U
Aroclor-1260	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U	0.000098 U	0.000098 U
Aroclor-1262	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U	0.000098 U	0.000098 U
Aroclor-1268	mg/L	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.00011 U	0.0001 U	0.000098 U	0.000098 U
Total PCBs	mg/L	0	0	0	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.021 J	1.2	0.019 J	0.05 U	0.05 U	0.05 U	0.05 U	0.022 J
Aluminum (dissolved)	mg/L	-	-	-	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	0.0045 J	0.0028 J	0.04	0.018	0.0059	0.012	0.0014 J	0.0047 J
Arsenic (dissolved)	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	0.28	0.016 J	0.082 J	0.12	0.26	0.28	0.13	0.16
Barium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Beryllium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	0.01 U	0.012	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	0.00047 J	0.00081 J	0.00026 J	0.00069 J	0.000064 J	0.000069 J	0.0018 J	0.00031 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	0.004 U	0.0031 J	0.0004 J	0.004 U	0.004 U	0.004 U	0.00088 J	0.004 U
Copper (dissolved)	mg/L	-	-	-	-	-	-	-	-
Iron	mg/L	1.5	1.2	1.2	0.34	0.38	1.3	0.98	3.1

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-729I*	*CRA-729M*	*CRA-731I*	*CRA-732I*	*CRA-735I*	*CRA-736I*	*CRA-737M*	*CRA-739I*
Sample ID:		*GW-17358-040313-CT-015*	*GW-17358-040313-CT-016*	*GW-17358-040113-DR-006*	*GW-17358-040113-JY-002*	*GW-17358-041213-DR-099*	*GW-17358-041213-DR-100*	*GW-17358-040113-DR-007*	*GW-17358-040113-CT-003*
Sample Date:		*4/3/2013*	*4/3/2013*	*4/1/2013*	*4/1/2013*	*4/12/2013*	*4/12/2013*	*4/1/2013*	*4/1/2013*
Sample Type:									
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	0.003 U	0.00082 J	0.00033 J	0.003 U	0.0012 J	0.0011 J	0.003 U	0.003 U
Lead (dissolved)	mg/L	-	-	-	-	-	-	-	-
Manganese	mg/L	0.26	0.017 J	0.04 J	0.12	0.09	0.15	0.33	0.059
Manganese (dissolved)	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	0.0039 J	0.002 J	0.031	0.02 U	0.02 U	0.02 U	0.0053 J	0.055
Nickel (dissolved)	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	0.005 U	0.0039 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Selenium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	0.0008 J	0.00043 J	0.002 U	0.00024 J	0.002 U	0.002 U	0.002 U	0.00014 J
Thallium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.004 U	0.0029 J	0.0019 J	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Vanadium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	-	-	-
General Chemistry									
Cyanide (amenable)	mg/L	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	0.1 U	-	-	-	0.1 U

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-739I*	*CRA-740I*	*CRA-740M*	*CRA-741I*	*CRA-741M*	*CRA-742D*	*CRA-742D*	*CRA-742I*
Sample ID:		*GW-17358-040113-CT-004*	*GW-17358-040313-CT-017*	*GW-17358-040313-CT-018*	*GW-17358-040313-CT-020*	*GW-17358-040413-CT-025*	*GW-17358-041013-DR-071*	*GW-17358-041113-DR-084*	*GW-17358-041013-DR-072*
Sample Date:		*4/1/2013*	*4/3/2013*	*4/3/2013*	*4/3/2013*	*4/4/2013*	*4/10/2013*	*4/11/2013*	*4/10/2013*
Sample Type:		*Duplicate*							
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.00057 J	0.01 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.013 U	0.005 U	0.00015 J	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.00027 J	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.018	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.025 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.013 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.0022 J	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.0081	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.0025 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.058	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.005 U	0.002 U	0.002 U	0.002 U	0.002 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-739I*	*CRA-740I*	*CRA-740M*	*CRA-741I*	*CRA-741M*	*CRA-742D*	*CRA-742D*	*CRA-742I*
Sample ID:		*GW-17358-040113-CT-004*	*GW-17358-040313-CT-017*	*GW-17358-040313-CT-018*	*GW-17358-040313-CT-020*	*GW-17358-040413-CT-025*	*GW-17358-041013-DR-071*	*GW-17358-041113-DR-084*	*GW-17358-041013-DR-072*
Sample Date:		*4/1/2013*	*4/3/2013*	*4/3/2013*	*4/3/2013*	*4/4/2013*	*4/10/2013*	*4/11/2013*	*4/10/2013*
Sample Type:		*Duplicate*							
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
2,4,5-Trichlorophenol	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
2,4,6-Trichlorophenol	mg/L	0.0038 U	0.0043 U	0.0039 U	0.0038 U	0.004 U	0.004 U	0.0041 U	0.0042 U
2,4-Dichlorophenol	mg/L	0.0095 U	0.011 U	0.0098 U	0.0096 U	0.0099 U	0.01 U	0.01 U	0.011 U
2,4-Dimethylphenol	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
2,4-Dinitrophenol	mg/L	0.019 U	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.021 U	0.021 U
2,4-Dinitrotoluene	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
2,6-Dinitrotoluene	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
2-Chloronaphthalene	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
2-Chlorophenol	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
2-Methylnaphthalene	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
2-Methylphenol	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
2-Nitroaniline	mg/L	0.019 U	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.021 U	0.021 U
2-Nitrophenol	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
3&4-Methylphenol	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
3,3'-Dichlorobenzidine	mg/L	0.00095 U	0.0011 U	0.00098 U	0.00096 U	0.00099 U	0.001 U	0.001 U	0.0011 U
3-Nitroaniline	mg/L	0.019 U	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.021 U	0.021 U
4,6-Dinitro-2-methylphenol	mg/L	0.019 U	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.021 U	0.021 U
4-Bromophenyl phenyl ether	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
4-Chloro-3-methylphenol	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
4-Chloroaniline	mg/L	0.0095 U	0.011 U	0.0098 U	0.0096 U	0.0099 U	0.01 U	0.01 U	0.011 U
4-Chlorophenyl phenyl ether	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
4-Nitroaniline	mg/L	0.019 U	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.021 U	0.021 U
4-Nitrophenol	mg/L	0.019 U	0.021 U	0.02 U	0.019 U	0.02 U	0.02 U	0.021 U	0.021 U
Acenaphthene	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Acenaphthylene	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Acetophenone	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Anthracene	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Atrazine	mg/L	0.0029 U	0.0032 U	0.0029 U	0.0029 U	0.003 U	0.003 U	0.0031 U	0.0032 U
Benzaldehyde	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Benzo(a)anthracene	mg/L	0.00095 U	0.0011 U	0.00098 U	0.00096 U	0.00099 U	0.001 U	0.001 U	0.0011 U
Benzo(a)pyrene	mg/L	0.00095 U	0.0011 U	0.00098 U	0.00096 U	0.00099 U	0.001 U	0.001 U	0.0011 U
Benzo(b)fluoranthene	mg/L	0.00095 U	0.0011 U	0.00098 U	0.00096 U	0.00099 U	0.001 U	0.001 U	0.0011 U
Benzo(g,h,i)perylene	mg/L	0.00095 U	0.0011 U	0.00098 U	0.00096 U	0.00099 U	0.001 U	0.001 U	0.0011 U
Benzo(k)fluoranthene	mg/L	0.00095 U	0.0011 U	0.00098 U	0.00096 U	0.00099 U	0.001 U	0.001 U	0.0011 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
bis(2-Chloroethoxy)methane	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
bis(2-Chloroethyl)ether	mg/L	0.00095 U	0.0011 U	0.00098 U	0.00096 U	0.00099 U	0.001 U	0.001 U	0.0011 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Butyl benzylphthalate	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Caprolactam	mg/L	0.0095 U	0.0051 J	0.0098 U	0.0011 J	0.0099 U	0.01 U	0.01 U	0.011 U
Carbazole	mg/L	0.0095 U	0.011 U	0.0098 U	0.0096 U	0.0099 U	0.01 U	0.01 U	0.011 U
Chrysene	mg/L	0.00095 U	0.0011 U	0.00098 U	0.00096 U	0.00099 U	0.001 U	0.001 U	0.0011 U
Dibenz(a,h)anthracene	mg/L	0.0019 U	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0021 U	0.0021 U
Dibenzofuran	mg/L	0.0038 U	0.0043 U	0.0039 U	0.0038 U	0.004 U	0.004 U	0.0041 U	0.0042 U
Diethyl phthalate	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Dimethyl phthalate	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Di-n-butylphthalate	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Di-n-octyl phthalate	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-739I*	*CRA-740I*	*CRA-740M*	*CRA-741I*	*CRA-741M*	*CRA-742D*	*CRA-742D*	*CRA-742I*
Sample ID:		*GW-17358-040113-CT-004*	*GW-17358-040313-CT-017*	*GW-17358-040313-CT-018*	*GW-17358-040313-CT-020*	*GW-17358-040413-CT-025*	*GW-17358-041013-DR-071*	*GW-17358-041113-DR-084*	*GW-17358-041013-DR-072*
Sample Date:		*4/1/2013*	*4/3/2013*	*4/3/2013*	*4/3/2013*	*4/4/2013*	*4/10/2013*	*4/11/2013*	*4/10/2013*
Sample Type:		*Duplicate*							
Parameters	*Units*								
Fluoranthene	mg/L	0.00095 U	0.0011 U	0.00098 U	0.00096 U	0.00099 U	0.001 U	0.001 U	0.0011 U
Fluorene	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Hexachlorobenzene	mg/L	0.00019 U	0.00021 U	0.0002 U	0.00019 U	0.0002 U	0.0002 U	0.00021 U	0.00021 U
Hexachlorobutadiene	mg/L	0.00095 U	0.0011 U	0.00098 U	0.00096 U	0.00099 U	0.001 U	0.001 U	0.0011 U
Hexachlorocyclopentadiene	mg/L	R	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	R	0.0053 U
Hexachloroethane	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0019 U	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0021 U	0.0021 U
Isophorone	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Naphthalene	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Nitrobenzene	mg/L	0.0029 U	0.0032 U	0.0029 U	0.0029 U	0.003 U	0.003 U	0.0031 U	0.0032 U
N-Nitrosodi-n-propylamine	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
N-Nitrosodiphenylamine	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Pentachlorophenol	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Phenanthrene	mg/L	0.0019 U	0.0021 U	0.002 U	0.0019 U	0.002 U	0.002 U	0.0021 U	0.0021 U
Phenol	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
Pyrene	mg/L	0.0048 U	0.0053 U	0.0049 U	0.0048 U	0.005 U	0.005 U	0.0052 U	0.0053 U
PCBs									
Aroclor-1016	mg/L	0.0001 U	0.00011 U	0.000098 U	0.0000097 U	0.000099 U	0.0001 U	0.000096 U	0.0001 U
Aroclor-1221	mg/L	0.0001 U	0.00011 U	0.000098 U	0.0000097 U	0.000099 U	0.0001 U	0.000096 U	0.0001 U
Aroclor-1232	mg/L	0.0001 U	0.00011 U	0.000098 U	0.0000097 U	0.000099 U	0.0001 U	0.000096 U	0.0001 U
Aroclor-1242	mg/L	0.0001 U	0.00011 U	0.000098 U	0.0000097 U	0.000099 U	0.0001 U	0.000096 U	0.0001 U
Aroclor-1248	mg/L	0.0001 U	0.00011 U	0.000098 U	0.0000097 U	0.000099 U	0.0001 U	0.000096 U	0.0001 U
Aroclor-1254	mg/L	0.0001 U	0.00011 U	0.000098 U	0.0000097 U	0.000099 U	0.0001 U	0.000096 U	0.0001 U
Aroclor-1260	mg/L	0.0001 U	0.00011 U	0.000098 U	0.0000097 U	0.000099 U	0.0001 U	0.000096 U	0.0001 U
Aroclor-1262	mg/L	0.0001 U	0.00011 U	0.000098 U	0.0000097 U	0.000099 U	0.0001 U	0.000096 U	0.0001 U
Aroclor-1268	mg/L	0.0001 U	0.00011 U	0.000098 U	0.0000097 U	0.000099 U	0.0001 U	0.000096 U	0.0001 U
Total PCBs	mg/L	0	0	0	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.028 J	0.05 U	0.027 J	0.05 U	0.02 J	4.7	17 J	0.05 U
Aluminum (dissolved)	mg/L	-	-	-	-	-	-	0.038 J	-
Antimony	mg/L	0.002 U	0.002 U	0.0032 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	-	0.002 U	-
Arsenic	mg/L	0.0045 J	0.0062	0.002 J	0.011	0.0004 J	0.005	0.0085	0.0015 J
Arsenic (dissolved)	mg/L	-	-	-	-	-	-	0.003 J	-
Barium	mg/L	0.16	0.085 J	0.033 J	0.32	0.18	0.083 J	0.2	0.15
Barium (dissolved)	mg/L	-	-	-	-	-	-	0.067 J	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00023 J	0.0009 J	0.001 U
Beryllium (dissolved)	mg/L	-	-	-	-	-	-	0.001 U	-
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00014 J	0.001 U
Cadmium (dissolved)	mg/L	-	-	-	-	-	-	0.001 U	-
Chromium	mg/L	0.01 U	0.01 U	0.017	0.01 U	0.0095 J	0.0074 J	0.032	0.01 U
Chromium (dissolved)	mg/L	-	-	-	-	-	-	0.01 U	-
Cobalt	mg/L	0.00038 J	0.00033 J	0.00045 J	0.00027 J	0.00031 J	0.0022 J	0.011 J	0.001 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	-	0.00015 J	-
Copper	mg/L	0.00085 J	0.004 U	0.0026 J	0.004 U	0.004 U	0.0054	0.022	0.004 U
Copper (dissolved)	mg/L	-	-	-	-	-	-	0.004 U	-
Iron	mg/L	2.7	0.35	0.2 U	2.5	0.2 U	5.3	26	0.59

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-739I*	*CRA-740I*	*CRA-740M*	*CRA-741I*	*CRA-741M*	*CRA-742D*	*CRA-742D*	*CRA-742I*
Sample ID:		*GW-17358-040113-CT-004*	*GW-17358-040313-CT-017*	*GW-17358-040313-CT-018*	*GW-17358-040313-CT-020*	*GW-17358-040413-CT-025*	*GW-17358-041013-DR-071*	*GW-17358-041113-DR-084*	*GW-17358-041013-DR-072*
Sample Date:		*4/1/2013*	*4/3/2013*	*4/3/2013*	*4/3/2013*	*4/4/2013*	*4/10/2013*	*4/11/2013*	*4/10/2013*
Sample Type:		*Duplicate*							
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	-	-	-	-	0.2 U	-
Lead	mg/L	0.00046 J	0.0015 J	0.003 U	0.003	0.003 U	0.0025 J	0.0098	0.00065 J
Lead (dissolved)	mg/L	-	-	-	-	-	-	0.003 U	-
Manganese	mg/L	0.066	0.21	0.05 U	0.25	0.0045 J	0.084	0.39	0.27
Manganese (dissolved)	mg/L	-	-	-	-	-	-	0.011 J	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00032	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	-	-	-	-	0.0002 U	-
Nickel	mg/L	0.052	0.0017 J	0.0015 J	0.0031 J	0.0012 J	0.0073 J	0.032	0.0022 J
Nickel (dissolved)	mg/L	-	-	-	-	-	-	0.02 U	-
Selenium	mg/L	0.005 U	0.005 U	0.0048 J	0.005 U	0.0028 J	0.005 U	0.0016 J	0.005 U
Selenium (dissolved)	mg/L	-	-	-	-	-	-	0.005 U	-
Silver	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	-	-	-	-	-	0.0002 U	-
Thallium	mg/L	0.0002 J	0.00028 J	0.00021 J	0.002 U	0.002 U	0.002 U	0.00061 J	0.002 U
Thallium (dissolved)	mg/L	-	-	-	-	-	-	0.00038 J	-
Vanadium	mg/L	0.004 U	0.004 U	0.00049 J	0.004 U	0.004 U	0.012	0.049	0.004 U
Vanadium (dissolved)	mg/L	-	-	-	-	-	-	0.004 U	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.093 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	-	0.05 U	-
General Chemistry									
Cyanide (amenable)	mg/L	-	-	-	-	-	0.005 U	0.005 U	0.005 U
Phosphorus	mg/L	0.1 U	0.1 U	0.1 U	-	-	0.21	0.52	0.035 J

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-743M*	*CRA-744M*	*CRA-745M*	*CRA-745M*	*CRA-749M*	*CRA-750M*	*CRA-751M*	*CRA-752M*
Sample ID:		*GW-17358-040413-CT-021*	*GW-17358-040313-CT-019*	*GW-17358-040413-CT-022*	*GW-17358-040413-CT-023*	*GW-17358-040413-CT-024*	*GW-17358-040413-CT-027*	*GW-17358-040413-CT-028*	*GW-17358-040413-CT-029*
Sample Date:		*4/4/2013*	*4/3/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*
Sample Type:					*Duplicate*				
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0079	0.0013	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0027 J	0.001 U	0.0024
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Chloroform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Chloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.051	0.001 U	0.014
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.05 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.025 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.13	0.00049 J	0.001 U
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0033 J	0.001 U	0.002
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.049	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.005 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.01 U	0.002 U	0.002 U

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-743M*	*CRA-744M*	*CRA-745M*	*CRA-745M*	*CRA-749M*	*CRA-750M*	*CRA-751M*	*CRA-752M*
Sample ID:		*GW-17358-040413-CT-021*	*GW-17358-040313-CT-019*	*GW-17358-040413-CT-022*	*GW-17358-040413-CT-023*	*GW-17358-040413-CT-024*	*GW-17358-040413-CT-027*	*GW-17358-040413-CT-028*	*GW-17358-040413-CT-029*
Sample Date:		*4/4/2013*	*4/3/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*
Sample Type:					*Duplicate*				
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
2,4,5-Trichlorophenol	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
2,4,6-Trichlorophenol	mg/L	0.0042 U	0.0041 U	0.0042 U	0.0042 U	0.0038 U	0.004 U	0.0043 U	0.0042 U
2,4-Dichlorophenol	mg/L	0.011 U	0.01 U	0.011 U	0.01 U	0.0095 U	0.01 U	0.011 U	0.01 U
2,4-Dimethylphenol	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
2,4-Dinitrophenol	mg/L	0.021 U	0.021 U	0.021 U	0.021 U	0.019 U	0.02 U	0.022 U	0.021 U
2,4-Dinitrotoluene	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
2,6-Dinitrotoluene	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
2-Chloronaphthalene	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
2-Chlorophenol	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
2-Methylnaphthalene	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
2-Methylphenol	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
2-Nitroaniline	mg/L	0.021 U	0.021 U	0.021 U	0.021 U	0.019 U	0.02 U	0.022 U	0.021 U
2-Nitrophenol	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
3&4-Methylphenol	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
3,3'-Dichlorobenzidine	mg/L	0.0011 U	0.001 U	0.0011 U	0.001 U	0.00095 U	0.001 U	0.0011 U	0.001 U
3-Nitroaniline	mg/L	0.021 U	0.021 U	0.021 U	0.021 U	0.019 U	0.02 U	0.022 U	0.021 U
4,6-Dinitro-2-methylphenol	mg/L	0.021 U	0.021 U	0.021 U	0.021 U	0.019 U	0.02 U	0.022 U	0.021 U
4-Bromophenyl phenyl ether	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
4-Chloro-3-methylphenol	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
4-Chloroaniline	mg/L	0.011 U	0.01 U	0.011 U	0.01 U	0.0095 U	0.01 U	0.011 U	0.01 U
4-Chlorophenyl phenyl ether	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
4-Nitroaniline	mg/L	0.021 U	0.021 U	0.021 U	0.021 U	0.019 U	0.02 U	0.022 U	0.021 U
4-Nitrophenol	mg/L	0.021 U	0.021 U	0.021 U	0.021 U	0.019 U	0.02 U	0.022 U	0.021 U
Acenaphthene	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Acenaphthylene	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Acetophenone	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Anthracene	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Atrazine	mg/L	0.0032 U	0.0031 U	0.0032 U	0.0031 U	0.0029 U	0.003 U	0.0032 U	0.0031 U
Benzaldehyde	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Benzo(a)anthracene	mg/L	0.0011 U	0.001 U	0.0011 U	0.001 U	0.00095 U	0.001 U	0.0011 U	0.001 U
Benzo(a)pyrene	mg/L	0.0011 U	0.001 U	0.0011 U	0.001 U	0.00095 U	0.001 U	0.0011 U	0.001 U
Benzo(b)fluoranthene	mg/L	0.0011 U	0.001 U	0.0011 U	0.001 U	0.00095 U	0.001 U	0.0011 U	0.001 U
Benzo(g,h,i)perylene	mg/L	0.0011 U	0.001 U	0.0011 U	0.00025 J	0.00095 U	0.001 U	0.0011 U	0.001 U
Benzo(k)fluoranthene	mg/L	0.0011 U	0.001 U	0.0011 U	0.001 U	0.00095 U	0.001 U	0.0011 U	0.001 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
bis(2-Chloroethoxy)methane	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
bis(2-Chloroethyl)ether	mg/L	0.0011 U	0.001 U	0.0011 U	0.001 U	0.00095 U	0.001 U	0.0011 U	0.001 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Butyl benzylphthalate	mg/L	0.0053 U	0.00086 J	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Caprolactam	mg/L	0.011 U	0.0011 J	0.011 U	0.01 U	0.0095 U	0.01 U	0.011 U	0.01 U
Carbazole	mg/L	0.011 U	0.01 U	0.011 U	0.01 U	0.0095 U	0.01 U	0.011 U	0.01 U
Chrysene	mg/L	0.0011 U	0.001 U	0.0011 U	0.001 U	0.00095 U	0.001 U	0.0011 U	0.001 U
Dibenz(a,h)anthracene	mg/L	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0019 U	0.002 U	0.0022 U	0.0021 U
Dibenzofuran	mg/L	0.0042 U	0.0041 U	0.0042 U	0.0042 U	0.0038 U	0.004 U	0.0043 U	0.0042 U
Diethyl phthalate	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Dimethyl phthalate	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Di-n-butylphthalate	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Di-n-octyl phthalate	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-743M*	*CRA-744M*	*CRA-745M*	*CRA-745M*	*CRA-749M*	*CRA-750M*	*CRA-751M*	*CRA-752M*
Sample ID:		*GW-17358-040413-CT-021*	*GW-17358-040313-CT-019*	*GW-17358-040413-CT-022*	*GW-17358-040413-CT-023*	*GW-17358-040413-CT-024*	*GW-17358-040413-CT-027*	*GW-17358-040413-CT-028*	*GW-17358-040413-CT-029*
Sample Date:		*4/4/2013*	*4/3/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*
Sample Type:					*Duplicate*				
Parameters	*Units*								
Fluoranthene	mg/L	0.0011 U	0.001 U	0.0011 U	0.001 U	0.00095 U	0.001 U	0.0011 U	0.001 U
Fluorene	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Hexachlorobenzene	mg/L	0.00021 U	0.00021 U	0.00021 U	0.00021 U	0.00019 U	0.0002 U	0.00022 U	0.00021 U
Hexachlorobutadiene	mg/L	0.0011 U	0.001 U	0.0011 U	0.001 U	0.00095 U	0.001 U	0.0011 U	0.001 U
Hexachlorocyclopentadiene	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Hexachloroethane	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0019 U	0.002 U	0.0022 U	0.0021 U
Isophorone	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Naphthalene	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Nitrobenzene	mg/L	0.0032 U	0.0031 U	0.0032 U	0.0031 U	0.0029 U	0.003 U	0.0032 U	0.0031 U
N-Nitrosodi-n-propylamine	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
N-Nitrosodiphenylamine	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Pentachlorophenol	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Phenanthrene	mg/L	0.0021 U	0.0021 U	0.0021 U	0.0021 U	0.0019 U	0.002 U	0.0022 U	0.0021 U
Phenol	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
Pyrene	mg/L	0.0053 U	0.0052 U	0.0053 U	0.0052 U	0.0048 U	0.0051 U	0.0054 U	0.0052 U
PCBs									
Aroclor-1016	mg/L	0.00011 U	0.0001 U	0.00011 U	0.0001 U	0.000095 U	0.000099 U	0.000095 U	0.0001 U
Aroclor-1221	mg/L	0.00011 U	0.0001 U	0.00011 U	0.0001 U	0.000095 U	0.000099 U	0.000095 U	0.0001 U
Aroclor-1232	mg/L	0.00011 U	0.0001 U	0.00011 U	0.0001 U	0.000095 U	0.000099 U	0.000095 U	0.0001 U
Aroclor-1242	mg/L	0.00011 U	0.0001 U	0.00011 U	0.0001 U	0.000095 U	0.000099 U	0.000095 U	0.0001 U
Aroclor-1248	mg/L	0.00011 U	0.0001 U	0.00011 U	0.0001 U	0.000095 U	0.000099 U	0.000095 U	0.0001 U
Aroclor-1254	mg/L	0.00011 U	0.0001 U	0.00011 U	0.0001 U	0.000095 U	0.000099 U	0.000095 U	0.0001 U
Aroclor-1260	mg/L	0.00011 U	0.0001 U	0.00011 U	0.0001 U	0.000095 U	0.000099 U	0.000095 U	0.0001 U
Aroclor-1262	mg/L	0.00011 U	0.0001 U	0.00011 U	0.0001 U	0.000095 U	0.000099 U	0.000095 U	0.0001 U
Aroclor-1268	mg/L	0.00011 U	0.0001 U	0.00011 U	0.0001 U	0.000095 U	0.000099 U	0.000095 U	0.0001 U
Total PCBs	mg/L	0	0	0	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.45	0.05 U	0.05 U	0.05 U	0.023 J	0.12	0.15	0.039 J
Aluminum (dissolved)	mg/L	-	-	-	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	0.00085 J	0.0015 J	0.005 U	0.005 U	0.005 U	0.00041 J	0.00078 J	0.00099 J
Arsenic (dissolved)	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	0.095 J	0.019 J	0.031 J	0.03 J	0.047 J	0.02 J	0.029 J	0.07 J
Barium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00036 J	0.001 U
Beryllium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00042 J	0.00019 J
Cadmium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	0.0013 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.00095 J	0.01 U
Chromium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	0.0012 J	0.0013 J	0.0032 J	0.0029 J	0.02 U	0.0011 J	0.0026 J	0.00082 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	0.0038 J	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.0013 J	0.00054 J
Copper (dissolved)	mg/L	-	-	-	-	-	-	-	-
Iron	mg/L	0.8	3.7	4.6	4.5	0.2 U	0.062 J	0.2 U	0.068 J

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-743M*	*CRA-744M*	*CRA-745M*	*CRA-745M*	*CRA-749M*	*CRA-750M*	*CRA-751M*	*CRA-752M*
Sample ID:		*GW-17358-040413-CT-021*	*GW-17358-040313-CT-019*	*GW-17358-040413-CT-022*	*GW-17358-040413-CT-023*	*GW-17358-040413-CT-024*	*GW-17358-040413-CT-027*	*GW-17358-040413-CT-028*	*GW-17358-040413-CT-029*
Sample Date:		*4/4/2013*	*4/3/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*	*4/4/2013*
Sample Type:					*Duplicate*				
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	0.00055 J	0.003 U	0.003 U	0.003 U	0.003 U	0.00023 J	0.00064 J	0.00028 J
Lead (dissolved)	mg/L	-	-	-	-	-	-	-	-
Manganese	mg/L	0.037 J	0.52	1.6	1.5	0.0049 J	0.55	1.4	0.35
Manganese (dissolved)	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.00028	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	0.0046 J	0.002 J	0.0026 J	0.0023 J	0.001 J	0.0044 J	0.0081 J	0.0033 J
Nickel (dissolved)	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	0.022	0.0043 J	0.0019 J	0.0015 J	0.005	0.00092 J	0.0012 J	0.0017 J
Selenium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	0.002 U	0.00018 J	0.002 U	0.002 U	0.002 U	0.002 U	0.0014 J	0.0006 J
Thallium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.0012 J	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.00066 J	0.004 U
Vanadium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	-	-	-
General Chemistry									
Cyanide (amenable)	mg/L	-	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	-
Phosphorus	mg/L	-	-	0.1 U	0.1 U	-	-	-	-

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-753M*	*CRA-755M*	*CRA-756M*	*CRA-757M*	*CRA-757M*	*CRA-775M*	*CRA-775M*	*CRA-784I*
Sample ID:		*GW-17358-040413-CT-030*	*GW-17358-040513-CT-034*	*GW-17358-040813-JY-054*	*GW-17358-040813-JY-056*	*GW-17358-040813-JY-057*	*GW-17358-041113-EM-093*	*GW-17358-041113-EM-094*	*GW-17358-040413-CT-026*
Sample Date:		*4/4/2013*	*4/5/2013*	*4/8/2013*	*4/8/2013*	*4/8/2013*	*4/11/2013*	*4/11/2013*	*4/4/2013*
Sample Type:								*Duplicate*	
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.027	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.0087	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.00053 J	0.001 U	0.00052 J	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.0017 J	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.01 U	0.025 U	0.33 U	0.33 U	0.00089 J	0.00068 J	0.01 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.025 U	0.33 U	0.33 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.01 U	0.025 U	0.33 U	0.33 U	0.00039 J	0.00038 J	0.01 U
Acetone	mg/L	0.01 U	0.01 UJ	0.025 U	0.33 U	0.33 U	0.0017 J	0.0015 J	0.01 U
Benzene	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.00033 J	0.17 U	0.17 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.00049 J	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.0049	0.001 U	0.024	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.025 U	0.33 U	0.33 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.013 U	0.17 U	0.17 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.077	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.0009 J	0.001 U	0.01	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.0068	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.001 U	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.00079 J	0.001 U	0.0025 U	0.033 U	0.033 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.0007 J	0.001 U	0.00068 J	0.97	0.95	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.005 U	0.067 U	0.067 U	0.00056 J	0.0006 J	0.002 U

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-753M*	*CRA-755M*	*CRA-756M*	*CRA-757M*	*CRA-757M*	*CRA-775M*	*CRA-775M*	*CRA-784I*
Sample ID:		*GW-17358-040413-CT-030*	*GW-17358-040513-CT-034*	*GW-17358-040813-JY-054*	*GW-17358-040813-JY-056*	*GW-17358-040813-JY-057*	*GW-17358-041113-EM-093*	*GW-17358-041113-EM-094*	*GW-17358-040413-CT-026*
Sample Date:		*4/4/2013*	*4/5/2013*	*4/8/2013*	*4/8/2013*	*4/8/2013*	*4/11/2013*	*4/11/2013*	*4/4/2013*
Sample Type:								*Duplicate*	
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
2,4,5-Trichlorophenol	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
2,4,6-Trichlorophenol	mg/L	0.0038 U	0.0038 U	0.0095 U	0.0038 U	0.0038 U	0.04 U	0.039 U	0.0038 U
2,4-Dichlorophenol	mg/L	0.0095 U	0.0096 U	0.024 U	0.0095 U	0.0095 U	0.1 U	0.098 U	0.0095 U
2,4-Dimethylphenol	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
2,4-Dinitrophenol	mg/L	0.019 U	0.019 U	0.048 U	0.019 U	0.019 U	0.2 U	0.2 U	0.019 U
2,4-Dinitrotoluene	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
2,6-Dinitrotoluene	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
2-Chloronaphthalene	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
2-Chlorophenol	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
2-Methylnaphthalene	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
2-Methylphenol	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
2-Nitroaniline	mg/L	0.019 U	0.019 U	0.048 U	0.019 U	0.019 U	0.2 U	0.2 U	0.019 U
2-Nitrophenol	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
3&4-Methylphenol	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
3,3'-Dichlorobenzidine	mg/L	0.00095 U	0.00096 U	0.0024 U	0.00095 U	0.00095 U	0.01 U	0.0098 U	0.00095 U
3-Nitroaniline	mg/L	0.019 U	0.019 U	0.048 U	0.019 U	0.019 U	0.2 U	0.2 U	0.019 U
4,6-Dinitro-2-methylphenol	mg/L	0.019 U	0.019 U	0.048 U	0.019 U	0.019 U	0.2 U	0.2 U	0.019 U
4-Bromophenyl phenyl ether	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
4-Chloro-3-methylphenol	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
4-Chloroaniline	mg/L	0.0095 U	0.0096 U	0.024 U	0.0095 U	0.0095 U	0.1 U	0.098 U	0.0095 U
4-Chlorophenyl phenyl ether	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
4-Nitroaniline	mg/L	0.019 U	0.019 U	0.048 U	0.019 U	0.019 U	0.2 U	0.2 U	0.019 U
4-Nitrophenol	mg/L	0.019 U	0.019 U	0.048 U	0.019 U	0.019 U	0.2 U	0.2 U	0.019 U
Acenaphthene	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Acenaphthylene	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Acetophenone	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Anthracene	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Atrazine	mg/L	0.0029 U	0.0029 U	0.0071 U	0.0029 U	0.0029 U	0.03 U	0.029 U	0.0029 U
Benzaldehyde	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Benzo(a)anthracene	mg/L	0.00095 U	0.00096 U	0.0024 U	0.00095 U	0.00095 U	0.01 U	0.0098 U	0.00095 U
Benzo(a)pyrene	mg/L	0.00095 U	0.00096 U	0.0024 U	0.00095 U	0.00095 U	0.01 U	0.0098 U	0.00095 U
Benzo(b)fluoranthene	mg/L	0.00095 U	0.00096 U	0.0024 U	0.00095 U	0.00095 U	0.01 U	0.0098 U	0.00095 U
Benzo(g,h,i)perylene	mg/L	0.00095 U	0.00096 U	0.0024 U	0.00095 U	0.00095 U	0.01 U	0.0098 U	0.00095 U
Benzo(k)fluoranthene	mg/L	0.00095 U	0.00096 U	0.0024 U	0.00095 U	0.00095 U	0.01 U	0.0098 U	0.00095 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
bis(2-Chloroethoxy)methane	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
bis(2-Chloroethyl)ether	mg/L	0.00095 U	0.00096 U	0.0024 U	0.00095 U	0.00095 U	0.01 U	0.0098 U	0.00095 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0048 U	0.0011 J	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Butyl benzylphthalate	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Caprolactam	mg/L	0.0095 U	0.0096 U	0.024 U	0.0095 U	0.0095 U	0.1 U	0.098 U	0.0095 U
Carbazole	mg/L	0.0095 U	0.0096 U	0.024 U	0.0095 U	0.0095 U	0.1 U	0.098 U	0.0095 U
Chrysene	mg/L	0.00095 U	0.00096 U	0.0024 U	0.00095 U	0.00095 U	0.01 U	0.0098 U	0.00095 U
Dibenz(a,h)anthracene	mg/L	0.0019 U	0.0019 U	0.0048 U	0.0019 U	0.0019 U	0.02 U	0.02 U	0.0019 U
Dibenzofuran	mg/L	0.0038 U	0.0038 U	0.0095 U	0.0038 U	0.0038 U	0.04 U	0.039 U	0.0038 U
Diethyl phthalate	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Dimethyl phthalate	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Di-n-butylphthalate	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Di-n-octyl phthalate	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-753M*	*CRA-755M*	*CRA-756M*	*CRA-757M*	*CRA-757M*	*CRA-775M*	*CRA-775M*	*CRA-784I*
Sample ID:		*GW-17358-040413-CT-030*	*GW-17358-040513-CT-034*	*GW-17358-040813-JY-054*	*GW-17358-040813-JY-056*	*GW-17358-040813-JY-057*	*GW-17358-041113-EM-093*	*GW-17358-041113-EM-094*	*GW-17358-040413-CT-026*
Sample Date:		*4/4/2013*	*4/5/2013*	*4/8/2013*	*4/8/2013*	*4/8/2013*	*4/11/2013*	*4/11/2013*	*4/4/2013*
Sample Type:								*Duplicate*	
Parameters	*Units*								
Fluoranthene	mg/L	0.00095 U	0.00096 U	0.0024 U	0.00095 U	0.00095 U	0.01 U	0.0098 U	0.00095 U
Fluorene	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Hexachlorobenzene	mg/L	0.00019 U	0.00019 U	0.00048 U	0.00019 U	0.00019 U	0.002 U	0.002 U	0.00019 U
Hexachlorobutadiene	mg/L	0.00095 U	0.00096 U	0.0024 U	0.00095 U	0.00095 U	0.01 U	0.0098 U	0.00095 U
Hexachlorocyclopentadiene	mg/L	0.0048 U	0.0048 U	R	R	R	0.05 U	0.049 U	0.0048 U
Hexachloroethane	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0019 U	0.0019 U	0.0048 U	0.0019 U	0.0019 U	0.02 U	0.02 U	0.0019 U
Isophorone	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Naphthalene	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Nitrobenzene	mg/L	0.0029 U	0.0029 U	0.0071 U	0.0029 U	0.0029 U	0.03 U	0.029 U	0.0029 U
N-Nitrosodi-n-propylamine	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
N-Nitrosodiphenylamine	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Pentachlorophenol	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Phenanthrene	mg/L	0.0019 U	0.0019 U	0.0048 U	0.0019 U	0.0019 U	0.02 U	0.02 U	0.0019 U
Phenol	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
Pyrene	mg/L	0.0048 U	0.0048 U	0.012 U	0.0048 U	0.0048 U	0.05 U	0.049 U	0.0048 U
PCBs									
Aroclor-1016	mg/L	0.000095 U	0.000096 U	0.000095 U	0.000096 U	0.000096 U	0.0001 U	0.000099 U	0.0001 U
Aroclor-1221	mg/L	0.000095 U	0.000096 U	0.000095 U	0.000096 U	0.000096 U	0.0001 U	0.000099 U	0.0001 U
Aroclor-1232	mg/L	0.000095 U	0.000096 U	0.000095 U	0.000096 U	0.000096 U	0.0001 U	0.000099 U	0.0001 U
Aroclor-1242	mg/L	0.000095 U	0.000096 U	0.000095 U	0.000096 U	0.000096 U	0.0001 U	0.000099 U	0.0001 U
Aroclor-1248	mg/L	0.000095 U	0.000096 U	0.000095 U	0.000096 U	0.000096 U	0.0001 U	0.000099 U	0.0001 U
Aroclor-1254	mg/L	0.000095 U	0.000096 U	0.000095 U	0.000096 U	0.000096 U	0.0001 U	0.000099 U	0.0001 U
Aroclor-1260	mg/L	0.000095 U	0.000096 U	0.000095 U	0.000096 U	0.000096 U	0.0001 U	0.000099 U	0.0001 U
Aroclor-1262	mg/L	0.000095 U	0.000096 U	0.000095 U	0.000096 U	0.000096 U	0.0001 U	0.000099 U	0.0001 U
Aroclor-1268	mg/L	0.000095 U	0.000096 U	0.000095 U	0.000096 U	0.000096 U	0.0001 U	0.000099 U	0.0001 U
Total PCBs	mg/L	0	0	0	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.05 U	0.05 U	0.02 J	0.019 J	0.02 J	0.05 U	0.05 U	0.05 U
Aluminum (dissolved)	mg/L	-	-	-	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	0.01	0.00063 J	0.065	0.013	0.015	0.022	0.022	0.018
Arsenic (dissolved)	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	0.05 J	0.076 J	0.15	0.24	0.25	0.51	0.52	0.072 J
Barium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Beryllium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.00086 J	0.00083 J	0.00087 J	0.01 U
Chromium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	0.00036 J	0.001 J	0.0024 J	0.0018 J	0.0019 J	0.0016 J	0.0016 J	0.0001 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	0.0004 J	0.004 U	0.004 U	0.00034 J	0.004 U	0.004 U	0.004 U	0.004 U
Copper (dissolved)	mg/L	-	-	-	-	-	-	-	-
Iron	mg/L	0.082 J	0.2 U	15	7	7.7	15	14	1.3

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-753M*	*CRA-755M*	*CRA-756M*	*CRA-757M*	*CRA-757M*	*CRA-775M*	*CRA-775M*	*CRA-784I*
Sample ID:		*GW-17358-040413-CT-030*	*GW-17358-040513-CT-034*	*GW-17358-040813-JY-054*	*GW-17358-040813-JY-056*	*GW-17358-040813-JY-057*	*GW-17358-041113-EM-093*	*GW-17358-041113-EM-094*	*GW-17358-040413-CT-026*
Sample Date:		*4/4/2013*	*4/5/2013*	*4/8/2013*	*4/8/2013*	*4/8/2013*	*4/11/2013*	*4/11/2013*	*4/4/2013*
Sample Type:								*Duplicate*	
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	0.003 U	0.003 U	0.003 U	0.00026 J	0.00022 J	0.00036 J	0.00048 J	0.003 U
Lead (dissolved)	mg/L	-	-	-	-	-	-	-	-
Manganese	mg/L	0.22	0.66	0.33	0.74	0.8	0.61	0.61	0.065
Manganese (dissolved)	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.00027
Mercury (dissolved)	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	0.0014 J	0.0072 J	0.016 J	0.016 J	0.017 J	0.0033 J	0.0037 J	0.00022 J
Nickel (dissolved)	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	0.005 U	0.0038 J	0.005 U	0.005 U	0.005 U	0.0011 J	0.0011 J	0.005 U
Selenium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	0.0003 J	0.00014 J	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Thallium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.00055 J	0.00048 J	0.004 U
Vanadium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	-	-	-
General Chemistry									
Cyanide (amenable)	mg/L	0.005 U	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	0.078 J	-	-	0.29	0.27	-

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-785D*	*CRA-785D*	*CRA-785I*	*CRA-787I*	*CRA-789M*	*CRA-790M*	*CRA-791M*	*CRA-792M*
Sample ID:		*GW-17358-041013-JY-077*	*GW-17358-041113-DR-086*	*GW-17358-041013-JY-078*	*GW-17358-040113-CT-005*	*GW-17358-040913-JY-066*	*GW-17358-040913-JY-060*	*GW-17358-040513-CT-033*	*GW-17358-040913-JY-058*
Sample Date:		*4/10/2013*	*4/11/2013*	*4/10/2013*	*4/1/2013*	*4/9/2013*	*4/9/2013*	*4/5/2013*	*4/9/2013*
Sample Type:									
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.0014 J	0.01 U	0.01 U	0.01 U	0.01 U	0.01 UJ	0.01 U
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.0012 J	0.0011 J	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.00073 J	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.00087 J	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.0003 J	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-785D*	*CRA-785D*	*CRA-785I*	*CRA-787I*	*CRA-789M*	*CRA-790M*	*CRA-791M*	*CRA-792M*
Sample ID:		*GW-17358-041013-JY-077*	*GW-17358-041113-DR-086*	*GW-17358-041013-JY-078*	*GW-17358-040113-CT-005*	*GW-17358-040913-JY-066*	*GW-17358-040913-JY-060*	*GW-17358-040513-CT-033*	*GW-17358-040913-JY-058*
Sample Date:		*4/10/2013*	*4/11/2013*	*4/10/2013*	*4/1/2013*	*4/9/2013*	*4/9/2013*	*4/5/2013*	*4/9/2013*
Sample Type:									
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
2,4,5-Trichlorophenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
2,4,6-Trichlorophenol	mg/L	0.0038 U	0.0043 U	0.0038 U	0.0039 U	0.0041 U	0.004 U	0.0039 U	0.0043 U
2,4-Dichlorophenol	mg/L	0.0096 U	0.011 U	0.0095 U	0.0097 U	0.01 U	0.01 U	0.0097 U	0.011 U
2,4-Dimethylphenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
2,4-Dinitrophenol	mg/L	0.019 U	0.022 U	0.019 U	0.019 U	0.02 U	0.02 U	0.019 U	0.022 U
2,4-Dinitrotoluene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
2,6-Dinitrotoluene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
2-Chloronaphthalene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
2-Chlorophenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
2-Methylnaphthalene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
2-Methylphenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
2-Nitroaniline	mg/L	0.019 U	0.022 U	0.019 U	0.019 U	0.02 U	0.02 U	0.019 U	0.022 U
2-Nitrophenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
3&4-Methylphenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
3,3'-Dichlorobenzidine	mg/L	0.00096 U	0.0011 U	0.00095 U	0.00097 U	0.001 U	0.001 U	0.00097 U	0.0011 U
3-Nitroaniline	mg/L	0.019 U	0.022 U	0.019 U	0.019 U	0.02 U	0.02 U	0.019 U	0.022 U
4,6-Dinitro-2-methylphenol	mg/L	0.019 U	0.022 U	0.019 U	0.019 U	0.02 U	0.02 U	0.019 U	0.022 U
4-Bromophenyl phenyl ether	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
4-Chloro-3-methylphenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
4-Chloroaniline	mg/L	0.0096 U	0.011 U	0.0095 U	0.0097 U	0.01 U	0.01 U	0.0097 U	0.011 U
4-Chlorophenyl phenyl ether	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
4-Nitroaniline	mg/L	0.019 U	0.022 U	0.019 U	0.019 U	0.02 U	0.02 U	0.019 U	0.022 U
4-Nitrophenol	mg/L	0.019 U	0.022 U	0.019 U	0.019 U	0.02 U	0.02 U	0.019 U	0.022 U
Acenaphthene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Acenaphthylene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Acetophenone	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Anthracene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Atrazine	mg/L	0.0029 U	0.0032 U	0.0029 U	0.0029 U	0.0031 U	0.003 U	0.0029 U	0.0033 U
Benzaldehyde	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Benzo(a)anthracene	mg/L	0.00096 U	0.0011 U	0.00095 U	0.00097 U	0.001 U	0.001 U	0.00097 U	0.0011 U
Benzo(a)pyrene	mg/L	0.00096 U	0.0011 U	0.00095 U	0.00097 U	0.001 U	0.001 U	0.00097 U	0.0011 U
Benzo(b)fluoranthene	mg/L	0.00096 U	0.0011 U	0.00095 U	0.00097 U	0.001 U	0.001 U	0.00097 U	0.0011 U
Benzo(g,h,i)perylene	mg/L	0.00096 U	0.0011 U	0.00095 U	0.00097 U	0.001 U	0.001 U	0.00097 U	0.0011 U
Benzo(k)fluoranthene	mg/L	0.00096 U	0.0011 U	0.00095 U	0.00097 U	0.001 U	0.001 U	0.00097 U	0.0011 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
bis(2-Chloroethoxy)methane	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
bis(2-Chloroethyl)ether	mg/L	0.00096 U	0.0011 U	0.00095 U	0.00097 U	0.001 U	0.001 U	0.00097 U	0.0011 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Butyl benzylphthalate	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Caprolactam	mg/L	0.0096 U	0.00099 J	0.0095 U	0.0097 U	0.01 U	0.01 U	0.0097 U	0.011 U
Carbazole	mg/L	0.0096 U	0.011 U	0.0095 U	0.0097 U	0.01 U	0.01 U	0.0097 U	0.011 U
Chrysene	mg/L	0.00096 U	0.0011 U	0.00095 U	0.00097 U	0.001 U	0.001 U	0.00097 U	0.0011 U
Dibenz(a,h)anthracene	mg/L	0.0019 U	0.0022 U	0.0019 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0022 U
Dibenzofuran	mg/L	0.0038 U	0.0043 U	0.0038 U	0.0039 U	0.0041 U	0.004 U	0.0039 U	0.0043 U
Diethyl phthalate	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Dimethyl phthalate	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Di-n-butylphthalate	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Di-n-octyl phthalate	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-785D*	*CRA-785D*	*CRA-785I*	*CRA-787I*	*CRA-789M*	*CRA-790M*	*CRA-791M*	*CRA-792M*
Sample ID:		*GW-17358-041013-JY-077*	*GW-17358-041113-DR-086*	*GW-17358-041013-JY-078*	*GW-17358-040113-CT-005*	*GW-17358-040913-JY-066*	*GW-17358-040913-JY-060*	*GW-17358-040513-CT-033*	*GW-17358-040913-JY-058*
Sample Date:		*4/10/2013*	*4/11/2013*	*4/10/2013*	*4/1/2013*	*4/9/2013*	*4/9/2013*	*4/5/2013*	*4/9/2013*
Sample Type:									
Parameters	*Units*								
Fluoranthene	mg/L	0.00096 U	0.0011 U	0.00095 U	0.00097 U	0.001 U	0.001 U	0.00097 U	0.0011 U
Fluorene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Hexachlorobenzene	mg/L	0.00019 U	0.00022 U	0.00019 U	0.00019 U	0.0002 U	0.0002 U	0.00019 U	0.00022 U
Hexachlorobutadiene	mg/L	0.00096 U	0.0011 U	0.00095 U	0.00097 U	0.001 U	0.001 U	0.00097 U	0.0011 U
Hexachlorocyclopentadiene	mg/L	0.0048 U	0.0054 U	0.0048 U	R	R	R	0.0049 U	R
Hexachloroethane	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0019 U	0.0022 U	0.0019 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0022 U
Isophorone	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Naphthalene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Nitrobenzene	mg/L	0.0029 U	0.0032 U	0.0029 U	0.0029 U	0.0031 U	0.003 U	0.0029 U	0.0033 U
N-Nitrosodi-n-propylamine	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
N-Nitrosodiphenylamine	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Pentachlorophenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Phenanthrene	mg/L	0.0019 U	0.0022 U	0.0019 U	0.0019 U	0.002 U	0.002 U	0.0019 U	0.0022 U
Phenol	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
Pyrene	mg/L	0.0048 U	0.0054 U	0.0048 U	0.0049 U	0.0051 U	0.005 U	0.0049 U	0.0054 U
PCBs									
Aroclor-1016	mg/L	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000099 U	0.000095 U	0.000099 U	0.000095 U
Aroclor-1221	mg/L	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000099 U	0.000095 U	0.000099 U	0.000095 U
Aroclor-1232	mg/L	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000099 U	0.000095 U	0.000099 U	0.000095 U
Aroclor-1242	mg/L	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000099 U	0.000095 U	0.000099 U	0.000095 U
Aroclor-1248	mg/L	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000099 U	0.000095 U	0.000099 U	0.000095 U
Aroclor-1254	mg/L	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000099 U	0.000095 U	0.000099 U	0.000095 U
Aroclor-1260	mg/L	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000099 U	0.000095 U	0.000099 U	0.000095 U
Aroclor-1262	mg/L	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000099 U	0.000095 U	0.000099 U	0.000095 U
Aroclor-1268	mg/L	0.0001 U	0.00011 U	0.000095 U	0.0001 U	0.000099 U	0.000095 U	0.000099 U	0.000095 U
Total PCBs	mg/L	0	0	0	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	1.9	7.9 J	0.058	0.05 U	0.02 J	0.019 J	0.05 U	0.05 U
Aluminum (dissolved)	mg/L	-	0.3	-	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	0.002 U	-	-	-	-	-	-
Arsenic	mg/L	0.0011 J	0.0027 J	0.02	0.017	0.025	0.0083	0.014	0.0012 J
Arsenic (dissolved)	mg/L	-	0.00089 J	-	-	-	-	-	-
Barium	mg/L	0.06 J	0.19	0.17	0.18	0.32	0.27	0.22	0.26
Barium (dissolved)	mg/L	-	0.062 J	-	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.00042 J	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Beryllium (dissolved)	mg/L	-	0.001 U	-	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00013 J
Cadmium (dissolved)	mg/L	-	0.001 U	-	-	-	-	-	-
Chromium	mg/L	0.0039 J	0.017	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium (dissolved)	mg/L	-	0.0011 J	-	-	-	-	-	-
Cobalt	mg/L	0.00078 J	0.0038 J	0.000068 J	0.00023 J	0.0013 J	0.00031 J	0.0039 J	0.00074 J
Cobalt (dissolved)	mg/L	-	0.00027 J	-	-	-	-	-	-
Copper	mg/L	0.004 U	0.017 U	0.004 U	0.00042 J	0.004 U	0.004 U	0.004 U	0.00081 J
Copper (dissolved)	mg/L	-	0.004 U	-	-	-	-	-	-
Iron	mg/L	2	9.3	0.88	3.7	5.8	3	6	0.19 J

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-785D*	*CRA-785D*	*CRA-785I*	*CRA-787I*	*CRA-789M*	*CRA-790M*	*CRA-791M*	*CRA-792M*
Sample ID:		*GW-17358-041013-JY-077*	*GW-17358-041113-DR-086*	*GW-17358-041013-JY-078*	*GW-17358-040113-CT-005*	*GW-17358-040913-JY-066*	*GW-17358-040913-JY-060*	*GW-17358-040513-CT-033*	*GW-17358-040913-JY-058*
Sample Date:		*4/10/2013*	*4/11/2013*	*4/10/2013*	*4/1/2013*	*4/9/2013*	*4/9/2013*	*4/5/2013*	*4/9/2013*
Sample Type:									
Parameters	*Units*								
Iron (dissolved)	mg/L	-	0.42	-	-	-	-	-	-
Lead	mg/L	0.0016 J	0.015	0.00033 J	0.00035 J	0.0012 J	0.00037 J	0.003 U	0.00045 J
Lead (dissolved)	mg/L	-	0.00037 J	-	-	-	-	-	-
Manganese	mg/L	0.041 J	0.14	0.061	0.049 J	0.29	0.19	0.32	0.22
Manganese (dissolved)	mg/L	-	0.02 J	-	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	0.0002 U	-	-	-	-	-	-
Nickel	mg/L	0.0028 J	0.013 J	0.00045 J	0.0054 J	0.0035 J	0.0015 J	0.0028 J	0.0014 J
Nickel (dissolved)	mg/L	-	0.0031 J	-	-	-	-	-	-
Selenium	mg/L	0.005 U	0.00071 J	0.005 U	0.005 U	0.005 U	0.0018 J	0.005 U	0.005 U
Selenium (dissolved)	mg/L	-	0.005 U	-	-	-	-	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	0.0002 U	-	-	-	-	-	-
Thallium	mg/L	0.002 U	0.0003 J	0.002 U	0.00017 J	0.002 U	0.00086 J	0.002 U	0.001 J
Thallium (dissolved)	mg/L	-	0.00023 J	-	-	-	-	-	-
Vanadium	mg/L	0.0047	0.022	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Vanadium (dissolved)	mg/L	-	0.00085 J	-	-	-	-	-	-
Zinc	mg/L	0.056 U	0.12 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	0.05 U	-	-	-	-	-	-
General Chemistry									
Cyanide (amenable)	mg/L	-	-	-	-	-	-	-	-
Phosphorus	mg/L	0.04 J	0.17	0.036 J	-	-	-	-	-

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-795M*	*CRA-798M*	*CRA-799M*	*CRA-800M*	*CRA-801M*	*CRA-801M*	*CRA-803M*	*CRA-804I*
Sample ID:		*GW-17358-040813-DR-049*	*GW-17358-040513-JY-036*	*GW-17358-040513-JY-037*	*GW-17358-040513-DR-041*	*GW-17358-040513-DR-039*	*GW-17358-040513-DR-040*	*GW-17358-040913-EM-064*	*GW-17358-040913-EM-061*
Sample Date:		*4/8/2013*	*4/5/2013*	*4/5/2013*	*4/5/2013*	*4/5/2013*	*4/5/2013*	*4/9/2013*	*4/9/2013*
Sample Type:							*Duplicate*		
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00021 J	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.01 UJ	0.01 UJ	0.01 UJ	0.01 UJ	0.01 UJ	0.01 U	0.01 U
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.00022 J	0.001 U	0.00054 J	0.001 U
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00027 J
Trichlorofluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.00073 J	0.002 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-795M*	*CRA-798M*	*CRA-799M*	*CRA-800M*	*CRA-801M*	*CRA-801M*	*CRA-803M*	*CRA-804I*
Sample ID:		*GW-17358-040813-DR-049*	*GW-17358-040513-JY-036*	*GW-17358-040513-JY-037*	*GW-17358-040513-DR-041*	*GW-17358-040513-DR-039*	*GW-17358-040513-DR-040*	*GW-17358-040913-EM-064*	*GW-17358-040913-EM-061*
Sample Date:		*4/8/2013*	*4/5/2013*	*4/5/2013*	*4/5/2013*	*4/5/2013*	*4/5/2013*	*4/9/2013*	*4/9/2013*
Sample Type:							*Duplicate*		
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
2,4,5-Trichlorophenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
2,4,6-Trichlorophenol	mg/L	0.004 U	0.0039 U	0.0038 U	0.0043 U	0.0042 U	0.0044 U	0.0038 U	0.004 U
2,4-Dichlorophenol	mg/L	0.0099 U	0.0097 U	0.0095 U	0.011 U	0.01 U	0.011 U	0.0096 U	0.0099 U
2,4-Dimethylphenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
2,4-Dinitrophenol	mg/L	0.02 U	0.019 U	0.019 U	0.022 U	0.021 U	0.022 U	0.019 U	0.02 U
2,4-Dinitrotoluene	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
2,6-Dinitrotoluene	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
2-Chloronaphthalene	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
2-Chlorophenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
2-Methylnaphthalene	mg/L	0.005 U	0.0049 U	0.0048 U	0.00015 J	0.0052 U	0.0055 U	0.0048 U	0.005 U
2-Methylphenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
2-Nitroaniline	mg/L	0.02 U	0.019 U	0.019 U	0.022 U	0.021 U	0.022 U	0.019 U	0.02 U
2-Nitrophenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
3&4-Methylphenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
3,3'-Dichlorobenzidine	mg/L	0.00099 U	0.00097 U	0.00095 U	0.0011 U	0.001 U	0.0011 U	0.00096 U	0.00099 U
3-Nitroaniline	mg/L	0.02 U	0.019 U	0.019 U	0.022 U	0.021 U	0.022 U	0.019 U	0.02 U
4,6-Dinitro-2-methylphenol	mg/L	0.02 U	0.019 U	0.019 U	0.022 U	0.021 U	0.022 U	0.019 U	0.02 U
4-Bromophenyl phenyl ether	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
4-Chloro-3-methylphenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
4-Chloroaniline	mg/L	0.0099 U	0.0097 U	0.0095 U	0.011 U	0.01 U	0.011 U	0.0096 U	0.0099 U
4-Chlorophenyl phenyl ether	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
4-Nitroaniline	mg/L	0.02 U	0.019 U	0.019 U	0.022 U	0.021 U	0.022 U	0.019 U	0.02 U
4-Nitrophenol	mg/L	0.02 U	0.019 U	0.019 U	0.022 U	0.021 U	0.022 U	0.019 U	0.02 U
Acenaphthene	mg/L	0.005 U	0.0049 U	0.0048 U	0.00036 J	0.0052 U	0.0055 U	0.0048 U	0.005 U
Acenaphthylene	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Acetophenone	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Anthracene	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Atrazine	mg/L	0.003 U	0.0029 U	0.0029 U	0.0032 U	0.0031 U	0.0033 U	0.0029 U	0.003 U
Benzaldehyde	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Benzo(a)anthracene	mg/L	0.00099 U	0.00097 U	0.00095 U	0.0011 U	0.001 U	0.0011 U	0.00096 U	0.00099 U
Benzo(a)pyrene	mg/L	0.00099 U	0.00097 U	0.00095 U	0.0011 U	0.001 U	0.0011 U	0.00096 U	0.00099 U
Benzo(b)fluoranthene	mg/L	0.00099 U	0.00097 U	0.00095 U	0.0011 U	0.001 U	0.0011 U	0.00096 U	0.00099 U
Benzo(g,h,i)perylene	mg/L	0.00099 U	0.00097 U	0.00095 U	0.0011 U	0.001 U	0.0011 U	0.00096 U	0.00099 U
Benzo(k)fluoranthene	mg/L	0.00099 U	0.00097 U	0.00095 U	0.0011 U	0.001 U	0.0011 U	0.00096 U	0.00099 U
Biphenyl (1,1-Biphenyl)	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
bis(2-Chloroethoxy)methane	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
bis(2-Chloroethyl)ether	mg/L	0.00099 U	0.00097 U	0.00095 U	0.0011 U	0.001 U	0.0011 U	0.00096 U	0.00099 U
bis(2-Ethylhexyl)phthalate	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Butyl benzylphthalate	mg/L	0.00096 J	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Caprolactam	mg/L	0.0099 U	0.0097 U	0.0095 U	0.011 U	0.01 U	0.011 U	0.0096 U	0.0099 U
Carbazole	mg/L	0.0099 U	0.0097 U	0.0095 U	0.011 U	0.01 U	0.011 U	0.0096 U	0.0099 U
Chrysene	mg/L	0.00099 U	0.00097 U	0.00095 U	0.0011 U	0.001 U	0.0011 U	0.00096 U	0.00099 U
Dibenz(a,h)anthracene	mg/L	0.002 U	0.0019 U	0.0019 U	0.0022 U	0.0021 U	0.0022 U	0.0019 U	0.002 U
Dibenzofuran	mg/L	0.004 U	0.0039 U	0.0038 U	0.00022 J	0.0042 U	0.0044 U	0.0038 U	0.004 U
Diethyl phthalate	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Dimethyl phthalate	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Di-n-butylphthalate	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Di-n-octyl phthalate	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-795M*	*CRA-798M*	*CRA-799M*	*CRA-800M*	*CRA-801M*	*CRA-801M*	*CRA-803M*	*CRA-804I*
Sample ID:		*GW-17358-040813-DR-049*	*GW-17358-040513-JY-036*	*GW-17358-040513-JY-037*	*GW-17358-040513-DR-041*	*GW-17358-040513-DR-039*	*GW-17358-040513-DR-040*	*GW-17358-040913-EM-064*	*GW-17358-040913-EM-061*
Sample Date:		*4/8/2013*	*4/5/2013*	*4/5/2013*	*4/5/2013*	*4/5/2013*	*4/5/2013*	*4/9/2013*	*4/9/2013*
Sample Type:							*Duplicate*		
Parameters	*Units*								
Fluoranthene	mg/L	0.00099 U	0.00097 U	0.00095 U	0.0011 U	0.001 U	0.0011 U	0.00096 U	0.00099 U
Fluorene	mg/L	0.005 U	0.0049 U	0.0048 U	0.00017 J	0.0052 U	0.0055 U	0.0048 U	0.005 U
Hexachlorobenzene	mg/L	0.0002 U	0.00019 U	0.00019 U	0.00022 U	0.00021 U	0.00022 U	0.00019 U	0.0002 U
Hexachlorobutadiene	mg/L	0.00099 U	0.00097 U	0.00095 U	0.0011 U	0.001 U	0.0011 U	0.00096 U	0.00099 U
Hexachlorocyclopentadiene	mg/L	R	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	R	R
Hexachloroethane	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Indeno(1,2,3-cd)pyrene	mg/L	0.002 U	0.0019 U	0.0019 U	0.0022 U	0.0021 U	0.0022 U	0.0019 U	0.002 U
Isophorone	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Naphthalene	mg/L	0.005 U	0.0049 U	0.0048 U	0.00035 J	0.0052 U	0.0055 U	0.0048 U	0.005 U
Nitrobenzene	mg/L	0.003 U	0.0029 U	0.0029 U	0.0032 U	0.0031 U	0.0033 U	0.0029 U	0.003 U
N-Nitrosodi-n-propylamine	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
N-Nitrosodiphenylamine	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Pentachlorophenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Phenanthrene	mg/L	0.002 U	0.0019 U	0.0019 U	0.0022 U	0.0021 U	0.0022 U	0.0019 U	0.002 U
Phenol	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
Pyrene	mg/L	0.005 U	0.0049 U	0.0048 U	0.0054 U	0.0052 U	0.0055 U	0.0048 U	0.005 U
PCBs									
Aroclor-1016	mg/L	0.0001 U	0.000096 U	0.000096 U	0.0001 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1221	mg/L	0.0001 U	0.000096 U	0.000096 U	0.0001 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1232	mg/L	0.0001 U	0.000096 U	0.000096 U	0.0001 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1242	mg/L	0.0001 U	0.000096 U	0.000096 U	0.0001 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1248	mg/L	0.0001 U	0.000096 U	0.000096 U	0.0001 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1254	mg/L	0.0001 U	0.000096 U	0.000096 U	0.0001 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1260	mg/L	0.0001 U	0.000096 U	0.000096 U	0.0001 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1262	mg/L	0.0001 U	0.000096 U	0.000096 U	0.0001 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1268	mg/L	0.0001 U	0.000096 U	0.000096 U	0.0001 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Total PCBs	mg/L	0	0	0	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.024 J	0.023 J	0.057	0.043 J	0.037 J	0.031 J	0.05 U	0.05 U
Aluminum (dissolved)	mg/L	-	-	-	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	0.0033 J	0.00079 J	0.00091 J	0.0026 J	0.001 J	0.0011 J	0.0019 J	0.031
Arsenic (dissolved)	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	0.27	0.12	0.056 J	0.11	0.13	0.14	0.26	0.33
Barium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00044 J
Beryllium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00025 J
Cadmium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	0.00071 J	0.00077 J	0.0012 J	0.0011 J	0.0013 J	0.001 J	0.01 U	0.01 U
Chromium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	0.00065 J	0.00042 J	0.00043 J	0.00058 J	0.00084 J	0.00088 J	0.00099 J	0.00038 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	0.0017 J	0.004 U	0.002 J	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Copper (dissolved)	mg/L	-	-	-	-	-	-	-	-
Iron	mg/L	1.3	0.15 J	0.029 J	0.72	0.035 J	0.2 U	0.4	3.7

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-795M*	*CRA-798M*	*CRA-799M*	*CRA-800M*	*CRA-801M*	*CRA-801M*	*CRA-803M*	*CRA-804I*
Sample ID:		*GW-17358-040813-DR-049*	*GW-17358-040513-JY-036*	*GW-17358-040513-JY-037*	*GW-17358-040513-DR-041*	*GW-17358-040513-DR-039*	*GW-17358-040513-DR-040*	*GW-17358-040913-EM-064*	*GW-17358-040913-EM-061*
Sample Date:		*4/8/2013*	*4/5/2013*	*4/5/2013*	*4/5/2013*	*4/5/2013*	*4/5/2013*	*4/9/2013*	*4/9/2013*
Sample Type:							*Duplicate*		
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	0.003 U	0.003 U	0.003 U	0.003 U	0.00025 J	0.003 U	0.003 U	0.0019 J
Lead (dissolved)	mg/L	-	-	-	-	-	-	-	-
Manganese	mg/L	0.32	0.28	0.074	0.34	0.55	0.57	0.42	0.097
Manganese (dissolved)	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	0.0015 J	0.0016 J	0.0019 J	0.0017 J	0.0018 J	0.0018 J	0.0024 J	0.00075 J
Nickel (dissolved)	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	0.005 U	0.0027 J	0.005	0.00093 J	0.002 J	0.0018 J	0.005 U	0.00062 J
Selenium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.00018 J	0.0014 J
Thallium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.004 U	0.004 U	0.00099 J	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Vanadium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	-	-	-
General Chemistry									
Cyanide (amenable)	mg/L	-	-	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	0.068 J	-	-	-	0.071 J

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-804I*	*CRA-804M*	*CRA-805M*	*CRA-806M*	*CRA-807M*	*CRA-808M*	*CRA-826ML*	*CRA-827ML*
Sample ID:		*GW-17358-040913-EM-062*	*GW-17358-040913-EM-063*	*GW-17358-041613-DR-110*	*GW-17358-040813-JY-055*	*GW-17358-040913-JY-069*	*GW-17358-041113-EM-083*	*GW-17358-040213-CT-013*	*GW-17358-040813-JY-053*
Sample Date:		*4/9/2013*	*4/9/2013*	*4/16/2013*	*4/8/2013*	*4/9/2013*	*4/11/2013*	*4/2/2013*	*4/8/2013*
Sample Type:		*Duplicate*							
Parameters	*Units*								
TCL VOCs									
1,1,1-Trichloroethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.05 U	0.25 U	0.01 U	0.11 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.01 U	0.05 U	0.25 U	0.01 U	0.11 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.05 U	0.25 U	0.01 U	0.11 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.05 U	0.25 U	0.01 U	0.11 U	0.01 U	0.01 U	0.01 U
Benzene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.025 U	0.13 U	0.005 U	0.056 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Chloromethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.11	0.61	0.001 U	0.0068 J	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.005 U	0.025 U	0.0007 J	0.011 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.05 U	0.25 U	0.01 U	0.11 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.025 U	0.13 U	0.005 U	0.056 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.25	0.001 U	0.001 U	0.001 U
Toluene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.068	0.26	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.00025 J	0.0029 J	0.025 U	0.0056	0.006 J	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.001 U	0.005 U	0.025 U	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.005 U	0.32	0.001 U	0.011 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.01 U	0.05 U	0.0032	0.022 U	0.002 U	0.002 U	0.002 U

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-804I*	*CRA-804M*	*CRA-805M*	*CRA-806M*	*CRA-807M*	*CRA-808M*	*CRA-826ML*	*CRA-827ML*
Sample ID:		*GW-17358-040913-EM-062*	*GW-17358-040913-EM-063*	*GW-17358-041613-DR-110*	*GW-17358-040813-JY-055*	*GW-17358-040913-JY-069*	*GW-17358-041113-EM-083*	*GW-17358-040213-CT-013*	*GW-17358-040813-JY-053*
Sample Date:		*4/9/2013*	*4/9/2013*	*4/16/2013*	*4/8/2013*	*4/9/2013*	*4/11/2013*	*4/2/2013*	*4/8/2013*
Sample Type:		*Duplicate*							
Parameters	*Units*								
TCL SVOCs									
2,2'-Oxybis(1-chloropropane)	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
2,4,5-Trichlorophenol	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
2,4,6-Trichlorophenol	mg/L	0.0042 U	0.0039 U	0.004 U	0.0038 U	0.0038 U	0.0039 U	0.0038 U	0.0038 U
2,4-Dichlorophenol	mg/L	0.011 U	0.0098 U	0.01 U	0.0095 U	0.0095 U	0.0098 U	0.0096 U	0.0095 U
2,4-Dimethylphenol	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
2,4-Dinitrophenol	mg/L	0.021 U	0.02 U	0.02 U	0.019 U	0.019 U	0.02 U	0.019 U	0.019 U
2,4-Dinitrotoluene	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
2,6-Dinitrotoluene	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
2-Chloronaphthalene	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
2-Chlorophenol	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
2-Methylnaphthalene	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
2-Methylphenol	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
2-Nitroaniline	mg/L	0.021 U	0.02 U	0.02 U	0.019 U	0.019 U	0.02 U	0.019 U	0.019 U
2-Nitrophenol	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
3&4-Methylphenol	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
3,3'-Dichlorobenzidine	mg/L	0.0011 U	0.00098 U	0.001 U	0.00095 U	0.00095 U	0.00098 U	0.00096 U	0.00095 U
3-Nitroaniline	mg/L	0.021 U	0.02 U	0.02 U	0.019 U	0.019 U	0.02 U	0.019 U	0.019 U
4,6-Dinitro-2-methylphenol	mg/L	0.021 U	0.02 U	0.02 U	0.019 U	0.019 U	0.02 U	0.019 U	0.019 U
4-Bromophenyl phenyl ether	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
4-Chloro-3-methylphenol	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
4-Chloroaniline	mg/L	0.011 U	0.0098 U	0.01 U	0.0095 U	0.0095 U	0.0098 U	0.0096 U	0.0095 U
4-Chlorophenyl phenyl ether	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
4-Nitroaniline	mg/L	0.021 U	0.02 U	0.02 U	0.019 U	0.019 U	0.02 U	0.019 U	0.019 U
4-Nitrophenol	mg/L	0.021 U	0.02 U	0.02 U	0.019 U	0.019 U	0.02 U	0.019 U	0.019 U
Acenaphthene	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Acenaphthylene	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Acetophenone	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Anthracene	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Atrazine	mg/L	0.0032 U	0.0029 U	0.003 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U
Benzaldehyde	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Benzo(a)anthracene	mg/L	0.0011 U	0.00098 U	0.001 U	0.00095 U	0.00095 U	0.00098 U	0.00096 U	0.00095 U
Benzo(a)pyrene	mg/L	0.0011 U	0.00098 U	0.001 U	0.00095 U	0.00095 U	0.00098 U	0.00096 U	0.00095 U
Benzo(b)fluoranthene	mg/L	0.0011 U	0.00098 U	0.001 U	0.00095 U	0.00095 U	0.00098 U	0.00096 U	0.00095 U
Benzo(g,h,i)perylene	mg/L	0.0011 U	0.00098 U	0.001 U	0.00095 U	0.00095 U	0.00098 U	0.00096 U	0.00095 U
Benzo(k)fluoranthene	mg/L	0.0011 U	0.00098 U	0.001 U	0.00095 U	0.00095 U	0.00098 U	0.00096 U	0.00095 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
bis(2-Chloroethoxy)methane	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
bis(2-Chloroethyl)ether	mg/L	0.0011 U	0.00098 U	0.001 U	0.00095 U	0.00095 U	0.00098 U	0.00096 U	0.00095 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Butyl benzylphthalate	mg/L	0.0053 U	0.0049 U	0.0051 U	0.00088 J	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Caprolactam	mg/L	0.011 U	0.0098 U	0.01 U	0.0095 U	0.0095 U	0.0098 U	0.0096 U	0.0095 U
Carbazole	mg/L	0.011 U	0.0098 U	0.01 U	0.0095 U	0.0095 U	0.0098 U	0.0096 U	0.0095 U
Chrysene	mg/L	0.0011 U	0.00098 U	0.001 U	0.00095 U	0.00095 U	0.00098 U	0.00096 U	0.00095 U
Dibenz(a,h)anthracene	mg/L	0.0021 U	0.002 U	0.002 U	0.0019 U	0.0019 U	0.002 U	0.0019 U	0.0019 U
Dibenzofuran	mg/L	0.0042 U	0.0039 U	0.004 U	0.0038 U	0.0038 U	0.0039 U	0.0038 U	0.0038 U
Diethyl phthalate	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Dimethyl phthalate	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Di-n-butylphthalate	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Di-n-octyl phthalate	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-804I*	*CRA-804M*	*CRA-805M*	*CRA-806M*	*CRA-807M*	*CRA-808M*	*CRA-826ML*	*CRA-827ML*
Sample ID:		*GW-17358-040913-EM-062*	*GW-17358-040913-EM-063*	*GW-17358-041613-DR-110*	*GW-17358-040813-JY-055*	*GW-17358-040913-JY-069*	*GW-17358-041113-EM-083*	*GW-17358-040213-CT-013*	*GW-17358-040813-JY-053*
Sample Date:		*4/9/2013*	*4/9/2013*	*4/16/2013*	*4/8/2013*	*4/9/2013*	*4/11/2013*	*4/2/2013*	*4/8/2013*
Sample Type:		*Duplicate*							
Parameters	*Units*								
Fluoranthene	mg/L	0.0011 U	0.00098 U	0.001 U	0.00095 U	0.00095 U	0.00098 U	0.00096 U	0.00095 U
Fluorene	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Hexachlorobenzene	mg/L	0.00021 U	0.0002 U	0.0002 U	0.00019 U	0.00019 U	0.0002 U	0.00019 U	0.00019 U
Hexachlorobutadiene	mg/L	0.0011 U	0.00098 U	0.001 U	0.00095 U	0.00095 U	0.00098 U	0.00096 U	0.00095 U
Hexachlorocyclopentadiene	mg/L	R	R	R	R	R	R	0.0048 U	R
Hexachloroethane	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0021 U	0.002 U	0.002 U	0.0019 U	0.0019 U	0.002 U	0.0019 U	0.0019 U
Isophorone	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Naphthalene	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Nitrobenzene	mg/L	0.0032 U	0.0029 U	0.003 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U	0.0029 U
N-Nitrosodi-n-propylamine	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
N-Nitrosodiphenylamine	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Pentachlorophenol	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Phenanthrene	mg/L	0.0021 U	0.002 U	0.002 U	0.0019 U	0.0019 U	0.002 U	0.0019 U	0.0019 U
Phenol	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
Pyrene	mg/L	0.0053 U	0.0049 U	0.0051 U	0.0048 U	0.0048 U	0.0049 U	0.0048 U	0.0048 U
PCBs									
Aroclor-1016	mg/L	0.000098 U	0.000095 U	0.0001 U	0.000095 U	0.000098 U	0.0001 U	0.000095 U	0.000095 U
Aroclor-1221	mg/L	0.000098 U	0.000095 U	0.0001 U	0.000095 U	0.000098 U	0.0001 U	0.000095 U	0.000095 U
Aroclor-1232	mg/L	0.000098 U	0.000095 U	0.0001 U	0.000095 U	0.000098 U	0.0001 U	0.000095 U	0.000095 U
Aroclor-1242	mg/L	0.000098 U	0.000095 U	0.0001 U	0.000095 U	0.000098 U	0.0001 U	0.000095 U	0.000095 U
Aroclor-1248	mg/L	0.000098 U	0.000095 U	0.0001 U	0.000095 U	0.000098 U	0.0001 U	0.000095 U	0.000095 U
Aroclor-1254	mg/L	0.000098 U	0.000095 U	0.0001 U	0.000095 U	0.000098 U	0.0001 U	0.000095 U	0.000095 U
Aroclor-1260	mg/L	0.000098 U	0.000095 U	0.0001 U	0.000095 U	0.000098 U	0.0001 U	0.000095 U	0.000095 U
Aroclor-1262	mg/L	0.000098 U	0.000095 U	0.0001 U	0.000095 U	0.000098 U	0.0001 U	0.000095 U	0.000095 U
Aroclor-1268	mg/L	0.000098 U	0.000095 U	0.0001 U	0.000095 U	0.000098 U	0.0001 U	0.000095 U	0.000095 U
Total PCBs	mg/L	0	0	0	0	0	0	0	0
TAL Metals									
Aluminum	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.028 J	0.05 U
Aluminum (dissolved)	mg/L	-	-	-	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	-	-	-
Arsenic	mg/L	0.033	0.0077	0.015	0.005	0.0013 J	0.0035 J	0.0049 J	0.0015 J
Arsenic (dissolved)	mg/L	-	-	-	-	-	-	-	-
Barium	mg/L	0.31	0.2	0.16	0.045 J	0.12	0.088 J	0.081 J	0.057 J
Barium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Beryllium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Chromium	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.00074 J	0.01 U	0.01 U
Chromium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Cobalt	mg/L	0.00021 J	0.00039 J	0.00056 J	0.0031 J	0.00074 J	0.00041 J	0.02 U	0.00032 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	-	-	-
Copper	mg/L	0.004 U	0.004 U	0.004 U	0.00049 J	0.004 U	0.004 U	0.00056 J	0.0004 J
Copper (dissolved)	mg/L	-	-	-	-	-	-	-	-
Iron	mg/L	3.9	3.7	6	2.1	0.088 J	0.62	1.3	0.099 J

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-804I*	*CRA-804M*	*CRA-805M*	*CRA-806M*	*CRA-807M*	*CRA-808M*	*CRA-826ML*	*CRA-827ML*
Sample ID:		*GW-17358-040913-EM-062*	*GW-17358-040913-EM-063*	*GW-17358-041613-DR-110*	*GW-17358-040813-JY-055*	*GW-17358-040913-JY-069*	*GW-17358-041113-EM-083*	*GW-17358-040213-CT-013*	*GW-17358-040813-JY-053*
Sample Date:		*4/9/2013*	*4/9/2013*	*4/16/2013*	*4/8/2013*	*4/9/2013*	*4/11/2013*	*4/2/2013*	*4/8/2013*
Sample Type:		*Duplicate*							
Parameters	*Units*								
Iron (dissolved)	mg/L	-	-	-	-	-	-	-	-
Lead	mg/L	0.00022 J	0.00039 J	0.00017 J	0.00025 J	0.003 U	0.003 U	0.0002 J	0.003 U
Lead (dissolved)	mg/L	-	-	-	-	-	-	-	-
Manganese	mg/L	0.095	0.74	0.56	0.9	0.45	0.094	0.19	0.16
Manganese (dissolved)	mg/L	-	-	-	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	-	-	-	-	-	-
Nickel	mg/L	0.0005 J	0.0078 J	0.0045 J	0.069	0.0017 J	0.02 U	0.00034 J	0.00073 J
Nickel (dissolved)	mg/L	-	-	-	-	-	-	-	-
Selenium	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Selenium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.000009 J	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	-	-	-	-	-	-	-
Thallium	mg/L	0.00058 J	0.00028 J	0.002 U	0.002 U	0.002 U	0.00033 J	0.002 U	0.002 U
Thallium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Vanadium	mg/L	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.00067 J	0.004 U
Vanadium (dissolved)	mg/L	-	-	-	-	-	-	-	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	-	-	-
General Chemistry									
Cyanide (amenable)	mg/L	-	-	-	-	-	-	-	-
Phosphorus	mg/L	0.1 U	0.1 U	-	0.1 U	-	0.1 U	-	-

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-828M*	*CRA-829M*	*CRA-833M*	*CRA-834M*	*CRA-837ML*	*CRA-856M*
Sample ID:		*GW-17358-040213-CT-008*	*GW-17358-040213-CT-009*	*GW-17358-041713-DR-118*	*GW-17358-041713-DR-117*	*GW-17358-040213-CT-014*	*GW-17358-040513-DR-043*
Sample Date:		*4/2/2013*	*4/2/2013*	*4/17/2013*	*4/17/2013*	*4/2/2013*	*4/5/2013*
Sample Type:							
Parameters	*Units*						
TCL VOCs							
1,1,1-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0017
1,1,2,2-Tetrachloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1,2-Trichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,1-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2,4-Trichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromo-3-chloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dibromoethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,2-Dichloropropane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,3-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
1,4-Dichlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
2-Butanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
2-Hexanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
4-Methyl-2-pentanone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Acetone	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromoform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Bromomethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Carbon disulfide	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Carbon tetrachloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chlorobenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00067 J
Chloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
cis-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.00096 J
cis-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dibromochloromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Ethylbenzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Isopropyl benzene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl acetate	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl cyclohexane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methyl tert butyl ether	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Methylene chloride	mg/L	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U
Styrene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.031
Toluene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trichloroethene	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.0033
Trichlorofluoromethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Trifluorotrichloroethane	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Vinyl chloride	mg/L	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Xylenes (total)	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-828M*	*CRA-829M*	*CRA-833M*	*CRA-834M*	*CRA-837ML*	*CRA-856M*
Sample ID:		*GW-17358-040213-CT-008*	*GW-17358-040213-CT-009*	*GW-17358-041713-DR-118*	*GW-17358-041713-DR-117*	*GW-17358-040213-CT-014*	*GW-17358-040513-DR-043*
Sample Date:		*4/2/2013*	*4/2/2013*	*4/17/2013*	*4/17/2013*	*4/2/2013*	*4/5/2013*
Sample Type:							
Parameters	*Units*						
TCL SVOCs							
2,2'-Oxybis(1-chloropropane)	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
2,4,5-Trichlorophenol	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
2,4,6-Trichlorophenol	mg/L	0.0038 U	0.0038 U	0.0041 U	0.0041 U	0.0038 U	0.0042 U
2,4-Dichlorophenol	mg/L	0.0095 U	0.0095 U	0.01 U	0.01 U	0.0096 U	0.01 U
2,4-Dimethylphenol	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
2,4-Dinitrophenol	mg/L	0.019 U	0.019 U	0.021 U	0.02 U	0.019 U	0.021 U
2,4-Dinitrotoluene	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
2,6-Dinitrotoluene	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
2-Chloronaphthalene	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
2-Chlorophenol	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
2-Methylnaphthalene	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
2-Methylphenol	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
2-Nitroaniline	mg/L	0.019 U	0.019 U	0.021 U	0.02 U	0.019 U	0.021 U
2-Nitrophenol	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
3&4-Methylphenol	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
3,3'-Dichlorobenzidine	mg/L	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00096 U	0.001 U
3-Nitroaniline	mg/L	0.019 U	0.019 U	0.021 U	0.02 U	0.019 U	0.021 U
4,6-Dinitro-2-methylphenol	mg/L	0.019 U	0.019 U	0.021 U	0.02 U	0.019 U	0.021 U
4-Bromophenyl phenyl ether	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
4-Chloro-3-methylphenol	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
4-Chloroaniline	mg/L	0.0095 U	0.0095 U	0.01 U	0.01 U	0.0096 U	0.01 U
4-Chlorophenyl phenyl ether	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
4-Nitroaniline	mg/L	0.019 U	0.019 U	0.021 U	0.02 U	0.019 U	0.021 U
4-Nitrophenol	mg/L	0.019 U	0.019 U	0.021 U	0.02 U	0.019 U	0.021 U
Acenaphthene	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Acenaphthylene	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Acetophenone	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Anthracene	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Atrazine	mg/L	0.0029 U	0.0029 U	0.0031 U	0.0031 U	0.0029 U	0.0031 U
Benzaldehyde	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Benzo(a)anthracene	mg/L	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00096 U	0.001 U
Benzo(a)pyrene	mg/L	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00096 U	0.001 U
Benzo(b)fluoranthene	mg/L	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00096 U	0.001 U
Benzo(g,h,i)perylene	mg/L	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00096 U	0.001 U
Benzo(k)fluoranthene	mg/L	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00096 U	0.001 U
Biphenyl (1,1-Biphenyl)	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
bis(2-Chloroethoxy)methane	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
bis(2-Chloroethyl)ether	mg/L	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00096 U	0.001 U
bis(2-Ethylhexyl)phthalate	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0066 U	0.0047 J
Butyl benzylphthalate	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Caprolactam	mg/L	0.0095 U	0.0095 U	0.01 U	0.01 U	0.0096 U	0.01 U
Carbazole	mg/L	0.0095 U	0.0095 U	0.01 U	0.01 U	0.0096 U	0.01 U
Chrysene	mg/L	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00096 U	0.001 U
Dibenz(a,h)anthracene	mg/L	0.0019 U	0.0019 U	0.0021 U	0.002 U	0.0019 U	0.0021 U
Dibenzofuran	mg/L	0.0038 U	0.0038 U	0.0041 U	0.0041 U	0.0038 U	0.0042 U
Diethyl phthalate	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Dimethyl phthalate	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Di-n-butylphthalate	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Di-n-octyl phthalate	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-828M*	*CRA-829M*	*CRA-833M*	*CRA-834M*	*CRA-837ML*	*CRA-856M*
Sample ID:		*GW-17358-040213-CT-008*	*GW-17358-040213-CT-009*	*GW-17358-041713-DR-118*	*GW-17358-041713-DR-117*	*GW-17358-040213-CT-014*	*GW-17358-040513-DR-043*
Sample Date:		*4/2/2013*	*4/2/2013*	*4/17/2013*	*4/17/2013*	*4/2/2013*	*4/5/2013*
Sample Type:							
Parameters	*Units*						
Fluoranthene	mg/L	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00096 U	0.001 U
Fluorene	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Hexachlorobenzene	mg/L	0.00019 U	0.00019 U	0.00021 U	0.0002 U	0.00019 U	0.00021 U
Hexachlorobutadiene	mg/L	0.00095 U	0.00095 U	0.001 U	0.001 U	0.00096 U	0.001 U
Hexachlorocyclopentadiene	mg/L	0.0048 U	0.0048 U	R	R	0.0048 U	0.0052 U
Hexachloroethane	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Indeno(1,2,3-cd)pyrene	mg/L	0.0019 U	0.0019 U	0.0021 U	0.002 U	0.0019 U	0.0021 U
Isophorone	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Naphthalene	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Nitrobenzene	mg/L	0.0029 U	0.0029 U	0.0031 U	0.0031 U	0.0029 U	0.0031 U
N-Nitrosodi-n-propylamine	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
N-Nitrosodiphenylamine	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Pentachlorophenol	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Phenanthrene	mg/L	0.0019 U	0.0019 U	0.0021 U	0.002 U	0.0019 U	0.0021 U
Phenol	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
Pyrene	mg/L	0.0048 U	0.0048 U	0.0052 U	0.0051 U	0.0048 U	0.0052 U
PCBs							
Aroclor-1016	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1221	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1232	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1242	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1248	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1254	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1260	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1262	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Aroclor-1268	mg/L	0.000095 U	0.000095 U	0.0001 U	0.0001 U	0.000095 U	0.0001 U
Total PCBs	mg/L	0	0	0	0	0	0
TAL Metals							
Aluminum	mg/L	0.039 J	0.11	0.14	0.019 J	0.15	0.05 U
Aluminum (dissolved)	mg/L	-	-	-	-	-	-
Antimony	mg/L	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Antimony (dissolved)	mg/L	-	-	-	-	-	-
Arsenic	mg/L	0.00094 J	0.001 J	0.0024 J	0.0011 J	0.012	0.001 J
Arsenic (dissolved)	mg/L	-	-	-	-	-	-
Barium	mg/L	0.087 J	0.087 J	0.097 J	0.084 J	0.1	0.054 J
Barium (dissolved)	mg/L	-	-	-	-	-	-
Beryllium	mg/L	0.001 U	0.001 U	0.00028 J	0.001 U	0.001 U	0.001 U
Beryllium (dissolved)	mg/L	-	-	-	-	-	-
Cadmium	mg/L	0.001 U	0.001 U	0.00017 J	0.000053 J	0.001 U	0.001 U
Cadmium (dissolved)	mg/L	-	-	-	-	-	-
Chromium	mg/L	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U
Chromium (dissolved)	mg/L	-	-	-	-	-	-
Cobalt	mg/L	0.00027 J	0.0012 J	0.00032 J	0.00026 J	0.00016 J	0.0023 J
Cobalt (dissolved)	mg/L	-	-	-	-	-	-
Copper	mg/L	0.00059 J	0.0012 J	0.0017 J	0.004 U	0.0007 J	0.004 U
Copper (dissolved)	mg/L	-	-	-	-	-	-
Iron	mg/L	0.23	0.34	0.99	0.21	5.8	0.2 U

TABLE 2

ANALYTICAL RESULTS SUMMARY
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Sample Location:		*CRA-828M*	*CRA-829M*	*CRA-833M*	*CRA-834M*	*CRA-837ML*	*CRA-856M*
Sample ID:		*GW-17358-040213-CT-008*	*GW-17358-040213-CT-009*	*GW-17358-041713-DR-118*	*GW-17358-041713-DR-117*	*GW-17358-040213-CT-014*	*GW-17358-040513-DR-043*
Sample Date:		*4/2/2013*	*4/2/2013*	*4/17/2013*	*4/17/2013*	*4/2/2013*	*4/5/2013*
Sample Type:							
Parameters	*Units*						
Iron (dissolved)	mg/L	-	-	-	-	-	-
Lead	mg/L	0.003 U	0.00024 J	0.00045 J	0.00026 J	0.0003 J	0.003 U
Lead (dissolved)	mg/L	-	-	-	-	-	-
Manganese	mg/L	0.072	0.41	0.21	0.016 J	0.16	0.18
Manganese (dissolved)	mg/L	-	-	-	-	-	-
Mercury	mg/L	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Mercury (dissolved)	mg/L	-	-	-	-	-	-
Nickel	mg/L	0.0014 J	0.0022 J	0.0013 J	0.0028 J	0.00079 J	0.0025 J
Nickel (dissolved)	mg/L	-	-	-	-	-	-
Selenium	mg/L	0.005 U	0.005 U	0.00027 J	0.00072 J	0.005 U	0.0057
Selenium (dissolved)	mg/L	-	-	-	-	-	-
Silver	mg/L	0.0002 U	0.0002 U	0.000013 J	0.0002 U	0.0002 U	0.0002 U
Silver (dissolved)	mg/L	-	-	-	-	-	-
Thallium	mg/L	0.002 U	0.002 U	0.0012 J	0.002 U	0.002 U	0.002 U
Thallium (dissolved)	mg/L	-	-	-	-	-	-
Vanadium	mg/L	0.004 U	0.00055 J	0.0006 J	0.00039 J	0.00054 J	0.004 U
Vanadium (dissolved)	mg/L	-	-	-	-	-	-
Zinc	mg/L	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Zinc (dissolved)	mg/L	-	-	-	-	-	-
General Chemistry							
Cyanide (amenable)	mg/L	-	-	-	-	-	-
Phosphorus	mg/L	-	-	-	-	0.036 J	-

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit
UJ - Not detected; associated reporting limit is estimated
R - Rejected

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

TABLE 3

ANALYTICAL METHODS AND HOLDING TIME CRITERIA
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Method* [1]	*Matrix*	*Holding Time*	
			Collection to Extraction (Days)	*Collection or Extraction to Analysis (Days)*
TCL VOC	SW-846 8260	Water	-	14
TCL SVOC	SW-846 8270C	Water	7	40
PCB	SW-846 8082	Water	7	40
TAL Metals	SW-846 6020	Water	-	180
Mercury	SW-846 7470A	Water	-	28
Cyanide (Amenable)	SW-846 9012	Water	-	14
Phospliorus (total)	SM4500-P-E	Water	-	28

Notes

SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions.
SM "Standard Methods for the Examination of Water and Wastewater", 18th Edition, 1992, with subsequent revisions.

PCB - Polychlorinated biphenyls
SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target control list
VOC - Volatile organic compound

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO HOLDING TIME EXCEEDANCE
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Sample ID*	*Holding Time (days)*	*Holding Time Criteria (days)*	*Analyte*	*Qualified Sample Results*	*Units*
PCB	GW-17358-040113-JY-001	9	7	Aroclor-1260	0.095 UJ	µg/L
				Aroclor-1254	0.095 UJ	µg/L
				Aroclor-1268	0.095 UJ	µg/L
				Aroclor-1221	0.095 UJ	µg/L
				Aroclor-1232	0.095 UJ	µg/L
				Aroclor-1248	0.095 UJ	µg/L
				Aroclor-1016	0.095 UJ	µg/L
				Aroclor-1262	0.095 UJ	µg/L
				Aroclor-1242	0.095 UJ	µg/L

Notes:

UJ - Not detected; associated reporting limit is estimated.

PCB - Polychlorinated biphenyls

TABLE 5

QUALIFIED SAMPLE DATA DUE TO OUTLYING CALIBRATION CRITERIA
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Calibration Date*	*Calibration ID (CCV)*	*Recovery (percent)*	*Criteria (percent)*	*Associated Sample ID*	*Qualified Result*	*Units*
TAL Metals	Aluminum	04/17/13	CCV	>110	90-110	GW-17358-041213-JY-097	130 J	µg/L
						GW-17358-041113-DR-084	17000 J	µg/L
						GW-17358-041113-DR-085	1400 J	µg/L
						GW-17358-041113-DR-086	7900 J	µg/L
						GW-17358-041113-DR-087	29000 J	µg/L
TAL Metals	Beryllium	04/19/13	CCV	>110	90-110	GW-17358-040913-EM-061	0.44 J	µg/L
TAL Metals	Beryllium	04/20/13	CCV	>110	90-110	GW-17358-041013-DR-071	0.23 J	µg/L
TAL Metals	Aluminum	04/23/13	CCV	>110	90-110	GW-17358-041013-DR-080	19 J	µg/L
						GW-17358-041013-DR-081	3500 J	µg/L
						GW-17358-041513-DR-102	130 J	µg/L
						GW-17358-041513-DR-103	9.9 J	µg/L
						GW-17358-041513-DR-104	11 J	µg/L
						GW-17358-041513-DR-105	36 J	µg/L
						GW-17358-041513-DR-106	21 J	µg/L
						GW-17358-041513-DR-107	110 J	µg/L
						GW-17358-041613-DR-108	7.7 J	µg/L
						GW-17358-041613-DR-109	8.8 J	µg/L
						GW-17358-041613-DR-111	24 J	µg/L
						GW-17358-041613-DR-112	140 J	µg/L
						GW-17358-041613-DR-113	240 J	µg/L
						GW-17358-041613-DR-114	7.8 J	µg/L
						GW-17358-041613-DR-115	27 J	µg/L
						GW-17358-041713-DR-117	19 J	µg/L

TABLE 5

QUALIFIED SAMPLE DATA DUE TO OUTLYING CALIBRATION CRITERIA
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Calibration Date*	*Calibration ID (CCV)*	*Recovery (percent)*	*Criteria (percent)*	*Associated Sample ID*	*Qualified Result*	*Units*
TAL Metals	Copper	04/23/13	CCV	>110	90-110	GW-17358-041013-DR-081	6.7 J	µg/L

Notes:

J - Estimated concentration

CCV - Continuing calibration verification.

TAL - Target analyte compound

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result **	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TCL VOC	Benzene	04/03/13	0.222 J	GW-17358-040313-CT-016	0.17 JB	1.0 U	µg/L
				GW-17358-040313-CT-017	0.20 JB	1.0 U	µg/L
				GW-17358-040313-CT-018	0.21 JB	1.0 U	µg/L
				GW-17358-040313-CT-020	0.52 JB	2.5 U	µg/L
TCL VOC	Methylene chloride	04/09/13	1.26 J	GW-17358-040313-CT-020	2.4 JB	13 U	µg/L
TCL VOC	Methylene chloride	04/10/13	1.45 J	GW-17358-040313-CT-015	1.2 JB	13 U	µg/L
TCL VOC	Methylene chloride	04/12/13	2.93 J	GW-17358-040413-CT-031	28 JB	63 U	µg/L
TCL VOC	Methylene chloride	04/19/13	0.583 J	GW-17358-041613-DR-110	12 JB	130 U	µg/L
TCL SVOC	bis(2-Ethylhexyl)phthalate	04/01/13	4.18 J	GW-17358-040113-CT-003	1.0 JB	4.8 U	µg/L
				GW-17358-040113-CT-004	1.5 JB	4.8 U	µg/L
				GW-17358-040113-CT-005	1.2 JB	4.9 U	µg/L
				GW-17358-040113-DR-006	0.99 JB	5.1 U	µg/L
				GW-17358-040113-DR-007	1.6 JB	5.2 U	µg/L
				GW-17358-040113-JY-001	0.86 JB	4.8 U	µg/L
TCL SVOC	bis(2-Ethylhexyl)phthalate	04/10/13	1.6 J	GW-17358-040213-CT-008	0.87 JB	4.8 U	µg/L
				GW-17358-040213-CT-009	0.77 JB	4.8 U	µg/L
				GW-17358-040213-CT-010	0.97 JB	4.9 U	µg/L
				GW-17358-040213-CT-011	0.90 JB	4.8 U	µg/L
				GW-17358-040213-CT-012	0.89 JB	4.8 U	µg/L
				GW-17358-040213-CT-013	0.89 JB	4.8 U	µg/L
				GW-17358-040213-CT-014	6.6 B	6.6 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result **	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TCL SVOC	bis(2-Ethylhexyl)phthalate	04/12/13	0.953 J	GW-17358-040313-CT-015	1.0 JB	4.8 U	µg/L
				GW-17358-040313-CT-016	1.3 JB	5.2 U	µg/L
				GW-17358-040313-CT-017	1.1 JB	5.3 U	µg/L
				GW-17358-040313-CT-018	1.1 JB	4.9 U	µg/L
				GW-17358-040313-CT-019	1.2 JB	5.2 U	µg/L
				GW-17358-040313-CT-020	1.7 JB	4.8 U	µg/L
TCL SVOC	bis(2-Ethylhexyl)phthalate	04/11/13	0.837 J	GW-17358-040413-CT-021	0.90 JB	5.3 U	µg/L
				GW-17358-040413-CT-024	0.76 JB	4.8 U	µg/L
				GW-17358-040413-CT-025	0.80 JB	5.0 U	µg/L
TCL SVOC	bis(2-Ethylhexyl)phthalate	04/12/13	1.34 J	GW-17358-040413-CT-027	1.3 JB	5.1 U	µg/L
				GW-17358-040413-CT-028	1.1 JB	5.4 U	µg/L
				GW-17358-040413-CT-029	0.88 JB	5.2 U	µg/L
				GW-17358-040413-CT-031	1.1 JB	5.6 U	µg/L
TCL SVOC	bis(2-Ethylhexyl)phthalate	04/09/13	1.27 J	GW-17358-040913-EM-061	1.2 JB	5.0 U	µg/L
				GW-17358-040913-EM-062	0.93 JB	5.3 U	µg/L
				GW-17358-040913-EM-063	1.1 JB	4.9 U	µg/L
				GW-17358-040913-EM-064	1.1 JB	4.8 U	µg/L
				GW-17358-040913-EM-065	1.2 JB	4.8 U	µg/L
				GW-17358-040913-EM-067	1.1 JB	4.9 U	µg/L
				GW-17358-040913-EM-068	0.94 JB	4.9 U	µg/L
				GW-17358-040913-JY-058	1.2 JB	5.4 U	µg/L
				GW-17358-040913-JY-059	1.4 JB	4.9 U	µg/L
				GW-17358-040913-JY-060	2.9 JB	5.0 U	µg/L
				GW-17358-040913-JY-066	1.2 JB	5.1 U	µg/L
				GW-17358-040913-JY-069	1.1 JB	4.8 U	µg/L
				GW-17358-040913-JY-070	1.6 JB	5.3 U	µg/L
				GW-17358-040813-DR-049	1.2 JB	5.0 U	µg/L
				GW-17358-040813-DR-050	1.2 JB	5.1 U	µg/L
				GW-17358-040813-DR-051	1.1 JB	5.1 U	µg/L
				GW-17358-040813-DR-052	3.5 JB	4.8 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result **	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TCL SVOC	bis(2-Ethylhexyl)phthalate	04/08/13	0.9444 J	GW-17358-040813-JY-045	2.1 JB	12 U	µg/L
				GW-17358-040813-JY-046	1.0 JB	4.8 U	µg/L
				GW-17358-040813-JY-047	1.1 JB	5.0 U	µg/L
				GW-17358-040813-JY-048	1.1 JB	4.8 U	µg/L
				GW-17358-040813-JY-053	1.0 JB	4.8 U	µg/L
				GW-17358-040813-JY-054	3.5 JB	12 U	µg/L
				GW-17358-040813-JY-055	1.1 JB	4.8 U	µg/L
				GW-17358-040813-JY-056	1.3 JB	4.8 U	µg/L
				GW-17358-040813-JY-057	1.4 JB	4.8 U	µg/L
TCL SVOC	bis(2-Ethylhexyl)phthalate	04/08/13	0.982 J	GW-17358-041013-DR-071	4.1 JB	5.0 U	µg/L
				GW-17358-041013-DR-072	2.9 JB	5.3 U	µg/L
				GW-17358-041013-DR-073	1.6 JB	4.9 U	µg/L
				GW-17358-041013-DR-082	1.1 JB	5.3 U	µg/L
				GW-17358-041013-JY-074	1.6 JB	4.8 U	µg/L
				GW-17358-041013-JY-075	0.81 JB	5.0 U	µg/L
				GW-17358-041013-JY-077	1.2 JB	4.8 U	µg/L
				GW-17358-041013-JY-079	2.1 JB	4.8 U	µg/L
TAL Metals	Antimony	04/16/13	1.31 J	GW-17358-040313-CT-015	0.79 JB	2.0 U	µg/L
				GW-17358-040313-CT-016	2.0 JB	2.0 U	µg/L
				GW-17358-040313-CT-017	0.98 JB	2.0 U	µg/L
				GW-17358-040313-CT-018	3.2 JB	3.2 U	µg/L
				GW-17358-040313-CT-019	0.70 JB	2.0 U	µg/L
				GW-17358-040313-CT-020	0.93 JB	2.0 U	µg/L
				GW-17358-040513-DR-041	0.79 JB	2.0 U	µg/L
				GW-17358-040513-CT-033	0.83 JB	2.0 U	µg/L
				GW-17358-040513-CT-034	0.79 JB	2.0 U	µg/L
				GW-17358-040513-CT-035	0.68 JB	2.0 U	µg/L
				GW-17358-040513-CT-044	0.69 JB	2.0 U	µg/L
				GW-17358-040513-DR-039	0.90 JB	2.0 U	µg/L
				GW-17358-040513-DR-040	0.90 JB	2.0 U	µg/L
				GW-17358-040513-DR-042	0.63 JB	2.0 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result **	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Antimony	04/16/13	1.31 J	GW-17358-040513-DR-043	1.1 JB	2.0 U	µg/L
				GW-17358-040513-JY-036	1.1 JB	2.0 U	µg/L
				GW-17358-040513-JY-037	0.82 JB	2.0 U	µg/L
TAL Metals	Copper	04/16/13	0.305 J	GW-17358-040313-CT-017	1.2 JB	4.0 U	µg/L
				GW-17358-040313-CT-020	0.92 JB	4.0 U	µg/L
				GW-17358-040513-CT-034	1.2 JB	4.0 U	µg/L
				GW-17358-040513-CT-044	0.49 JB	4.0 U	µg/L
				GW-17358-040513-DR-039	1.4 JB	4.0 U	µg/L
				GW-17358-040513-DR-040	1.3 JB	4.0 U	µg/L
				GW-17358-040513-DR-041	0.80 JB	4.0 U	µg/L
				GW-17358-040513-DR-043	0.39 JB	4.0 U	µg/L
				GW-17358-040513-JY-036	0.98 JB	4.0 U	µg/L
TAL Metals	Manganese	04/16/13	1.66 J	GW-17358-040313-CT-018	2.3 JB	50 U	µg/L
TAL Metals	Zinc	04/16/13	47.3 J	GW-17358-040313-CT-015	6.6 JB	50 U	µg/L
				GW-17358-040313-CT-016	13 JB	50 U	µg/L
				GW-17358-040313-CT-017	20 JB	50 U	µg/L
				GW-17358-040313-CT-018	14 JB	50 U	µg/L
				GW-17358-040313-CT-019	34 JB	50 U	µg/L
				GW-17358-040313-CT-020	5.7 JB	50 U	µg/L
				GW-17358-040513-CT-033	5.4 JB	50 U	µg/L
				GW-17358-040513-CT-034	17 JB	50 U	µg/L
				GW-17358-040513-CT-035	21 JB	50 U	µg/L
				GW-17358-040513-CT-044	10 JB	50 U	µg/L
				GW-17358-040513-DR-039	7.5 JB	50 U	µg/L
				GW-17358-040513-DR-040	6.3 JB	50 U	µg/L
				GW-17358-040513-DR-041	4.8 JB	50 U	µg/L
				GW-17358-040513-DR-042	7.8 JB	50 U	µg/L
				GW-17358-040513-DR-043	18 JB	50 U	µg/L
				GW-17358-040513-JY-036	9.3 JB	50 U	µg/L
				GW-17358-040513-JY-037	6.6 JB	50 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result* *	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Antimony	04/16/13	1 J	GW-17358-040113-CT-003	0.61 JB	2.0 U	µg/L
				GW-17358-040113-JY-001	0.59 JB	2.0 U	µg/L
				GW-17358-040113-JY-002	0.55 JB	2.0 U	µg/L
				GW-17358-040513-JY-038	1.9 JB	2.0 U	µg/L
TAL Metals	Copper	04/16/13	0.418 J	GW-17358-040113-CT-003	0.46 JB	4.0 U	µg/L
TAL Metals	Lead	04/16/13	1.85 J	GW-17358-040113-CT-003	0.41 JB	3.0 U	µg/L
				GW-17358-040113-JY-001	0.59 JB	3.0 U	µg/L
				GW-17358-040113-JY-002	0.56 JB	3.0 U	µg/L
				GW-17358-040513-JY-038	0.20 JB	3.0 U	µg/L
TAL Metals	Nickel	04/16/13	0.477 J	GW-17358-040113-JY-002	1.5 JB	20 U	µg/L
TAL Metals	Zinc	04/16/13	57.2	GW-17358-040113-CT-003	27 JB	50 U	µg/L
				GW-17358-040113-JY-001	22 JB	50 U	µg/L
				GW-17358-040113-JY-002	38 JB	50 U	µg/L
				GW-17358-040513-JY-038	49 JB	50 U	µg/L
TAL Metals	Aluminum	04/16/13	14.7 J	GW-17358-041213-DR-099	13 JB	50 U	µg/L
				GW-17358-041213-DR-100	15 JB	50 U	µg/L
				GW-17358-041213-EM-096	16 JB	50 U	µg/L
				GW-17358-041213-EM-101	17 JB	50 U	µg/L
				GW-17358-041213-JY-098	23 JB	50 U	µg/L
				GW-17358-041113-JY-088	33 JB	50 U	µg/L
				GW-17358-041113-EM-093	29 JB	50 U	µg/L
				GW-17358-041113-EM-094	40 JB	50 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result* *	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Antimony	04/16/13	0.614 J	GW-17358-041213-DR-099	0.48 JB	2.0 U	µg/L
				GW-17358-041213-DR-100	0.40 JB	2.0 U	µg/L
				GW-17358-041213-EM-095	0.48 JB	2.0 U	µg/L
				GW-17358-041213-EM-096	0.65 JB	2.0 U	µg/L
				GW-17358-041213-EM-101	0.52 JB	2.0 U	µg/L
				GW-17358-041213-JY-097	0.56 JB	2.0 U	µg/L
				GW-17358-041213-JY-098	0.50 JB	2.0 U	µg/L
				GW-17358-041113-JY-088	0.64 JB	2.0 U	µg/L
				GW-17358-041113-DR-084	0.85 JB	2.0 U	µg/L
				GW-17358-041113-DR-085	0.72 JB	2.0 U	µg/L
				GW-17358-041113-DR-086	0.74 JB	2.0 U	µg/L
				GW-17358-041113-DR-087	1.3 JB	2.0 U	µg/L
				GW-17358-041113-EM-083	0.58 JB	2.0 U	µg/L
				GW-17358-041113-EM-092	0.43 JB	2.0 U	µg/L
				GW-17358-041113-EM-093	1.0 JB	2.0 U	µg/L
				GW-17358-041113-EM-094	1.1 JB	2.0 U	µg/L
				GW-17358-041113-JY-089	0.56 JB	2.0 U	µg/L
				GW-17358-041113-JY-090	0.72 JB	2.0 U	µg/L
				GW-17358-041113-JY-091	0.51 JB	2.0 U	µg/L
TAL Metals	Arsenic	04/16/13	0.144 J	GW-17358-041213-EM-101	0.46 JB	5.0 U	µg/L
				GW-17358-041213-JY-097	0.41 JB	5.0 U	µg/L
TAL Metals	Chromium	04/16/13	0.136 J	GW-17358-041213-DR-099	0.34 JB	10 U	µg/L
				GW-17358-041213-DR-100	0.35 JB	10 U	µg/L
				GW-17358-041213-EM-095	0.27 JB	10 U	µg/L
				GW-17358-041213-EM-096	0.31 JB	10 U	µg/L
				GW-17358-041213-EM-101	0.45 JB	10 U	µg/L
				GW-17358-041213-JY-098	0.57 JB	10 U	µg/L
TAL Metals	Copper	04/16/13	4.25 J	GW-17358-041213-DR-099	1.2 JB	4.0 U	µg/L
				GW-17358-041213-DR-100	1.5 JB	4.0 U	µg/L
				GW-17358-041213-EM-096	0.65 JB	4.0 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result **	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Copper	04/16/13	4.25 J	GW-17358-041213-EM-101	0.49 JB	4.0 U	µg/L
				GW-17358-041213-JY-097	0.79 JB	4.0 U	µg/L
				GW-17358-041213-JY-098	2.6 JB	4.0 U	µg/L
				GW-17358-041113-DR-085	2.3 JB	4.0 U	µg/L
				GW-17358-041113-DR-086	17 B	17 U	µg/L
				GW-17358-041113-EM-093	3.1 JB	4.0 U	µg/L
				GW-17358-041113-EM-094	3.9 JB	4.0 U	µg/L
				GW-17358-041113-JY-090	0.82 JB	4.0 U	µg/L
TAL Metals	Iron	04/16/13	27.4 J	GW-17358-041213-EM-096	70 JB	200 U	µg/L
				GW-17358-041213-JY-097	25 JB	200 U	µg/L
TAL Metals	Manganese	04/16/13	2.06 J	GW-17358-041213-EM-101	5.3 JB	50 U	µg/L
TAL Metals	Nickel	04/16/13	0.334 J	GW-17358-041213-DR-099	0.93 JB	20 U	µg/L
				GW-17358-041213-DR-100	0.74 JB	20 U	µg/L
				GW-17358-041213-EM-095	0.92 JB	20 U	µg/L
				GW-17358-041213-EM-096	0.86 JB	20 U	µg/L
				GW-17358-041213-EM-101	0.71 JB	20 U	µg/L
				GW-17358-041213-JY-098	1.1 JB	20 U	µg/L
				GW-17358-041113-EM-083	1.6 JB	20 U	µg/L
				GW-17358-041113-JY-091	0.42 JB	20 U	µg/L
TAL Metals	Zinc	04/16/13	34.6 J	GW-17358-041213-DR-099	6.8 JB	50 U	µg/L
				GW-17358-041213-DR-100	8.3 JB	50 U	µg/L
				GW-17358-041213-EM-095	5.5 JB	50 U	µg/L
				GW-17358-041213-EM-096	17 JB	50 U	µg/L
				GW-17358-041213-EM-101	12 JB	50 U	µg/L
				GW-17358-041213-JY-097	11 JB	50 U	µg/L
				GW-17358-041213-JY-098	16 JB	50 U	µg/L
				GW-17358-041113-JY-088	28 JB	50 U	µg/L
				GW-17358-041113-DR-084	93 B	93 U	µg/L
				GW-17358-041113-DR-085	32 JB	50 U	µg/L
				GW-17358-041113-DR-086	120 B	120 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result* *	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Zinc	04/16/13	34.6 J	GW-17358-041113-DR-087	150 B	150 U	µg/L
				GW-17358-041113-EM-083	26 JB	50 U	µg/L
				GW-17358-041113-EM-092	23 JB	50 U	µg/L
				GW-17358-041113-EM-093	36 JB	50 U	µg/L
				GW-17358-041113-EM-094	48 JB	50 U	µg/L
				GW-17358-041113-JY-089	14 JB	50 U	µg/L
				GW-17358-041113-JY-090	9.4 JB	50 U	µg/L
				GW-17358-041113-JY-091	7.4 JB	50 U	µg/L
TAL Metals	Antimony	04/17/13	0.696 J	GW-17358-040113-CT-004	0.45 JB	2.0 U	µg/L
				GW-17358-040113-CT-005	0.43 JB	2.0 U	µg/L
				GW-17358-040113-DR-006	0.41 JB	2.0 U	µg/L
				GW-17358-040113-DR-007	0.45 JB	2.0 U	µg/L
				GW-17358-040213-CT-008	0.50 JB	2.0 U	µg/L
				GW-17358-040213-CT-009	0.52 JB	2.0 U	µg/L
				GW-17358-040213-CT-010	0.92 JB	2.0 U	µg/L
				GW-17358-040213-CT-011	0.81 JB	2.0 U	µg/L
				GW-17358-040213-CT-012	0.66 JB	2.0 U	µg/L
				GW-17358-040213-CT-013	0.41 JB	2.0 U	µg/L
				GW-17358-040213-CT-014	0.38 JB	2.0 U	µg/L
TAL Metals	Chromium	04/17/13	0.802 J	GW-17358-040213-CT-008	2.4 JB	10 U	µg/L
				GW-17358-040213-CT-009	1.6 JB	10 U	µg/L
				GW-17358-040213-CT-010	1.2 JB	10 U	µg/L
				GW-17358-040213-CT-012	2.1 JB	10 U	µg/L
				GW-17358-040213-CT-014	0.98 JB	10 U	µg/L
TAL Metals	Iron	04/17/13	37.1 J	GW-17358-040213-CT-011	30 JB	200 U	µg/L
TAL Metals	Zinc	04/17/13	23.6 J	GW-17358-040113-CT-004	18 JB	50 U	µg/L
				GW-17358-040113-CT-005	7.8 JB	50 U	µg/L
				GW-17358-040113-DR-006	19 JB	50 U	µg/L
				GW-17358-040113-DR-007	7.9 JB	50 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result **	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Zinc	04/17/13	23.6 J	GW-17358-040213-CT-008	8.6 JB	50 U	µg/L
				GW-17358-040213-CT-009	21 JB	50 U	µg/L
				GW-17358-040213-CT-010	28 JB	50 U	µg/L
				GW-17358-040213-CT-011	16 JB	50 U	µg/L
				GW-17358-040213-CT-012	5.7 JB	50 U	µg/L
				GW-17358-040213-CT-013	16 JB	50 U	µg/L
				GW-17358-040213-CT-014	7.4 JB	50 U	µg/L
TAL Metals	Antimony (dissolved)	04/18/13	0.492 J	GW-17358-041113-DR-084	0.60 JB	2.0 U	µg/L
				GW-17358-041113-DR-085	0.52 JB	2.0 U	µg/L
				GW-17358-041113-DR-086	0.45 JB	2.0 U	µg/L
				GW-17358-041113-DR-087	1.1 JB	2.0 U	µg/L
TAL Metals	Copper (dissolved)	04/18/13	0.776 J	GW-17358-041113-DR-084	0.40 JB	4.0 U	µg/L
				GW-17358-041113-DR-085	0.36 JB	4.0 U	µg/L
				GW-17358-041113-DR-086	0.96 JB	4.0 U	µg/L
TAL Metals	Iron (dissolved)	04/18/13	26.9 J	GW-17358-041113-DR-084	57 JB	200 U	µg/L
				GW-17358-041113-DR-085	130 JB	200 U	µg/L
TAL Metals	Nickel (dissolved)	04/18/13	0.327 J	GW-17358-041113-DR-084	0.85 JB	20 U	µg/L
TAL Metals	Zinc (dissolved)	04/18/13	381	GW-17358-041113-DR-084	15 JB	50 U	µg/L
				GW-17358-041113-DR-085	13 JB	50 U	µg/L
				GW-17358-041113-DR-086	18 JB	50 U	µg/L
TAL Metals	Antimony	04/19/13	0.189 J	GW-17358-040413-CT-024	0.33 JB	2.0 U	µg/L
				GW-17358-040413-CT-021	0.79 JB	2.0 U	µg/L
				GW-17358-040413-CT-022	0.18 JB	2.0 U	µg/L
				GW-17358-040413-CT-023	0.17 JB	2.0 U	µg/L
				GW-17358-040413-CT-025	0.71 JB	2.0 U	µg/L
				GW-17358-040413-CT-026	0.21 JB	2.0 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result **	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Antimony	04/19/13	0.189 J	GW-17358-040413-CT-027	0.24 JB	2.0 U	µg/L
TAL Metals	Copper	04/19/13	0.574 J	GW-17358-040413-CT-024	0.69 JB	4.0 U	µg/L
				GW-17358-040413-CT-025	1.4 JB	4.0 U	µg/L
				GW-17358-040413-CT-027	1.1 JB	4.0 U	µg/L
TAL Metals	Zinc	04/19/13	12.5 J	GW-17358-040413-CT-021	13 JB	50 U	µg/L
				GW-17358-040413-CT-022	6.0 JB	50 U	µg/L
				GW-17358-040413-CT-023	6.1 JB	50 U	µg/L
				GW-17358-040413-CT-024	5.3 JB	50 U	µg/L
				GW-17358-040413-CT-025	7.4 JB	50 U	µg/L
				GW-17358-040413-CT-026	6.9 JB	50 U	µg/L
				GW-17358-040413-CT-027	8.7 JB	50 U	µg/L
TAL Metals	Antimony	04/19/13	0.221 J	GW-17358-040813-DR-049	0.38 JB	2.0 U	µg/L
				GW-17358-040813-DR-050	0.22 JB	2.0 U	µg/L
				GW-17358-040813-DR-051	0.26 JB	2.0 U	µg/L
				GW-17358-040813-DR-052	0.33 JB	2.0 U	µg/L
				GW-17358-040813-JY-045	0.23 JB	2.0 U	µg/L
				GW-17358-040813-JY-046	0.20 JB	2.0 U	µg/L
				GW-17358-040813-JY-047	0.22 JB	2.0 U	µg/L
				GW-17358-040813-JY-048	0.60 JB	2.0 U	µg/L
				GW-17358-040813-JY-053	0.30 JB	2.0 U	µg/L
				GW-17358-040813-JY-054	0.19 JB	2.0 U	µg/L
				GW-17358-040813-JY-055	0.25 JB	2.0 U	µg/L
				GW-17358-040813-JY-056	0.18 JB	2.0 U	µg/L
				GW-17358-040813-JY-057	0.20 JB	2.0 U	µg/L
				GW-17358-040913-JY-058	0.33 JB	2.0 U	µg/L
				GW-17358-040913-JY-059	0.21 JB	2.0 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result* *	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Antimony	04/19/13	0.221 J	GW-17358-040413-CT-028	0.30 JB	2.0 U	µg/L
				GW-17358-040413-CT-029	0.33 JB	2.0 U	µg/L
				GW-17358-040413-CT-030	0.22 JB	2.0 U	µg/L
				GW-17358-040413-CT-031	0.50 JB	2.0 U	µg/L
				GW-17358-040413-CT-032	0.39 JB	2.0 U	µg/L
TAL Metals	Zinc	04/19/13	12.4 J	GW-17358-040813-DR-049	11 JB	50 U	µg/L
				GW-17358-040813-DR-050	7.3 JB	50 U	µg/L
				GW-17358-040813-DR-051	8.8 JB	50 U	µg/L
				GW-17358-040813-DR-052	9.0 JB	50 U	µg/L
				GW-17358-040813-JY-045	12 JB	50 U	µg/L
				GW-17358-040813-JY-046	11 JB	50 U	µg/L
				GW-17358-040813-JY-047	8.4 JB	50 U	µg/L
				GW-17358-040813-JY-048	6.7 JB	50 U	µg/L
				GW-17358-040813-JY-053	5.8 JB	50 U	µg/L
				GW-17358-040813-JY-054	22 JB	50 U	µg/L
				GW-17358-040813-JY-055	6.4 JB	50 U	µg/L
				GW-17358-040813-JY-056	31 JB	50 U	µg/L
				GW-17358-040813-JY-057	7.3 JB	50 U	µg/L
				GW-17358-040913-JY-058	28 JB	50 U	µg/L
				GW-17358-040913-JY-059	5.5 JB	50 U	µg/L
				GW-17358-040413-CT-028	7.7 JB	50 U	µg/L
				GW-17358-040413-CT-029	5.9 JB	50 U	µg/L
				GW-17358-040413-CT-030	5.7 JB	50 U	µg/L
				GW-17358-040413-CT-031	16 JB	50 U	µg/L
				GW-17358-040413-CT-032	8.1 JB	50 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result* *	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Antimony	04/20/13	0.172 J	GW-17358-040913-EM-061	0.23 JB	2.0 U	µg/L
				GW-17358-040913-EM-062	0.22 JB	2.0 U	µg/L
				GW-17358-040913-EM-063	0.20 JB	2.0 U	µg/L
				GW-17358-040913-EM-064	0.31 JB	2.0 U	µg/L
				GW-17358-040913-EM-065	0.24 JB	2.0 U	µg/L
				GW-17358-040913-EM-067	0.18 JB	2.0 U	µg/L
				GW-17358-040913-EM-068	0.18 JB	2.0 U	µg/L
				GW-17358-040913-JY-060	0.27 JB	2.0 U	µg/L
				GW-17358-040913-JY-066	0.24 JB	2.0 U	µg/L
				GW-17358-040913-JY-069	0.20 JB	2.0 U	µg/L
				GW-17358-040913-JY-070	0.23 JB	2.0 U	µg/L
				GW-17358-041013-DR-071	0.54 JB	2.0 U	µg/L
				GW-17358-041013-DR-072	0.21 JB	2.0 U	µg/L
				GW-17358-041013-DR-073	0.18 JB	2.0 U	µg/L
				GW-17358-041013-JY-074	0.23 JB	2.0 U	µg/L
				GW-17358-041013-JY-075	0.56 JB	2.0 U	µg/L
				GW-17358-041013-JY-076	0.23 JB	2.0 U	µg/L
				GW-17358-041013-JY-077	0.26 JB	2.0 U	µg/L
				GW-17358-041013-JY-078	0.18 JB	2.0 U	µg/L
				GW-17358-041013-JY-079	0.34 JB	2.0 U	µg/L
TAL Metals	Copper	04/20/13	0.675 J	GW-17358-040913-EM-061	1.2 JB	4.0 U	µg/L
				GW-17358-040913-EM-062	0.55 JB	4.0 U	µg/L
				GW-17358-040913-EM-063	0.31 JB	4.0 U	µg/L
				GW-17358-040913-EM-064	0.94 JB	4.0 U	µg/L
				GW-17358-040913-EM-065	0.44 JB	4.0 U	µg/L
				GW-17358-040913-EM-067	0.45 JB	4.0 U	µg/L
				GW-17358-040913-JY-060	1.1 JB	4.0 U	µg/L
				GW-17358-040913-JY-066	1.1 JB	4.0 U	µg/L
				GW-17358-040913-JY-069	0.62 JB	4.0 U	µg/L
				GW-17358-040913-JY-070	2.4 JB	4.0 U	µg/L
				GW-17358-041013-DR-072	1.1 JB	4.0 U	µg/L
				GW-17358-041013-DR-073	0.36 JB	4.0 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result **	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Copper	04/20/13	0.675 J	GW-17358-041013-JY-074	1.6 JB	4.0 U	µg/L
				GW-17358-041013-JY-075	2.5 JB	4.0 U	µg/L
				GW-17358-041013-JY-076	1.4 JB	4.0 U	µg/L
				GW-17358-041013-JY-077	2.9 JB	4.0 U	µg/L
				GW-17358-041013-JY-078	0.60 JB	4.0 U	µg/L
				GW-17358-041013-JY-079	3.8 JB	4.0 U	µg/L
TAL Metals	Zinc	04/20/13	37.4 J	GW-17358-040913-EM-061	16 JB	50 U	µg/L
				GW-17358-040913-EM-062	7.8 JB	50 U	µg/L
				GW-17358-040913-EM-063	8.0 JB	50 U	µg/L
				GW-17358-040913-EM-064	12 JB	50 U	µg/L
				GW-17358-040913-EM-065	7.8 JB	50 U	µg/L
				GW-17358-040913-EM-067	4.4 JB	50 U	µg/L
				GW-17358-040913-EM-068	5.0 JB	50 U	µg/L
				GW-17358-040913-JY-060	19 JB	50 U	µg/L
				GW-17358-040913-JY-066	15 JB	50 U	µg/L
				GW-17358-040913-JY-069	19 JB	50 U	µg/L
				GW-17358-040913-JY-070	9.4 JB	50 U	µg/L
				GW-17358-041013-DR-071	48 JB	50 U	µg/L
				GW-17358-041013-DR-072	10 JB	50 U	µg/L
				GW-17358-041013-DR-073	12 JB	50 U	µg/L
				GW-17358-041013-JY-074	15 JB	50 U	µg/L
				GW-17358-041013-JY-075	51 JB	50 U	µg/L
				GW-17358-041013-JY-076	11 JB	50 U	µg/L
				GW-17358-041013-JY-077	56 JB	50 U	µg/L
				GW-17358-041013-JY-078	9.3 JB	50 U	µg/L
				GW-17358-041013-JY-079	20 JB	50 U	µg/L
TAL Metals	Zinc (dissolved)	04/22/13	33.6 J	GW-17358-041113-DR-087	110 B	110 U	µg/L
TAL Metals	Antimony	04/23/13	0.144 J	GW-17358-041013-DR-080	0.34 JB	2.0 U	µg/L
				GW-17358-041013-DR-081	1.1 JB	2.0 U	µg/L
				GW-17358-041013-DR-082	0.17 JB	2.0 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result* *	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Antimony	04/23/13	0.144 J	GW-17358-041513-DR-102	0.30 JB	2.0 U	µg/L
				GW-17358-041513-DR-103	0.30 JB	2.0 U	µg/L
				GW-17358-041513-DR-104	0.29 JB	2.0 U	µg/L
				GW-17358-041513-DR-105	0.18 JB	2.0 U	µg/L
				GW-17358-041513-DR-106	0.73 JB	2.0 U	µg/L
				GW-17358-041513-DR-107	0.26 JB	2.0 U	µg/L
				GW-17358-041613-DR-108	0.17 JB	2.0 U	µg/L
				GW-17358-041613-DR-109	0.30 JB	2.0 U	µg/L
				GW-17358-041613-DR-110	0.21 JB	2.0 U	µg/L
				GW-17358-041613-DR-111	0.29 JB	2.0 U	µg/L
				GW-17358-041613-DR-112	0.23 JB	2.0 U	µg/L
				GW-17358-041613-DR-113	0.30 JB	2.0 U	µg/L
				GW-17358-041613-DR-114	0.35 JB	2.0 U	µg/L
				GW-17358-041613-DR-115	0.28 JB	2.0 U	µg/L
TAL Metals	Chromium	04/23/13	0.163 J	GW-17358-041513-DR-102	0.55 JB	10 U	µg/L
				GW-17358-041513-DR-105	0.40 JB	10 U	µg/L
				GW-17358-041613-DR-108	0.52 JB	10 U	µg/L
				GW-17358-041613-DR-110	0.32 JB	10 U	µg/L
				GW-17358-041613-DR-111	0.36 JB	10 U	µg/L
				GW-17358-041613-DR-112	0.59 JB	10 U	µg/L
				GW-17358-041613-DR-114	0.31 JB	10 U	µg/L
				GW-17358-041613-DR-115	0.45 JB	10 U	µg/L
TAL Metals	Copper	04/23/13	0.747 J	GW-17358-041013-DR-080	1.4 JB	4.0 U	µg/L
				GW-17358-041013-DR-082	0.87 JB	4.0 U	µg/L
				GW-17358-041513-DR-102	1.0 JB	4.0 U	µg/L
				GW-17358-041513-DR-103	1.4 JB	4.0 U	µg/L
				GW-17358-041513-DR-104	1.4 JB	4.0 U	µg/L
				GW-17358-041513-DR-105	1.2 JB	4.0 U	µg/L
				GW-17358-041513-DR-106	1.6 JB	4.0 U	µg/L
				GW-17358-041513-DR-107	1.3 JB	4.0 U	µg/L
				GW-17358-041613-DR-108	0.60 JB	4.0 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result* *	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Copper	04/23/13	0.747 J	GW-17358-041613-DR-109	3.3 JB	4.0 U	µg/L
				GW-17358-041613-DR-110	0.56 JB	4.0 U	µg/L
				GW-17358-041613-DR-111	1.2 JB	4.0 U	µg/L
				GW-17358-041613-DR-112	1.2 JB	4.0 U	µg/L
				GW-17358-041613-DR-113	3.3 JB	4.0 U	µg/L
				GW-17358-041613-DR-114	1.1 JB	4.0 U	µg/L
				GW-17358-041613-DR-115	0.93 JB	4.0 U	µg/L
TAL Metals	Iron	04/23/13	14.4 J	GW-17358-041613-DR-115	5.9 JB	200 U	µg/L
TAL Metals	Manganese	04/23/13	0.891 J	GW-17358-041013-DR-082	2.3 JB	50 U	µg/L
TAL Metals	Nickel	04/23/13	0.167 J	GW-17358-041013-DR-082	0.39 JB	20 U	µg/L
				GW-17358-041513-DR-105	0.57 JB	20 U	µg/L
TAL Metals	Zinc	04/20/13	20.3 J	GW-17358-041013-DR-080	12 JB	50 U	µg/L
				GW-17358-041013-DR-082	11 JB	50 U	µg/L
				GW-17358-041513-DR-105	8.9 JB	50 U	µg/L
				GW-17358-041513-DR-102	15 JB	50 U	µg/L
				GW-17358-041513-DR-103	10 JB	50 U	µg/L
				GW-17358-041513-DR-104	8.5 JB	50 U	µg/L
				GW-17358-041513-DR-106	19 JB	50 U	µg/L
				GW-17358-041513-DR-107	23 JB	50 U	µg/L
				GW-17358-041613-DR-108	6.9 JB	50 U	µg/L
				GW-17358-041613-DR-109	19 JB	50 U	µg/L
				GW-17358-041613-DR-110	11 JB	50 U	µg/L
				GW-17358-041613-DR-111	8.4 JB	50 U	µg/L
				GW-17358-041613-DR-112	15 JB	50 U	µg/L
				GW-17358-041613-DR-113	21 JB	50 U	µg/L
				GW-17358-041613-DR-114	14 JB	50 U	µg/L
				GW-17358-041613-DR-115	26 JB	50 U	µg/L

TABLE 6

QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*Analysis Date*	*Blank Result **	*Sample ID*	*Original Result*	*Qualified Result*	*Units*
TAL Metals	Antimony	04/23/13	0.212 J	GW-17358-041713-DR-116	0.21 JB	2.0 U	µg/L
				GW-17358-041713-DR-117	0.52 JB	2.0 U	µg/L
TAL Metals	Arsenic	04/23/13	0.116 J	GW-17358-041713-DR-116	0.31 JB	5.0 U	µg/L
TAL Metals	Chromium	04/23/13	0.516 J	GW-17358-041713-DR-116	0.26 JB	10 U	µg/L
				GW-17358-041713-DR-117	0.52 JB	10 U	µg/L
TAL Metals	Cobalt	04/23/13	0.0220 J	GW-17358-041713-DR-116	0.076 JB	20 U	µg/L
TAL Metals	Copper	04/23/13	0.828 J	GW-17358-041713-DR-116	0.92 JB	4.0 U	µg/L
				GW-17358-041713-DR-117	3.7 JB	4.0 U	µg/L
TAL Metals	Nickel	04/23/13	0.218 J	GW-17358-041713-DR-116	0.78 JB	20 U	µg/L
TAL Metals	Zinc	04/23/13	100	GW-17358-041713-DR-117	12 JB	50 U	µg/L
TAL Metals	Antimony	04/24/13	0.281 J	GW-17358-041713-DR-118	0.30 JB	2.0 U	µg/L
TAL Metals	Chromium	04/24/13	0.35 J	GW-17358-041713-DR-118	1.3 JB	10 U	µg/L
TAL Metals	Zinc	04/24/13	5.94 J	GW-17358-041713-DR-118	14 JB	50 U	µg/L
TAL Metals	Zinc	04/25/13	13.6 J	GW-17358-041713-DR-116	4.4 JB	50 U	µg/L

Notes:

* Blank result adjusted for sample factors where applicable.
U Not detected at the associated reporting limit.

SVOC - Semi-volatile organic compound
TAL - Target analyte list
TCL - Target compound list
VOC - Volatile organic compound

TABLE 7

QUALIFIED SAMPLE DATA DUE TO OUTLYING OF SURROGATE RECOVERIES
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Sample ID*	*Surrogate*	*Surrogate Recovery (percent)*	*Control Limits (percent)*	*Analyte*	*Qualified Result*	*Units*
PCB	GW-17358-041113-DR-085	Decachlorobiphenyl	5	10-130	Aroclor-1260	R	
					Aroclor-1254	R	
					Aroclor-1268	R	
					Aroclor-1262	R	

Notes:

R - Rejected

PCB - Polychlorinated biphenyls

TABLE 8

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE RESULTS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*LCS Date*	*LCS (percent)*	*Control Limits (percent)*	*Associated Sample ID*	*Qualified Results*	*Units*
TCL VOC	Acetone	04/13/13	42	43-136	GW-17358-040513-CT-033	10 UJ	µg/L
					GW-17358-040513-CT-034	10 UJ	µg/L
					GW-17358-040513-DR-039	10 UJ	µg/L
					GW-17358-040513-DR-040	10 UJ	µg/L
					GW-17358-040513-DR-041	10 UJ	µg/L
					GW-17358-040513-DR-042	10 UJ	µg/L
					GW-17358-040513-JY-036	10 UJ	µg/L
					GW-17358-040513-JY-037	10 UJ	µg/L
					GW-17358-040513-JY-038	10 UJ	µg/L
TCL VOC	Carbon disulfide	04/23/13	154	62-142	GW-17358-040813-JY-054	0.33 J	µg/L
TCL SVOC	Hexachlorocyclopentadiene	04/10/13	8	10-110	GW-17358-040113-CT-003	R	
					GW-17358-040113-CT-004	R	
					GW-17358-040113-CT-005	R	
					GW-17358-040113-DR-006	R	
					GW-17358-040113-DR-007	R	
					GW-17358-040113-JY-001	R	
					GW-17358-040113-JY-002	R	
TCL SVOC	Hexachlorocyclopentadiene	04/17/13	7	10-110	GW-17358-040913-EM-061	R	
					GW-17358-040913-EM-062	R	
					GW-17358-040913-EM-063	R	
					GW-17358-040913-EM-064	R	
					GW-17358-040913-EM-065	R	
					GW-17358-040913-EM-067	R	
					GW-17358-040913-EM-068	R	
					GW-17358-040913-JY-058	R	
					GW-17358-040913-JY-059	R	
					GW-17358-040913-JY-060	R	
					GW-17358-040913-JY-066	R	
					GW-17358-040913-JY-069	R	
					GW-17358-040913-JY-070	R	

TABLE 8

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE RESULTS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*LCS Date*	*LCS (percent)*	*Control Limits (percent)*	*Associated Sample ID*	*Qualified Results*	*Units*
TCL SVOC	Hexachlorocyclopentadiene	04/18/13	8	10-110	GW-17358-040813-DR-049	R	
					GW-17358-040813-DR-050	R	
					GW-17358-040813-DR-051	R	
					GW-17358-040813-DR-052	R	
					GW-17358-040813-JY-045	R	
					GW-17358-040813-JY-046	R	
					GW-17358-040813-JY-047	R	
					GW-17358-040813-JY-048	R	
					GW-17358-040813-JY-053	R	
					GW-17358-040813-JY-054	R	
					GW-17358-040813-JY-055	R	
					GW-17358-040813-JY-056	R	
					GW-17358-040813-JY-057	R	
TCL SVOC	Hexachlorocyclopentadiene	04/17/13	2	10-110	GW-17358-041113-DR-084	R	
					GW-17358-041113-EM-083	R	
TCL SVOC	Hexachlorocyclopentadiene	04/24/13	7	10-110	GW-17358-041613-DR-108	R	
					GW-17358-041613-DR-109	R	
					GW-17358-041613-DR-110	R	
					GW-17358-041613-DR-111	R	
					GW-17358-041613-DR-112	R	
					GW-17358-041613-DR-113	R	
					GW-17358-041613-DR-114	R	
					GW-17358-041613-DR-115	R	
TCL SVOC	Hexachlorocyclopentadiene	04/25/13	2	10-110	GW-17358-041713-DR-116	R	
					GW-17358-041713-DR-117	R	
					GW-17358-041713-DR-118	R	

TABLE 8

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE RESULTS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Analyte*	*LCS Date*	*LCS (percent)*	*Control Limits (percent)*	*Associated Sample ID*	*Qualified Results*	*Units*

Notes:

J - Estimated concentration
UJ - Not detected; associated reporting limit is estimated.
R - Rejected

LCS - Laboratory control sample.
SVOC - Semi-volatile organic compound
TCL - Target control list
VOC - Volatile organic compound

TABLE 9

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Sample ID*	*Analyte*	*MS % Recovery*	*MSD % Recovery*	*RPD (percent)*	*Control Limits*		*Qualified Result*	*Units*
						% Recovery	*RPD*		
TCL SVOC	GW-17358-040313-CT-015	3,3'-Dichlorobenzidine	0	0	0	10-110	99	R	
TCL SVOC	GW-17358-040513-JY-038	3,3'-Dichlorobenzidine	0	0	0	10-110	99	R	
TCL SVOC	GW-17358-041113-JY-088	4-Chloroaniline	0	0	0	15-110	73	R	
		Hexachlorocyclopentadiene	0	0	0	10-110	99	R	
		3,3'-Dichlorobenzidine	0	0	0	10-110	99	R	
		3-Nitroaniline	17	21	21	22-110	69	100 UJ	µg/L
TCL SVOC	GW-17358-041613-DR-108	4-Nitroaniline	0	0	0	18-110	60	R	
		4-Chloroaniline	5	5	5	15-110	73	R	
		Atrazine	25	25	2	40-124	30	2.9 UJ	µg/L
		3,3'-Dichlorobenzidine	0	0	0	10-110	99	R	
		3-Nitroaniline	0	0	0	22-110	69	R	

Notes:

R - Rejected
UJ - Not detected; associated reporting limit is estimated.

MS - Matrix spike.
MSD - Matrix spike duplicate.
RPD - Relative percent difference.
SVOC - Semi-volatile organic compound
TCL - Target control list

TABLE 10

QUALIFIED SAMPLE DATA DUE TO ANALYTE CONCENTRATIONS IN THE TRIP BLANKS
RFI WORK PLAN ADDENDUM 1 - GROUNDWATER MONITORING
WILLOW RUN POWERTRAIN
YPSILANTI, MICHIGAN
APRIL 2013

Parameter	*Blank Date*	*Analyte*	*Blank Result*	*Associated Sample ID*	*Original Result*	*Qualified Result*	*Units*
TCL VOC	04/03/13	Acetone	1.3 J	GW-17358-040313-CT-015	3.1 J	25 U	µg/L
				GW-17358-040313-CT-018	1.1 J	10 U	µg/L
TCL VOC	04/16/13	Acetone	1.3 J	GW-17358-041613-DR-108	3.3 J	10 U	µg/L
				GW-17358-041613-DR-113	1.3 J	10 U	µg/L

Notes:

J - Estimated concentration
U - Not detected at the associated reporting limit.

TCL - Target control list
VOC - Volatile organic compound

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-22693-1
Client Project/Site: 17358-T01-10, RACER Willow Run

For:
Conestoga-Rovers & Associates, Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Mr. Paul Wiseman

Denise D Heckler

Authorized for release by:
4/25/2013 1:18:54 PM

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LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Definitions/Glossary 7
Sample Summary 9
Detection Summary 10
Method Summary 21
Client Sample Results 22
QC Association Summary 176
QC Sample Results 184
Surrogate Summary 215
Lab Chronicle 218
Certification Summary 227
Chain of Custody 228

Job ID: 240-22693-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 17358-T01-10, RACER Willow Run

Report Number: 240-22693-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica 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 application 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 04/03/2013 and 04/04/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 10 coolers at receipt time were 2.4º C, 2.6º C, 2.8º C, 3.1º C, 3.6º C, 3.6º C, 3.7º C, 4.1º C, 4.1º C and 5.1º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GW-17358-040313-CT-015 (240-22773-1), GW-17358-040313-CT-016 (240-22773-2), GW-17358-040313-CT-017 (240-22773-3), GW-17358-040313-CT-018 (240-22773-4), GW-17358-040313-CT-019 (240-22773-5), GW-17358-040313-CT-020 (240-22773-6) and TB-17358-040313 (240-22773-7) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. Samples GW-17358-040113-JY-001 (240-22693-1), GW-17358-040113-JY-002 (240-22693-2), GW-17358-040113-CT-003 (240-22693-3), GW-17358-040113-CT-004 (240-22693-4), GW-17358-040113-CT-005 (240-22693-5), GW-17358-040113-DR-006 (240-22693-6), GW-17358-040113-DR-007 (240-22693-7), GW-17358-040213-CT-008 (240-22693-8), GW-17358-040213-CT-009 (240-22693-9), GW-17358-040213-CT-010 (240-22693-10), GW-17358-040213-CT-011 (240-22693-11), GW-17358-040213-CT-012 (240-22693-12), GW-17358-040213-CT-013 (240-22693-13), GW-17358-040213-CT-014 (240-22693-14) and TB-17358-040213 (240-22693-15) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/09/2013 and 04/10/2013.

Benzene and Methylene Chloride were detected in method blanks 240-81347/6 and 240-81156/6 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Job ID: 240-22693-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

The laboratory control sample(LCS) for batches 81156 and 81347 exceeded control limits for the following analyte: Trichlorofluoromethane. This compound has been identified as poor performing when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

Trichlorofluoromethane failed the recovery criteria high for the MS/MSD of sample GW-17358-040313-CT-015 (240-22773-1) in batch 240-81347.

Samples GW-17358-040313-CT-015 (240-22773-1)[2.5X] and GW-17358-040313-CT-020 (240-22773-6)[2.5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

There was an MS/MSD analyzed in batch 81156 but could not be reported because the associated sample needed reanalyzed in a different batch.

No other difficulties were encountered during the VOCs analyses.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GW-17358-040313-CT-015 (240-22773-1), GW-17358-040313-CT-016 (240-22773-2), GW-17358-040313-CT-017 (240-22773-3), GW-17358-040313-CT-018 (240-22773-4), GW-17358-040313-CT-019 (240-22773-5) and GW-17358-040313-CT-020 (240-22773-6) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. Samples GW-17358-040113-JY-001 (240-22693-1), GW-17358-040113-JY-002 (240-22693-2), GW-17358-040113-CT-003 (240-22693-3), GW-17358-040113-CT-004 (240-22693-4), GW-17358-040113-CT-005 (240-22693-5), GW-17358-040113-DR-006 (240-22693-6), GW-17358-040113-DR-007 (240-22693-7), GW-17358-040213-CT-008 (240-22693-8), GW-17358-040213-CT-009 (240-22693-9), GW-17358-040213-CT-010 (240-22693-10), GW-17358-040213-CT-011 (240-22693-11), GW-17358-040213-CT-012 (240-22693-12), GW-17358-040213-CT-013 (240-22693-13) and GW-17358-040213-CT-014 (240-22693-14) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 04/06/2013, 04/08/2013 and 04/09/2013 and analyzed on 04/10/2013 and 04/12/2013.

Bis(2-ethylhexyl) phthalate was detected in method blanks 240-81130/22-A, 240-80935/22-A, and 240-80859/18-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged.

The laboratory control sample (LCS) for batch 81130 exceeded control limits for the following analyte: Atrazine. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data has been reported.

3,3'-Dichlorobenzidine failed the recovery criteria low for the MS of sample GW-17358-040313-CT-015MS (240-22773-1) in batch 240-81678.

3,3'-Dichlorobenzidine failed the recovery criteria low for the MSD of sample GW-17358-040313-CT-015MSD (240-22773-1) in batch 240-81678. Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Dibenz(a,h)anthracene and Indeno[1,2,3-cd]pyrene exceeded the rpd limit.

No other difficulties were encountered during the SVOCs analyses.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples GW-17358-040313-CT-015 (240-22773-1), GW-17358-040313-CT-016 (240-22773-2), GW-17358-040313-CT-017 (240-22773-3), GW-17358-040313-CT-018 (240-22773-4), GW-17358-040313-CT-019 (240-22773-5) and GW-17358-040313-CT-020 (240-22773-6) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. Samples GW-17358-040113-JY-001 (240-22693-1), GW-17358-040113-JY-002 (240-22693-2), GW-17358-040113-CT-003 (240-22693-3), GW-17358-040113-CT-004 (240-22693-4), GW-17358-040113-CT-005 (240-22693-5), GW-17358-040113-DR-006 (240-22693-6), GW-17358-040113-DR-007 (240-22693-7), GW-17358-040213-CT-008 (240-22693-8), GW-17358-040213-CT-009 (240-22693-9), GW-17358-040213-CT-010 (240-22693-10), GW-17358-040213-CT-011 (240-22693-11), GW-17358-040213-CT-012 (240-22693-12), GW-17358-040213-CT-013 (240-22693-13) and GW-17358-040213-CT-014 (240-22693-14) were analyzed for polychlorinated biphenyls

Job ID: 240-22693-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

(PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared on 04/06/2013 and 04/10/2013 and analyzed on 04/08/2013, 04/09/2013 and 04/11/2013.

The following sample required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: GW-17358-040113-DR-006 (240-22693-6). Lot # S65830

Surrogate recovery for the following sample was outside control limits: GW-17358-040113-JY-001 (240-22693-1). Re-extraction and/or re-analysis was performed outside of holding time with acceptable results. Both sets of data are reported.

No difficulties were encountered during the PCBs analyses.

All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICPMS)

Samples GW-17358-040313-CT-015 (240-22773-1), GW-17358-040313-CT-016 (240-22773-2), GW-17358-040313-CT-017 (240-22773-3), GW-17358-040313-CT-018 (240-22773-4), GW-17358-040313-CT-019 (240-22773-5) and GW-17358-040313-CT-020 (240-22773-6) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020. Samples GW-17358-040113-JY-001 (240-22693-1), GW-17358-040113-JY-002 (240-22693-2), GW-17358-040113-CT-003 (240-22693-3), GW-17358-040113-CT-004 (240-22693-4), GW-17358-040113-CT-005 (240-22693-5), GW-17358-040113-DR-006 (240-22693-6), GW-17358-040113-DR-007 (240-22693-7), GW-17358-040213-CT-008 (240-22693-8), GW-17358-040213-CT-009 (240-22693-9), GW-17358-040213-CT-010 (240-22693-10), GW-17358-040213-CT-011 (240-22693-11), GW-17358-040213-CT-012 (240-22693-12), GW-17358-040213-CT-013 (240-22693-13) and GW-17358-040213-CT-014 (240-22693-14) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 04/15/2013 and 04/16/2013 and analyzed on 04/16/2013, 04/17/2013, 04/18/2013, 04/19/2013 and 04/20/2013.

Several analytes were detected in method blanks 240-82065/1-A, 240-81911/1-A, and 240-81908/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples GW-17358-040313-CT-015 (240-22773-1), GW-17358-040313-CT-016 (240-22773-2), GW-17358-040313-CT-017 (240-22773-3), GW-17358-040313-CT-018 (240-22773-4), GW-17358-040313-CT-019 (240-22773-5) and GW-17358-040313-CT-020 (240-22773-6) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. Samples GW-17358-040113-JY-001 (240-22693-1), GW-17358-040113-JY-002 (240-22693-2), GW-17358-040113-CT-003 (240-22693-3), GW-17358-040113-CT-004 (240-22693-4), GW-17358-040113-CT-005 (240-22693-5), GW-17358-040113-DR-006 (240-22693-6), GW-17358-040113-DR-007 (240-22693-7), GW-17358-040213-CT-008 (240-22693-8), GW-17358-040213-CT-009 (240-22693-9), GW-17358-040213-CT-010 (240-22693-10), GW-17358-040213-CT-011 (240-22693-11), GW-17358-040213-CT-012 (240-22693-12), GW-17358-040213-CT-013 (240-22693-13) and GW-17358-040213-CT-014 (240-22693-14) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/09/2013 and analyzed on 04/09/2013 and 04/10/2013.

No difficulties were encountered during the mercury analyses.

All quality control parameters were within the acceptance limits.

TOTAL PHOSPHORUS

Samples GW-17358-040113-JY-001 (240-22693-1), GW-17358-040113-JY-002 (240-22693-2), GW-17358-040113-CT-003 (240-22693-3), GW-17358-040113-CT-004 (240-22693-4), GW-17358-040213-CT-011 (240-22693-11) and GW-17358-040213-CT-014 (240-22693-14) were analyzed for total phosphorus in accordance with SM 4500 P E. Samples GW-17358-040313-CT-017 (240-22773-3) and GW-17358-040313-CT-018 (240-22773-4) were analyzed for total phosphorus in accordance with SM 4500 P E. The samples were prepared and analyzed on 04/05/2013 and 04/10/2013.

Job ID: 240-22693-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

No difficulties were encountered during the total phosphorus analyses.

All other quality control parameters were within the acceptance limits.

AMENABLE CYANIDE

Sample GW-17358-040313-CT-019 (240-22773-5) was analyzed for amenable cyanide in accordance with EPA SW-846 Method 9012A.
The samples were analyzed on 04/11/2013.

No difficulties were encountered during the amenable cyanide analysis.

All quality control parameters were within the acceptance limits.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
*	LCS or LCSD exceeds the control limits
F	MS or MSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits
H	Sample was prepped or analyzed beyond the specified holding time

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-22693-1	GW-17358-040113-JY-001	Water	04/01/13 14:00	04/03/13 09:00
240-22693-2	GW-17358-040113-JY-002	Water	04/01/13 15:05	04/03/13 09:00
240-22693-3	GW-17358-040113-CT-003	Water	04/01/13 14:20	04/03/13 09:00
240-22693-4	GW-17358-040113-CT-004	Water	04/01/13 14:35	04/03/13 09:00
240-22693-5	GW-17358-040113-CT-005	Water	04/01/13 15:00	04/03/13 09:00
240-22693-6	GW-17358-040113-DR-006	Water	04/01/13 14:30	04/03/13 09:00
240-22693-7	GW-17358-040113-DR-007	Water	04/01/13 16:35	04/03/13 09:00
240-22693-8	GW-17358-040213-CT-008	Water	04/02/13 09:40	04/03/13 09:00
240-22693-9	GW-17358-040213-CT-009	Water	04/02/13 09:50	04/03/13 09:00
240-22693-10	GW-17358-040213-CT-010	Water	04/02/13 11:15	04/03/13 09:00
240-22693-11	GW-17358-040213-CT-011	Water	04/02/13 11:16	04/03/13 09:00
240-22693-12	GW-17358-040213-CT-012	Water	04/02/13 15:15	04/03/13 09:00
240-22693-13	GW-17358-040213-CT-013	Water	04/02/13 15:10	04/03/13 09:00
240-22693-14	GW-17358-040213-CT-014	Water	04/02/13 16:20	04/03/13 09:00
240-22693-15	TB-17358-040213	Water	04/02/13 00:00	04/03/13 09:00
240-22773-1	GW-17358-040313-CT-015	Water	04/03/13 10:00	04/04/13 09:15
240-22773-2	GW-17358-040313-CT-016	Water	04/03/13 10:05	04/04/13 09:15
240-22773-3	GW-17358-040313-CT-017	Water	04/03/13 11:15	04/04/13 09:15
240-22773-4	GW-17358-040313-CT-018	Water	04/03/13 11:25	04/04/13 09:15
240-22773-5	GW-17358-040313-CT-019	Water	04/03/13 15:55	04/04/13 09:15
240-22773-6	GW-17358-040313-CT-020	Water	04/03/13 15:30	04/04/13 09:15
240-22773-7	TB-17358-040313	WQ	04/03/13 00:00	04/04/13 09:15

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Client Sample ID: GW-17358-040113-JY-001 — Lab Sample ID: 240-22693-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.19	J	1.0	0.17	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	20		1.0	0.17	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	0.86	J B	4.8	0.77	ug/L	1		8270C	Total/NA
Antimony	0.59	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	48		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	610	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.52	J	20	0.058	ug/L	1		6020	Total Recoverable
Chromium	1.5	J	10	0.71	ug/L	1		6020	Total Recoverable
Iron	20000	B	200	26	ug/L	1		6020	Total Recoverable
Manganese	280	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	3.2	J B	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.59	J B	3.0	0.18	ug/L	1		6020	Total Recoverable
Thallium	0.29	J	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	22	J B	50	2.3	ug/L	1		6020	Total Recoverable
Total Phosphorus as P	0.11		0.10	0.033	mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: GW-17358-040113-JY-002 — Lab Sample ID: 240-22693-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	3.6		1.0	0.17	ug/L	1		8260B	Total/NA
Antimony	0.55	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	18		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	120	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.69	J	20	0.058	ug/L	1		6020	Total Recoverable
Iron	340	B	200	26	ug/L	1		6020	Total Recoverable
Manganese	120	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	1.5	J B	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.56	J B	3.0	0.18	ug/L	1		6020	Total Recoverable
Thallium	0.24	J	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	38	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040113-CT-003 — Lab Sample ID: 240-22693-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	1.0	J B	4.8	0.76	ug/L	1		8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-040113-CT-003 (Continued) — Lab Sample ID: 240-22693-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	22	J	50	19	ug/L	1		6020	Total Recoverable
Antimony	0.61	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	4.7	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	160	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.31	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	0.46	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	3100	B	200	26	ug/L	1		6020	Total Recoverable
Manganese	59	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	55	B	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.41	J B	3.0	0.18	ug/L	1		6020	Total Recoverable
Thallium	0.14	J	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	27	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040113-CT-004 — Lab Sample ID: 240-22693-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	1.5	J B	4.8	0.76	ug/L	1		8270C	Total/NA
Aluminum	28	J	50	19	ug/L	1		6020	Total Recoverable
Antimony	0.45	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	4.5	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	160	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.38	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	0.85	J	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	2700	B	200	26	ug/L	1		6020	Total Recoverable
Manganese	66	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	52	B	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.46	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Thallium	0.20	J	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	18	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040113-CT-005 — Lab Sample ID: 240-22693-5

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-040113-CT-005 (Continued)

Lab Sample ID: 240-22693-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	1.2	J B	4.9	0.78	ug/L	1		8270C	Total/NA
Antimony	0.43	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	17		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	180	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.23	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	0.42	J	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	3700	B	200	26	ug/L	1		6020	Total Recoverable
Manganese	49	J B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	5.4	J B	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.35	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Thallium	0.17	J	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	7.8	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040113-DR-006

Lab Sample ID: 240-22693-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	1.9	J	5.0	0.13	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.36	J	1.0	0.17	ug/L	1		8260B	Total/NA
2-Methylnaphthalene	0.22	J	5.1	0.10	ug/L	1		8270C	Total/NA
Bis(2-ethylhexyl) phthalate	0.99	J B	5.1	0.81	ug/L	1		8270C	Total/NA
Fluorene	0.20	J	5.1	0.10	ug/L	1		8270C	Total/NA
Phenanthrene	0.23	J	2.0	0.10	ug/L	1		8270C	Total/NA
Aluminum	19	J	50	19	ug/L	1		6020	Total Recoverable
Antimony	0.41	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	40		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	82	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.26	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	0.40	J	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	1200	B	200	26	ug/L	1		6020	Total Recoverable
Manganese	40	J B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	31	B	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.33	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Vanadium	1.9	J	4.0	0.44	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-040113-DR-006 (Continued)

Lab Sample ID: 240-22693-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	19	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040113-DR-007

Lab Sample ID: 240-22693-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.5		1.0	0.17	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.6	J B	5.2	0.83	ug/L	1		8270C	Total/NA
Antimony	0.45	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	1.4	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	130	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	1.8	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	0.88	J	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	980	B	200	26	ug/L	1		6020	Total Recoverable
Manganese	330	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	5.3	J B	20	0.20	ug/L	1		6020	Total Recoverable
Zinc	7.9	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040213-CT-008

Lab Sample ID: 240-22693-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.87	J B	4.8	0.76	ug/L	1		8270C	Total/NA
Aluminum	39	J	50	19	ug/L	1		6020	Total Recoverable
Antimony	0.50	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	0.94	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	87	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.27	J	20	0.058	ug/L	1		6020	Total Recoverable
Chromium	2.4	J B	10	0.71	ug/L	1		6020	Total Recoverable
Copper	0.59	J	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	230	B	200	26	ug/L	1		6020	Total Recoverable
Manganese	72	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	1.4	J B	20	0.20	ug/L	1		6020	Total Recoverable
Zinc	8.6	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040213-CT-009

Lab Sample ID: 240-22693-9

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-040213-CT-009 (Continued)

Lab Sample ID: 240-22693-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.77	J B	4.8	0.76	ug/L	1		8270C	Total/NA
Aluminum	110		50	19	ug/L	1		6020	Total Recoverable
Antimony	0.52	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	1.0	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	87	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	1.2	J	20	0.058	ug/L	1		6020	Total Recoverable
Chromium	1.6	J B	10	0.71	ug/L	1		6020	Total Recoverable
Copper	1.2	J	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	340	B	200	26	ug/L	1		6020	Total Recoverable
Manganese	410	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	2.2	J B	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.24	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Vanadium	0.55	J	4.0	0.44	ug/L	1		6020	Total Recoverable
Zinc	21	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040213-CT-010

Lab Sample ID: 240-22693-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.97	J B	4.9	0.78	ug/L	1		8270C	Total/NA
Aluminum	36	J	50	19	ug/L	1		6020	Total Recoverable
Antimony	0.92	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	5.2		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	190	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.59	J	20	0.058	ug/L	1		6020	Total Recoverable
Chromium	1.2	J B	10	0.71	ug/L	1		6020	Total Recoverable
Copper	1.0	J	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	2000	B	200	26	ug/L	1		6020	Total Recoverable
Manganese	350	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	1.6	J B	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.49	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Zinc	28	J B	50	2.3	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Client Sample ID: GW-17358-040213-CT-011 — Lab Sample ID: 240-22693-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.90	J B	4.8	0.76	ug/L	1		8270C	Total/NA
Aluminum	51		50	19	ug/L	1		6020	Total Recoverable
Antimony	0.81	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	0.92	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	38	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.26	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	1.7	J	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	30	J B	200	26	ug/L	1		6020	Total Recoverable
Manganese	73	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	2.2	J B	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.19	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Selenium	1.1	J	5.0	0.57	ug/L	1		6020	Total Recoverable
Zinc	16	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040213-CT-012 — Lab Sample ID: 240-22693-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.89	J B	4.8	0.77	ug/L	1		8270C	Total/NA
Antimony	0.66	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	1.1	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	140	B	100	0.19	ug/L	1		6020	Total Recoverable
Chromium	2.1	J B	10	0.71	ug/L	1		6020	Total Recoverable
Copper	1.2	J	4.0	0.29	ug/L	1		6020	Total Recoverable
Nickel	0.64	J B	20	0.20	ug/L	1		6020	Total Recoverable
Selenium	5.2		5.0	0.57	ug/L	1		6020	Total Recoverable
Vanadium	0.61	J	4.0	0.44	ug/L	1		6020	Total Recoverable
Zinc	5.7	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040213-CT-013 — Lab Sample ID: 240-22693-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	0.89	J B	4.8	0.77	ug/L	1		8270C	Total/NA
Aluminum	28	J	50	19	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-040213-CT-013 (Continued)

Lab Sample ID: 240-22693-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.41	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	4.9	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	81	J B	100	0.19	ug/L	1		6020	Total Recoverable
Copper	0.56	J	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	1300	B	200	26	ug/L	1		6020	Total Recoverable
Manganese	190	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	0.34	J B	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.20	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Vanadium	0.67	J	4.0	0.44	ug/L	1		6020	Total Recoverable
Zinc	16	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040213-CT-014

Lab Sample ID: 240-22693-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	6.6	B	4.8	0.77	ug/L	1		8270C	Total/NA
Aluminum	150		50	19	ug/L	1		6020	Total Recoverable
Antimony	0.38	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	12		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	100	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.16	J	20	0.058	ug/L	1		6020	Total Recoverable
Chromium	0.98	J B	10	0.71	ug/L	1		6020	Total Recoverable
Copper	0.70	J	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	5800	B	200	26	ug/L	1		6020	Total Recoverable
Manganese	160	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	0.79	J B	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.30	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Vanadium	0.54	J	4.0	0.44	ug/L	1		6020	Total Recoverable
Zinc	7.4	J B	50	2.3	ug/L	1		6020	Total Recoverable
Total Phosphorus as P	0.036	J	0.10	0.033	mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: TB-17358-040213

Lab Sample ID: 240-22693-15

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Client Sample ID: GW-17358-040313-CT-015

Lab Sample ID: 240-22773-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.1	J	25	2.8	ug/L	2.5		8260B	Total/NA
Methylene Chloride	1.2	J B	13	0.83	ug/L	2.5		8260B	Total/NA
Trichloroethene	7.6		2.5	0.43	ug/L	2.5		8260B	Total/NA
Vinyl chloride	65		2.5	0.55	ug/L	2.5		8260B	Total/NA
cis-1,2-Dichloroethene	58		2.5	0.43	ug/L	2.5		8260B	Total/NA
trans-1,2-Dichloroethene	3.2		2.5	0.48	ug/L	2.5		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.0	J B	4.8	0.76	ug/L	1		8270C	Total/NA
Aluminum	21	J	50	19	ug/L	1		6020	Total Recoverable
Antimony	0.79	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	4.5	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	280	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.47	J	20	0.058	ug/L	1		6020	Total Recoverable
Iron	1500		200	26	ug/L	1		6020	Total Recoverable
Manganese	260	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	3.9	J	20	0.20	ug/L	1		6020	Total Recoverable
Thallium	0.80	J	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	6.6	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040313-CT-016

Lab Sample ID: 240-22773-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.17	J B	1.0	0.13	ug/L	1		8260B	Total/NA
Trichloroethene	5.0		1.0	0.17	ug/L	1		8260B	Total/NA
Benzo[g,h,i]perylene	0.13	J	1.0	0.10	ug/L	1		8270C	Total/NA
Bis(2-ethylhexyl) phthalate	1.3	J B	5.2	0.82	ug/L	1		8270C	Total/NA
Dibenz(a,h)anthracene	0.21	J	2.1	0.10	ug/L	1		8270C	Total/NA
Indeno[1,2,3-cd]pyrene	0.15	J	2.1	0.10	ug/L	1		8270C	Total/NA
Aluminum	1200		50	19	ug/L	1		6020	Total Recoverable
Antimony	2.0	B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	2.8	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	16	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.81	J	20	0.058	ug/L	1		6020	Total Recoverable
Chromium	12		10	0.71	ug/L	1		6020	Total Recoverable
Copper	3.1	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	1200		200	26	ug/L	1		6020	Total Recoverable
Manganese	17	J B	50	0.83	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-040313-CT-016 (Continued) — Lab Sample ID: 240-22773-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	2.0	J	20	0.20	ug/L	1		6020	Total Recoverable
Lead	0.82	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Selenium	3.9	J	5.0	0.57	ug/L	1		6020	Total Recoverable
Thallium	0.43	J	2.0	0.14	ug/L	1		6020	Total Recoverable
Vanadium	2.9	J	4.0	0.44	ug/L	1		6020	Total Recoverable
Zinc	13	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040313-CT-017 — Lab Sample ID: 240-22773-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.20	J B	1.0	0.13	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.1	J B	5.3	0.85	ug/L	1		8270C	Total/NA
Caprolactam	5.1	J	11	0.85	ug/L	1		8270C	Total/NA
Antimony	0.98	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	6.2		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	85	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.33	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	1.2	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	350		200	26	ug/L	1		6020	Total Recoverable
Manganese	210	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	1.7	J	20	0.20	ug/L	1		6020	Total Recoverable
Lead	1.5	J	3.0	0.18	ug/L	1		6020	Total Recoverable
Thallium	0.28	J	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	20	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040313-CT-018 — Lab Sample ID: 240-22773-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.1	J	10	1.1	ug/L	1		8260B	Total/NA
Benzene	0.21	J B	1.0	0.13	ug/L	1		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.1	J B	4.9	0.78	ug/L	1		8270C	Total/NA
Aluminum	27	J	50	19	ug/L	1		6020	Total Recoverable
Antimony	3.2	B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	2.0	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	33	J B	100	0.19	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-040313-CT-018 (Continued) — Lab Sample ID: 240-22773-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.45	J	20	0.058	ug/L	1		6020	Total Recoverable
Chromium	17		10	0.71	ug/L	1		6020	Total Recoverable
Copper	2.6	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Manganese	2.3	J B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	1.5	J	20	0.20	ug/L	1		6020	Total Recoverable
Selenium	4.8	J	5.0	0.57	ug/L	1		6020	Total Recoverable
Thallium	0.21	J	2.0	0.14	ug/L	1		6020	Total Recoverable
Vanadium	0.49	J	4.0	0.44	ug/L	1		6020	Total Recoverable
Zinc	14	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040313-CT-019 — Lab Sample ID: 240-22773-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	1.2	J B	5.2	0.82	ug/L	1		8270C	Total/NA
Butyl benzyl phthalate	0.86	J	5.2	0.82	ug/L	1		8270C	Total/NA
Caprolactam	1.1	J	10	0.82	ug/L	1		8270C	Total/NA
Antimony	0.70	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	1.5	J	5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	19	J B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	1.3	J	20	0.058	ug/L	1		6020	Total Recoverable
Iron	3700		200	26	ug/L	1		6020	Total Recoverable
Manganese	520	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	2.0	J	20	0.20	ug/L	1		6020	Total Recoverable
Selenium	4.3	J	5.0	0.57	ug/L	1		6020	Total Recoverable
Thallium	0.18	J	2.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	34	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-040313-CT-020 — Lab Sample ID: 240-22773-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.52	J B	2.5	0.33	ug/L	2.5		8260B	Total/NA
Methylene Chloride	2.4	J B	13	0.83	ug/L	2.5		8260B	Total/NA
Vinyl chloride	58		2.5	0.55	ug/L	2.5		8260B	Total/NA
cis-1,2-Dichloroethene	18		2.5	0.43	ug/L	2.5		8260B	Total/NA
trans-1,2-Dichloroethene	2.2	J	2.5	0.48	ug/L	2.5		8260B	Total/NA
Bis(2-ethylhexyl) phthalate	1.7	J B	4.8	0.77	ug/L	1		8270C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-040313-CT-020 (Continued)

Lab Sample ID: 240-22773-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Caprolactam	1.1	J	9.6	0.77	ug/L	1		8270C	Total/NA
Antimony	0.93	J B	2.0	0.13	ug/L	1		6020	Total Recoverable
Arsenic	11		5.0	0.40	ug/L	1		6020	Total Recoverable
Barium	320	B	100	0.19	ug/L	1		6020	Total Recoverable
Cobalt	0.27	J	20	0.058	ug/L	1		6020	Total Recoverable
Copper	0.92	J B	4.0	0.29	ug/L	1		6020	Total Recoverable
Iron	2500		200	26	ug/L	1		6020	Total Recoverable
Manganese	250	B	50	0.83	ug/L	1		6020	Total Recoverable
Nickel	3.1	J	20	0.20	ug/L	1		6020	Total Recoverable
Lead	3.0		3.0	0.18	ug/L	1		6020	Total Recoverable
Zinc	5.7	J B	50	2.3	ug/L	1		6020	Total Recoverable

Client Sample ID: TB-17358-040313

Lab Sample ID: 240-22773-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.3	J	10	1.1	ug/L	1		8260B	Total/NA
Benzene	0.24	J B	1.0	0.13	ug/L	1		8260B	Total/NA
Methylene Chloride	0.35	J B	5.0	0.33	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	TCL Semivolatile Compounds (OLMO4.2)	SW846	TAL CAN
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6020	Metals (ICP/MS)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
9012A	Cyanide, Amenable	SW846	TAL CAN
SM 4500 P E	Phosphorus	SM	TAL CAN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040113-JY-001
Date Collected: 04/01/13 14:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 03:43	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 03:43	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 03:43	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 03:43	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 03:43	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 03:43	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 03:43	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 03:43	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 03:43	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 03:43	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 03:43	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 03:43	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 03:43	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 03:43	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 03:43	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 03:43	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 03:43	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 03:43	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 03:43	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 03:43	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 03:43	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 03:43	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 03:43	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 03:43	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 03:43	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 03:43	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 03:43	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 03:43	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 03:43	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 03:43	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 03:43	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 03:43	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 03:43	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 03:43	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 03:43	1
cis-1,2-Dichloroethene	**0.19**	**J**	1.0	0.17	ug/L			04/09/13 03:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 03:43	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 03:43	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 03:43	1
Methyl tert-butyl ether	**20**		1.0	0.17	ug/L			04/09/13 03:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 03:43	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 03:43	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 03:43	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 03:43	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 03:43	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 03:43	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 03:43	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 03:43	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		63 - 129		04/09/13 03:43	1
4-Bromofluorobenzene (Surr)	91		66 - 117		04/09/13 03:43	1
Toluene-d8 (Surr)	89		74 - 115		04/09/13 03:43	1
Dibromofluoromethane (Surr)	89		75 - 121		04/09/13 03:43	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040113-JY-002
Date Collected: 04/01/13 15:05
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 04:05	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 04:05	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 04:05	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 04:05	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 04:05	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 04:05	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 04:05	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 04:05	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 04:05	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 04:05	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 04:05	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 04:05	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 04:05	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 04:05	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 04:05	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 04:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 04:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 04:05	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 04:05	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 04:05	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 04:05	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 04:05	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 04:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 04:05	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 04:05	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 04:05	1
Trichloroethene	**3.6**		1.0	0.17	ug/L			04/09/13 04:05	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 04:05	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 04:05	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 04:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 04:05	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 04:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 04:05	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 04:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 04:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 04:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 04:05	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 04:05	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 04:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 04:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 04:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 04:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 04:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 04:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 04:05	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 04:05	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 04:05	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 04:05	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		63 - 129		04/09/13 04:05	1
4-Bromofluorobenzene (Surr)	90		66 - 117		04/09/13 04:05	1
Toluene-d8 (Surr)	90		74 - 115		04/09/13 04:05	1
Dibromofluoromethane (Surr)	90		75 - 121		04/09/13 04:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040113-CT-003
Date Collected: 04/01/13 14:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 04:27	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 04:27	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 04:27	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 04:27	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 04:27	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 04:27	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 04:27	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 04:27	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 04:27	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 04:27	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 04:27	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 04:27	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 04:27	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 04:27	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 04:27	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 04:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 04:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 04:27	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 04:27	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 04:27	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 04:27	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 04:27	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 04:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 04:27	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 04:27	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 04:27	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 04:27	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 04:27	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 04:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 04:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 04:27	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 04:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 04:27	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 04:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 04:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 04:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 04:27	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 04:27	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 04:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 04:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 04:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 04:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 04:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 04:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 04:27	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 04:27	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 04:27	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 04:27	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		63 - 129		04/09/13 04:27	1
4-Bromofluorobenzene (Surr)	95		66 - 117		04/09/13 04:27	1
Toluene-d8 (Surr)	89		74 - 115		04/09/13 04:27	1
Dibromofluoromethane (Surr)	90		75 - 121		04/09/13 04:27	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040113-CT-004
Date Collected: 04/01/13 14:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 04:49	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 04:49	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 04:49	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 04:49	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 04:49	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 04:49	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 04:49	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 04:49	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 04:49	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 04:49	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 04:49	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 04:49	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 04:49	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 04:49	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 04:49	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 04:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 04:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 04:49	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 04:49	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 04:49	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 04:49	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 04:49	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 04:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 04:49	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 04:49	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 04:49	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 04:49	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 04:49	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 04:49	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 04:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 04:49	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 04:49	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 04:49	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 04:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 04:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 04:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 04:49	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 04:49	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 04:49	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 04:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 04:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 04:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 04:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 04:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 04:49	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 04:49	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 04:49	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 04:49	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		63 - 129		04/09/13 04:49	1
4-Bromofluorobenzene (Surr)	91		66 - 117		04/09/13 04:49	1
Toluene-d8 (Surr)	90		74 - 115		04/09/13 04:49	1
Dibromofluoromethane (Surr)	91		75 - 121		04/09/13 04:49	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040113-CT-005
Date Collected: 04/01/13 15:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 05:12	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 05:12	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 05:12	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 05:12	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 05:12	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 05:12	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 05:12	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 05:12	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 05:12	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 05:12	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 05:12	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 05:12	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 05:12	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 05:12	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 05:12	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 05:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 05:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 05:12	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 05:12	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 05:12	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 05:12	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 05:12	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 05:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 05:12	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 05:12	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 05:12	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 05:12	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 05:12	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 05:12	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 05:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 05:12	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 05:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 05:12	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 05:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 05:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 05:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 05:12	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 05:12	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 05:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 05:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 05:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 05:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 05:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 05:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 05:12	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 05:12	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 05:12	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 05:12	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		63 - 129		04/09/13 05:12	1
4-Bromofluorobenzene (Surr)	90		66 - 117		04/09/13 05:12	1
Toluene-d8 (Surr)	91		74 - 115		04/09/13 05:12	1
Dibromofluoromethane (Surr)	91		75 - 121		04/09/13 05:12	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040113-DR-006
Date Collected: 04/01/13 14:30
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 05:34	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 05:34	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 05:34	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 05:34	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 05:34	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 05:34	1
Carbon disulfide	**1.9**	**J**	5.0	0.13	ug/L			04/09/13 05:34	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 05:34	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 05:34	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 05:34	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 05:34	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 05:34	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 05:34	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 05:34	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 05:34	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 05:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 05:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 05:34	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 05:34	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 05:34	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 05:34	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 05:34	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 05:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 05:34	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 05:34	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 05:34	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 05:34	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 05:34	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 05:34	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 05:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 05:34	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 05:34	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 05:34	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 05:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 05:34	1
cis-1,2-Dichloroethene	**0.36**	**J**	1.0	0.17	ug/L			04/09/13 05:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 05:34	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 05:34	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 05:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 05:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 05:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 05:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 05:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 05:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 05:34	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 05:34	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 05:34	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 05:34	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		63 - 129		04/09/13 05:34	1
4-Bromofluorobenzene (Surr)	87		66 - 117		04/09/13 05:34	1
Toluene-d8 (Surr)	84		74 - 115		04/09/13 05:34	1
Dibromofluoromethane (Surr)	90		75 - 121		04/09/13 05:34	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040113-DR-007
Date Collected: 04/01/13 16:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 05:57	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 05:57	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 05:57	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 05:57	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 05:57	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 05:57	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 05:57	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 05:57	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 05:57	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 05:57	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 05:57	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 05:57	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 05:57	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 05:57	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 05:57	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 05:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 05:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 05:57	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 05:57	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 05:57	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 05:57	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 05:57	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 05:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 05:57	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 05:57	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 05:57	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 05:57	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 05:57	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 05:57	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 05:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 05:57	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 05:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 05:57	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 05:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 05:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 05:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 05:57	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 05:57	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 05:57	1
Methyl tert-butyl ether	**1.5**		1.0	0.17	ug/L			04/09/13 05:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 05:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 05:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 05:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 05:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 05:57	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 05:57	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 05:57	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 05:57	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		63 - 129		04/09/13 05:57	1
4-Bromofluorobenzene (Surr)	85		66 - 117		04/09/13 05:57	1
Toluene-d8 (Surr)	86		74 - 115		04/09/13 05:57	1
Dibromofluoromethane (Surr)	87		75 - 121		04/09/13 05:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040213-CT-008
Date Collected: 04/02/13 09:40
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 06:19	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 06:19	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 06:19	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 06:19	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 06:19	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 06:19	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 06:19	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 06:19	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 06:19	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 06:19	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 06:19	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 06:19	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 06:19	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 06:19	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 06:19	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 06:19	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 06:19	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 06:19	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 06:19	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 06:19	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 06:19	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 06:19	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 06:19	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 06:19	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 06:19	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 06:19	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 06:19	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 06:19	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 06:19	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 06:19	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 06:19	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 06:19	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 06:19	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 06:19	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 06:19	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 06:19	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 06:19	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 06:19	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 06:19	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 06:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 06:19	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 06:19	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 06:19	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 06:19	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 06:19	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 06:19	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 06:19	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 06:19	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		63 - 129		04/09/13 06:19	1
4-Bromofluorobenzene (Surr)	81		66 - 117		04/09/13 06:19	1
Toluene-d8 (Surr)	84		74 - 115		04/09/13 06:19	1
Dibromofluoromethane (Surr)	90		75 - 121		04/09/13 06:19	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040213-CT-009
Date Collected: 04/02/13 09:50
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 06:42	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 06:42	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 06:42	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 06:42	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 06:42	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 06:42	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 06:42	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 06:42	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 06:42	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 06:42	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 06:42	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 06:42	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 06:42	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 06:42	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 06:42	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 06:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 06:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 06:42	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 06:42	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 06:42	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 06:42	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 06:42	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 06:42	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 06:42	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 06:42	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 06:42	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 06:42	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 06:42	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 06:42	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 06:42	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 06:42	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 06:42	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 06:42	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 06:42	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 06:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 06:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 06:42	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 06:42	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 06:42	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 06:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 06:42	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 06:42	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 06:42	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 06:42	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 06:42	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 06:42	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 06:42	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 06:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		63 - 129		04/09/13 06:42	1
4-Bromofluorobenzene (Surr)	82		66 - 117		04/09/13 06:42	1
Toluene-d8 (Surr)	84		74 - 115		04/09/13 06:42	1
Dibromofluoromethane (Surr)	92		75 - 121		04/09/13 06:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040213-CT-010
Date Collected: 04/02/13 11:15
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 07:04	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 07:04	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 07:04	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 07:04	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 07:04	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 07:04	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 07:04	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 07:04	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 07:04	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 07:04	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 07:04	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 07:04	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 07:04	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 07:04	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 07:04	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 07:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 07:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 07:04	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 07:04	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 07:04	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 07:04	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 07:04	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 07:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 07:04	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 07:04	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 07:04	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 07:04	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 07:04	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 07:04	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 07:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 07:04	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 07:04	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 07:04	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 07:04	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 07:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 07:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 07:04	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 07:04	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 07:04	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 07:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 07:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 07:04	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 07:04	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 07:04	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 07:04	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 07:04	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 07:04	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 07:04	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		63 - 129		04/09/13 07:04	1
4-Bromofluorobenzene (Surr)	92		66 - 117		04/09/13 07:04	1
Toluene-d8 (Surr)	87		74 - 115		04/09/13 07:04	1
Dibromofluoromethane (Surr)	93		75 - 121		04/09/13 07:04	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040213-CT-011
Date Collected: 04/02/13 11:16
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 07:26	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 07:26	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 07:26	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 07:26	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 07:26	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 07:26	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 07:26	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 07:26	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 07:26	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 07:26	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 07:26	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 07:26	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 07:26	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 07:26	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 07:26	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 07:26	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 07:26	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 07:26	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 07:26	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 07:26	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 07:26	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 07:26	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 07:26	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 07:26	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 07:26	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 07:26	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 07:26	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 07:26	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 07:26	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 07:26	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 07:26	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 07:26	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 07:26	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 07:26	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 07:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 07:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 07:26	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 07:26	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 07:26	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 07:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 07:26	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 07:26	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 07:26	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 07:26	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 07:26	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 07:26	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 07:26	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 07:26	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		63 - 129		04/09/13 07:26	1
4-Bromofluorobenzene (Surr)	87		66 - 117		04/09/13 07:26	1
Toluene-d8 (Surr)	85		74 - 115		04/09/13 07:26	1
Dibromofluoromethane (Surr)	87		75 - 121		04/09/13 07:26	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040213-CT-012
Date Collected: 04/02/13 15:15
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 07:48	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 07:48	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 07:48	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 07:48	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 07:48	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 07:48	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 07:48	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 07:48	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 07:48	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 07:48	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 07:48	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 07:48	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 07:48	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 07:48	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 07:48	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 07:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 07:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 07:48	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 07:48	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 07:48	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 07:48	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 07:48	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 07:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 07:48	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 07:48	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 07:48	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 07:48	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 07:48	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 07:48	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 07:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 07:48	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 07:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 07:48	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 07:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 07:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 07:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 07:48	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 07:48	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 07:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 07:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 07:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 07:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 07:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 07:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 07:48	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 07:48	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 07:48	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 07:48	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		63 - 129		04/09/13 07:48	1
4-Bromofluorobenzene (Surr)	90		66 - 117		04/09/13 07:48	1
Toluene-d8 (Surr)	85		74 - 115		04/09/13 07:48	1
Dibromofluoromethane (Surr)	92		75 - 121		04/09/13 07:48	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040213-CT-013
Date Collected: 04/02/13 15:10
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 08:11	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 08:11	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 08:11	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 08:11	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 08:11	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 08:11	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 08:11	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 08:11	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 08:11	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 08:11	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 08:11	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 08:11	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 08:11	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 08:11	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 08:11	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 08:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 08:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 08:11	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 08:11	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 08:11	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 08:11	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 08:11	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 08:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 08:11	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 08:11	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 08:11	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 08:11	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 08:11	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 08:11	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 08:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 08:11	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 08:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 08:11	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 08:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 08:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 08:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 08:11	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 08:11	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 08:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 08:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 08:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 08:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 08:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 08:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 08:11	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 08:11	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 08:11	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 08:11	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		63 - 129		04/09/13 08:11	1
4-Bromofluorobenzene (Surr)	86		66 - 117		04/09/13 08:11	1
Toluene-d8 (Surr)	88		74 - 115		04/09/13 08:11	1
Dibromofluoromethane (Surr)	89		75 - 121		04/09/13 08:11	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040213-CT-014
Date Collected: 04/02/13 16:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 08:33	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 08:33	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 08:33	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 08:33	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 08:33	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 08:33	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 08:33	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 08:33	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 08:33	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 08:33	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 08:33	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 08:33	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 08:33	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 08:33	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 08:33	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 08:33	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 08:33	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 08:33	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 08:33	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 08:33	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 08:33	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 08:33	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 08:33	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 08:33	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 08:33	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 08:33	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 08:33	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 08:33	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 08:33	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 08:33	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 08:33	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 08:33	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 08:33	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 08:33	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 08:33	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 08:33	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 08:33	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 08:33	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 08:33	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 08:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 08:33	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 08:33	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 08:33	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 08:33	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 08:33	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 08:33	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 08:33	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 08:33	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		63 - 129		04/09/13 08:33	1
4-Bromofluorobenzene (Surr)	85		66 - 117		04/09/13 08:33	1
Toluene-d8 (Surr)	86		74 - 115		04/09/13 08:33	1
Dibromofluoromethane (Surr)	93		75 - 121		04/09/13 08:33	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17358-040213
Date Collected: 04/02/13 00:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 08:55	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 08:55	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 08:55	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 08:55	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 08:55	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 08:55	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 08:55	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 08:55	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 08:55	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 08:55	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 08:55	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 08:55	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 08:55	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 08:55	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 08:55	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 08:55	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 08:55	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 08:55	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 08:55	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 08:55	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 08:55	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 08:55	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 08:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 08:55	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 08:55	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 08:55	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 08:55	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 08:55	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 08:55	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 08:55	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 08:55	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 08:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 08:55	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 08:55	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 08:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 08:55	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 08:55	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 08:55	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 08:55	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 08:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 08:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 08:55	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 08:55	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 08:55	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 08:55	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 08:55	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 08:55	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 08:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		63 - 129		04/09/13 08:55	1
4-Bromofluorobenzene (Surr)	85		66 - 117		04/09/13 08:55	1
Toluene-d8 (Surr)	81		74 - 115		04/09/13 08:55	1
Dibromofluoromethane (Surr)	94		75 - 121		04/09/13 08:55	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040313-CT-015
Date Collected: 04/03/13 10:00
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.1**	**J**	25	2.8	ug/L			04/10/13 15:56	2.5
Benzene	2.5	U	2.5	0.33	ug/L			04/10/13 15:56	2.5
Bromodichloromethane	2.5	U	2.5	0.38	ug/L			04/10/13 15:56	2.5
Bromoform	2.5	U	2.5	1.6	ug/L			04/10/13 15:56	2.5
Bromomethane	2.5	U	2.5	1.0	ug/L			04/10/13 15:56	2.5
2-Butanone (MEK)	25	U	25	1.4	ug/L			04/10/13 15:56	2.5
Carbon disulfide	13	U	13	0.33	ug/L			04/10/13 15:56	2.5
Carbon tetrachloride	2.5	U	2.5	0.33	ug/L			04/10/13 15:56	2.5
Chlorobenzene	2.5	U	2.5	0.38	ug/L			04/10/13 15:56	2.5
Chloroethane	2.5	U	2.5	0.73	ug/L			04/10/13 15:56	2.5
Chloroform	2.5	U	2.5	0.40	ug/L			04/10/13 15:56	2.5
Chloromethane	2.5	U	2.5	0.75	ug/L			04/10/13 15:56	2.5
1,1-Dichloroethane	2.5	U	2.5	0.38	ug/L			04/10/13 15:56	2.5
1,2-Dichloroethane	2.5	U	2.5	0.55	ug/L			04/10/13 15:56	2.5
1,1-Dichloroethene	2.5	U	2.5	0.48	ug/L			04/10/13 15:56	2.5
1,2-Dichloropropane	2.5	U	2.5	0.45	ug/L			04/10/13 15:56	2.5
cis-1,3-Dichloropropene	2.5	U	2.5	0.35	ug/L			04/10/13 15:56	2.5
trans-1,3-Dichloropropene	2.5	U	2.5	0.48	ug/L			04/10/13 15:56	2.5
Ethylbenzene	2.5	U	2.5	0.43	ug/L			04/10/13 15:56	2.5
2-Hexanone	25	U	25	1.0	ug/L			04/10/13 15:56	2.5
Methylene Chloride	**1.2**	**J B**	13	0.83	ug/L			04/10/13 15:56	2.5
4-Methyl-2-pentanone (MIBK)	25	U	25	0.80	ug/L			04/10/13 15:56	2.5
Styrene	2.5	U	2.5	0.28	ug/L			04/10/13 15:56	2.5
1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.45	ug/L			04/10/13 15:56	2.5
Tetrachloroethene	2.5	U	2.5	0.73	ug/L			04/10/13 15:56	2.5
Toluene	2.5	U	2.5	0.33	ug/L			04/10/13 15:56	2.5
Trichloroethene	**7.6**		2.5	0.43	ug/L			04/10/13 15:56	2.5
Vinyl chloride	**65**		2.5	0.55	ug/L			04/10/13 15:56	2.5
Xylenes, Total	5.0	U	5.0	0.70	ug/L			04/10/13 15:56	2.5
1,1,1-Trichloroethane	2.5	U	2.5	0.55	ug/L			04/10/13 15:56	2.5
1,1,2-Trichloroethane	2.5	U	2.5	0.68	ug/L			04/10/13 15:56	2.5
Cyclohexane	2.5	U	2.5	0.30	ug/L			04/10/13 15:56	2.5
1,2-Dibromo-3-Chloropropane	2.5	U	2.5	1.7	ug/L			04/10/13 15:56	2.5
1,2-Dibromoethane	2.5	U	2.5	0.60	ug/L			04/10/13 15:56	2.5
Dichlorodifluoromethane	2.5	U	2.5	0.78	ug/L			04/10/13 15:56	2.5
cis-1,2-Dichloroethene	**58**		2.5	0.43	ug/L			04/10/13 15:56	2.5
trans-1,2-Dichloroethene	**3.2**		2.5	0.48	ug/L			04/10/13 15:56	2.5
Isopropylbenzene	2.5	U	2.5	0.33	ug/L			04/10/13 15:56	2.5
Methyl acetate	25	U	25	0.95	ug/L			04/10/13 15:56	2.5
Methyl tert-butyl ether	2.5	U	2.5	0.43	ug/L			04/10/13 15:56	2.5
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	2.5	0.70	ug/L			04/10/13 15:56	2.5
1,2,4-Trichlorobenzene	2.5	U	2.5	0.38	ug/L			04/10/13 15:56	2.5
1,2-Dichlorobenzene	2.5	U	2.5	0.33	ug/L			04/10/13 15:56	2.5
1,3-Dichlorobenzene	2.5	U	2.5	0.35	ug/L			04/10/13 15:56	2.5
1,4-Dichlorobenzene	2.5	U	2.5	0.33	ug/L			04/10/13 15:56	2.5
Trichlorofluoromethane	2.5	U *	2.5	0.53	ug/L			04/10/13 15:56	2.5
Dibromochloromethane	2.5	U	2.5	0.45	ug/L			04/10/13 15:56	2.5
Methylcyclohexane	2.5	U	2.5	0.33	ug/L			04/10/13 15:56	2.5

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 129		04/10/13 15:56	2.5
4-Bromofluorobenzene (Surr)	77		66 - 117		04/10/13 15:56	2.5
Toluene-d8 (Surr)	87		74 - 115		04/10/13 15:56	2.5
Dibromofluoromethane (Surr)	87		75 - 121		04/10/13 15:56	2.5

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040313-CT-016
Date Collected: 04/03/13 10:05
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 15:50	1
Benzene	**0.17**	**J B**	1.0	0.13	ug/L			04/09/13 15:50	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 15:50	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 15:50	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 15:50	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 15:50	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 15:50	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 15:50	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 15:50	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 15:50	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 15:50	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 15:50	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 15:50	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 15:50	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 15:50	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 15:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 15:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 15:50	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 15:50	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 15:50	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 15:50	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 15:50	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 15:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 15:50	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 15:50	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 15:50	1
Trichloroethene	**5.0**		1.0	0.17	ug/L			04/09/13 15:50	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 15:50	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 15:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 15:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 15:50	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 15:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 15:50	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 15:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 15:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 15:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 15:50	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 15:50	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 15:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 15:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 15:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 15:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 15:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 15:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 15:50	1
Trichlorofluoromethane	1.0	U *	1.0	0.21	ug/L			04/09/13 15:50	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 15:50	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 15:50	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	83		63 - 129		04/09/13 15:50	1
4-Bromofluorobenzene (Surr)	81		66 - 117		04/09/13 15:50	1
Toluene-d8 (Surr)	83		74 - 115		04/09/13 15:50	1
Dibromofluoromethane (Surr)	78		75 - 121		04/09/13 15:50	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040313-CT-017
Date Collected: 04/03/13 11:15
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 16:13	1
Benzene	**0.20**	**J B**	1.0	0.13	ug/L			04/09/13 16:13	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 16:13	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 16:13	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 16:13	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 16:13	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 16:13	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 16:13	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 16:13	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 16:13	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 16:13	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 16:13	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 16:13	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 16:13	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 16:13	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 16:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 16:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 16:13	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 16:13	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 16:13	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 16:13	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 16:13	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 16:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 16:13	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 16:13	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 16:13	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 16:13	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 16:13	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 16:13	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 16:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 16:13	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 16:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 16:13	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 16:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 16:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 16:13	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 16:13	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 16:13	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 16:13	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 16:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 16:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 16:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 16:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 16:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 16:13	1
Trichlorofluoromethane	1.0	U *	1.0	0.21	ug/L			04/09/13 16:13	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 16:13	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 16:13	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		63 - 129		04/09/13 16:13	1
4-Bromofluorobenzene (Surr)	82		66 - 117		04/09/13 16:13	1
Toluene-d8 (Surr)	85		74 - 115		04/09/13 16:13	1
Dibromofluoromethane (Surr)	82		75 - 121		04/09/13 16:13	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040313-CT-018
Date Collected: 04/03/13 11:25
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.1**	**J**	10	1.1	ug/L			04/09/13 16:36	1
Benzene	**0.21**	**J B**	1.0	0.13	ug/L			04/09/13 16:36	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 16:36	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 16:36	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 16:36	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 16:36	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 16:36	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 16:36	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 16:36	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 16:36	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 16:36	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 16:36	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 16:36	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 16:36	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 16:36	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 16:36	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 16:36	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 16:36	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 16:36	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 16:36	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 16:36	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 16:36	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 16:36	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 16:36	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 16:36	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 16:36	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 16:36	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 16:36	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 16:36	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 16:36	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 16:36	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 16:36	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 16:36	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 16:36	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 16:36	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 16:36	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 16:36	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 16:36	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 16:36	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 16:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 16:36	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 16:36	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 16:36	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 16:36	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 16:36	1
Trichlorofluoromethane	1.0	U *	1.0	0.21	ug/L			04/09/13 16:36	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 16:36	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 16:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		63 - 129		04/09/13 16:36	1
4-Bromofluorobenzene (Surr)	83		66 - 117		04/09/13 16:36	1
Toluene-d8 (Surr)	84		74 - 115		04/09/13 16:36	1
Dibromofluoromethane (Surr)	82		75 - 121		04/09/13 16:36	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040313-CT-019
Date Collected: 04/03/13 15:55
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 16:58	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 16:58	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 16:58	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 16:58	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 16:58	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 16:58	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 16:58	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 16:58	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 16:58	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 16:58	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 16:58	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 16:58	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 16:58	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 16:58	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 16:58	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 16:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 16:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 16:58	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 16:58	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 16:58	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 16:58	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 16:58	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 16:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 16:58	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 16:58	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 16:58	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 16:58	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 16:58	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 16:58	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 16:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 16:58	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 16:58	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 16:58	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 16:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 16:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 16:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 16:58	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 16:58	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 16:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 16:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 16:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 16:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 16:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 16:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 16:58	1
Trichlorofluoromethane	1.0	U *	1.0	0.21	ug/L			04/09/13 16:58	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 16:58	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 16:58	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		63 - 129		04/09/13 16:58	1
4-Bromofluorobenzene (Surr)	80		66 - 117		04/09/13 16:58	1
Toluene-d8 (Surr)	84		74 - 115		04/09/13 16:58	1
Dibromofluoromethane (Surr)	81		75 - 121		04/09/13 16:58	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-040313-CT-020
Date Collected: 04/03/13 15:30
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	2.8	ug/L			04/09/13 17:21	2.5
Benzene	**0.52**	**J B**	2.5	0.33	ug/L			04/09/13 17:21	2.5
Bromodichloromethane	2.5	U	2.5	0.38	ug/L			04/09/13 17:21	2.5
Bromoform	2.5	U	2.5	1.6	ug/L			04/09/13 17:21	2.5
Bromomethane	2.5	U	2.5	1.0	ug/L			04/09/13 17:21	2.5
2-Butanone (MEK)	25	U	25	1.4	ug/L			04/09/13 17:21	2.5
Carbon disulfide	13	U	13	0.33	ug/L			04/09/13 17:21	2.5
Carbon tetrachloride	2.5	U	2.5	0.33	ug/L			04/09/13 17:21	2.5
Chlorobenzene	2.5	U	2.5	0.38	ug/L			04/09/13 17:21	2.5
Chloroethane	2.5	U	2.5	0.73	ug/L			04/09/13 17:21	2.5
Chloroform	2.5	U	2.5	0.40	ug/L			04/09/13 17:21	2.5
Chloromethane	2.5	U	2.5	0.75	ug/L			04/09/13 17:21	2.5
1,1-Dichloroethane	2.5	U	2.5	0.38	ug/L			04/09/13 17:21	2.5
1,2-Dichloroethane	2.5	U	2.5	0.55	ug/L			04/09/13 17:21	2.5
1,1-Dichloroethene	2.5	U	2.5	0.48	ug/L			04/09/13 17:21	2.5
1,2-Dichloropropane	2.5	U	2.5	0.45	ug/L			04/09/13 17:21	2.5
cis-1,3-Dichloropropene	2.5	U	2.5	0.35	ug/L			04/09/13 17:21	2.5
trans-1,3-Dichloropropene	2.5	U	2.5	0.48	ug/L			04/09/13 17:21	2.5
Ethylbenzene	2.5	U	2.5	0.43	ug/L			04/09/13 17:21	2.5
2-Hexanone	25	U	25	1.0	ug/L			04/09/13 17:21	2.5
Methylene Chloride	**2.4**	**J B**	13	0.83	ug/L			04/09/13 17:21	2.5
4-Methyl-2-pentanone (MIBK)	25	U	25	0.80	ug/L			04/09/13 17:21	2.5
Styrene	2.5	U	2.5	0.28	ug/L			04/09/13 17:21	2.5
1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.45	ug/L			04/09/13 17:21	2.5
Tetrachloroethene	2.5	U	2.5	0.73	ug/L			04/09/13 17:21	2.5
Toluene	2.5	U	2.5	0.33	ug/L			04/09/13 17:21	2.5
Trichloroethene	2.5	U	2.5	0.43	ug/L			04/09/13 17:21	2.5
Vinyl chloride	**58**		2.5	0.55	ug/L			04/09/13 17:21	2.5
Xylenes, Total	5.0	U	5.0	0.70	ug/L			04/09/13 17:21	2.5
1,1,1-Trichloroethane	2.5	U	2.5	0.55	ug/L			04/09/13 17:21	2.5
1,1,2-Trichloroethane	2.5	U	2.5	0.68	ug/L			04/09/13 17:21	2.5
Cyclohexane	2.5	U	2.5	0.30	ug/L			04/09/13 17:21	2.5
1,2-Dibromo-3-Chloropropane	2.5	U	2.5	1.7	ug/L			04/09/13 17:21	2.5
1,2-Dibromoethane	2.5	U	2.5	0.60	ug/L			04/09/13 17:21	2.5
Dichlorodifluoromethane	2.5	U	2.5	0.78	ug/L			04/09/13 17:21	2.5
cis-1,2-Dichloroethene	**18**		2.5	0.43	ug/L			04/09/13 17:21	2.5
trans-1,2-Dichloroethene	**2.2**	**J**	2.5	0.48	ug/L			04/09/13 17:21	2.5
Isopropylbenzene	2.5	U	2.5	0.33	ug/L			04/09/13 17:21	2.5
Methyl acetate	25	U	25	0.95	ug/L			04/09/13 17:21	2.5
Methyl tert-butyl ether	2.5	U	2.5	0.43	ug/L			04/09/13 17:21	2.5
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	2.5	0.70	ug/L			04/09/13 17:21	2.5
1,2,4-Trichlorobenzene	2.5	U	2.5	0.38	ug/L			04/09/13 17:21	2.5
1,2-Dichlorobenzene	2.5	U	2.5	0.33	ug/L			04/09/13 17:21	2.5
1,3-Dichlorobenzene	2.5	U	2.5	0.35	ug/L			04/09/13 17:21	2.5
1,4-Dichlorobenzene	2.5	U	2.5	0.33	ug/L			04/09/13 17:21	2.5
Trichlorofluoromethane	2.5	U *	2.5	0.53	ug/L			04/09/13 17:21	2.5
Dibromochloromethane	2.5	U	2.5	0.45	ug/L			04/09/13 17:21	2.5
Methylcyclohexane	2.5	U	2.5	0.33	ug/L			04/09/13 17:21	2.5

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		63 - 129		04/09/13 17:21	2.5
4-Bromofluorobenzene (Surr)	81		66 - 117		04/09/13 17:21	2.5
Toluene-d8 (Surr)	84		74 - 115		04/09/13 17:21	2.5
Dibromofluoromethane (Surr)	82		75 - 121		04/09/13 17:21	2.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17358-040313
Date Collected: 04/03/13 00:00
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-7
Matrix: WQ

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.3**	**J**	10	1.1	ug/L			04/09/13 17:44	1
Benzene	**0.24**	**J B**	1.0	0.13	ug/L			04/09/13 17:44	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 17:44	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 17:44	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 17:44	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 17:44	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 17:44	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 17:44	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 17:44	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 17:44	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 17:44	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 17:44	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 17:44	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 17:44	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 17:44	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 17:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 17:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 17:44	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 17:44	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 17:44	1
Methylene Chloride	**0.35**	**J B**	5.0	0.33	ug/L			04/09/13 17:44	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 17:44	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 17:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 17:44	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 17:44	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 17:44	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 17:44	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 17:44	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 17:44	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 17:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 17:44	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 17:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 17:44	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 17:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 17:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 17:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 17:44	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 17:44	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 17:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 17:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 17:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 17:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 17:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 17:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 17:44	1
Trichlorofluoromethane	1.0	U *	1.0	0.21	ug/L			04/09/13 17:44	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 17:44	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 17:44	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*86*		*63 - 129*		*04/09/13 17:44*	*1*
4-Bromofluorobenzene (Surr)	*80*		*66 - 117*		*04/09/13 17:44*	*1*
Toluene-d8 (Surr)	*84*		*74 - 115*		*04/09/13 17:44*	*1*
Dibromofluoromethane (Surr)	*80*		*75 - 121*		*04/09/13 17:44*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040113-JY-001
Date Collected: 04/01/13 14:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/06/13 09:54	04/10/13 09:42	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/06/13 09:54	04/10/13 09:42	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
2,4-Dichlorophenol	9.6	U	9.6	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
2,4-Dimethylphenol	4.8	U	4.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 09:42	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/06/13 09:54	04/10/13 09:42	1
2,6-Dinitrotoluene	4.8	U	4.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
2-Chloronaphthalene	4.8	U	4.8	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/06/13 09:54	04/10/13 09:42	1
2-Methylnaphthalene	4.8	U	4.8	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
2-Methylphenol	4.8	U	4.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
2-Nitroaniline	19	U	19	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/06/13 09:54	04/10/13 09:42	1
3,3'-Dichlorobenzidine	0.96	U	0.96	0.36	ug/L		04/06/13 09:54	04/10/13 09:42	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/06/13 09:54	04/10/13 09:42	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 09:42	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
4-Chloroaniline	9.6	U	9.6	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/06/13 09:54	04/10/13 09:42	1
4-Nitroaniline	19	U	19	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 09:42	1
Acenaphthene	4.8	U	4.8	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Acenaphthylene	4.8	U	4.8	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Acetophenone	4.8	U	4.8	0.33	ug/L		04/06/13 09:54	04/10/13 09:42	1
Anthracene	4.8	U	4.8	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Atrazine	2.9	U	2.9	0.33	ug/L		04/06/13 09:54	04/10/13 09:42	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/06/13 09:54	04/10/13 09:42	1
Benzo[a]anthracene	0.96	U	0.96	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Benzo[a]pyrene	0.96	U	0.96	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Benzo[b]fluoranthene	0.96	U	0.96	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Benzo[g,h,i]perylene	0.96	U	0.96	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Benzo[k]fluoranthene	0.96	U	0.96	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.31	ug/L		04/06/13 09:54	04/10/13 09:42	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Bis(2-ethylhexyl) phthalate	**0.86**	**J B**	4.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
Butyl benzyl phthalate	4.8	U	4.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
Caprolactam	9.6	U	9.6	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
Carbazole	9.6	U	9.6	0.27	ug/L		04/06/13 09:54	04/10/13 09:42	1
Chrysene	0.96	U	0.96	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Dibenzofuran	3.8	U	3.8	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Diethyl phthalate	4.8	U	4.8	0.58	ug/L		04/06/13 09:54	04/10/13 09:42	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/06/13 09:54	04/10/13 09:42	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/06/13 09:54	04/10/13 09:42	1
Di-n-octyl phthalate	4.8	U	4.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
Fluoranthene	0.96	U	0.96	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040113-JY-001
Date Collected: 04/01/13 14:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Hexachlorobenzene	0.19	U	0.19	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Hexachlorobutadiene	0.96	U	0.96	0.26	ug/L		04/06/13 09:54	04/10/13 09:42	1
Hexachlorocyclopentadiene	4.8	U *	4.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
Hexachloroethane	4.8	U	4.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/06/13 09:54	04/10/13 09:42	1
Naphthalene	4.8	U	4.8	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/06/13 09:54	04/10/13 09:42	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.77	ug/L		04/06/13 09:54	04/10/13 09:42	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/06/13 09:54	04/10/13 09:42	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/06/13 09:54	04/10/13 09:42	1
Phenol	4.8	U	4.8	0.58	ug/L		04/06/13 09:54	04/10/13 09:42	1
Phenanthrene	1.9	U	1.9	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
Pyrene	4.8	U	4.8	0.096	ug/L		04/06/13 09:54	04/10/13 09:42	1
3 & 4 Methylphenol	4.8	U	4.8	0.72	ug/L		04/06/13 09:54	04/10/13 09:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*54*		*20 - 110*	*04/06/13 09:54*	*04/10/13 09:42*	*1*
2-Fluorophenol (Surr)	*56*		*10 - 110*	*04/06/13 09:54*	*04/10/13 09:42*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*21 - 110*	*04/06/13 09:54*	*04/10/13 09:42*	*1*
Nitrobenzene-d5 (Surr)	*59*		*21 - 110*	*04/06/13 09:54*	*04/10/13 09:42*	*1*
Phenol-d5 (Surr)	*59*		*21 - 110*	*04/06/13 09:54*	*04/10/13 09:42*	*1*
Terphenyl-d14 (Surr)	*48*		*24 - 110*	*04/06/13 09:54*	*04/10/13 09:42*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040113-JY-002
Date Collected: 04/01/13 15:05
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/06/13 09:54	04/10/13 10:04	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/06/13 09:54	04/10/13 10:04	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 10:04	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/06/13 09:54	04/10/13 10:04	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/06/13 09:54	04/10/13 10:04	1
2-Methylnaphthalene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
2-Nitroaniline	19	U	19	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/06/13 09:54	04/10/13 10:04	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		04/06/13 09:54	04/10/13 10:04	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/06/13 09:54	04/10/13 10:04	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 10:04	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/06/13 09:54	04/10/13 10:04	1
4-Nitroaniline	19	U	19	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 10:04	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Acetophenone	4.8	U	4.8	0.32	ug/L		04/06/13 09:54	04/10/13 10:04	1
Anthracene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Atrazine	2.9	U	2.9	0.32	ug/L		04/06/13 09:54	04/10/13 10:04	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/06/13 09:54	04/10/13 10:04	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		04/06/13 09:54	04/10/13 10:04	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
Caprolactam	9.5	U	9.5	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
Carbazole	9.5	U	9.5	0.27	ug/L		04/06/13 09:54	04/10/13 10:04	1
Chrysene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		04/06/13 09:54	04/10/13 10:04	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/06/13 09:54	04/10/13 10:04	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/06/13 09:54	04/10/13 10:04	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040113-JY-002
Date Collected: 04/01/13 15:05
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		04/06/13 09:54	04/10/13 10:04	1
Hexachlorocyclopentadiene	4.8	U *	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/06/13 09:54	04/10/13 10:04	1
Naphthalene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/06/13 09:54	04/10/13 10:04	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:04	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/06/13 09:54	04/10/13 10:04	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/06/13 09:54	04/10/13 10:04	1
Phenol	4.8	U	4.8	0.57	ug/L		04/06/13 09:54	04/10/13 10:04	1
Phenanthrene	1.9	U	1.9	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
Pyrene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:04	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		04/06/13 09:54	04/10/13 10:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*51*		*20 - 110*	*04/06/13 09:54*	*04/10/13 10:04*	*1*
2-Fluorophenol (Surr)	*58*		*10 - 110*	*04/06/13 09:54*	*04/10/13 10:04*	*1*
2,4,6-Tribromophenol (Surr)	*65*		*21 - 110*	*04/06/13 09:54*	*04/10/13 10:04*	*1*
Nitrobenzene-d5 (Surr)	*55*		*21 - 110*	*04/06/13 09:54*	*04/10/13 10:04*	*1*
Phenol-d5 (Surr)	*59*		*21 - 110*	*04/06/13 09:54*	*04/10/13 10:04*	*1*
Terphenyl-d14 (Surr)	*47*		*24 - 110*	*04/06/13 09:54*	*04/10/13 10:04*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040113-CT-003
Date Collected: 04/01/13 14:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/06/13 09:54	04/10/13 10:26	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/06/13 09:54	04/10/13 10:26	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 10:26	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/06/13 09:54	04/10/13 10:26	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/06/13 09:54	04/10/13 10:26	1
2-Methylnaphthalene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
2-Nitroaniline	19	U	19	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/06/13 09:54	04/10/13 10:26	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		04/06/13 09:54	04/10/13 10:26	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/06/13 09:54	04/10/13 10:26	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 10:26	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/06/13 09:54	04/10/13 10:26	1
4-Nitroaniline	19	U	19	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 10:26	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Acetophenone	4.8	U	4.8	0.32	ug/L		04/06/13 09:54	04/10/13 10:26	1
Anthracene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Atrazine	2.9	U	2.9	0.32	ug/L		04/06/13 09:54	04/10/13 10:26	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/06/13 09:54	04/10/13 10:26	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		04/06/13 09:54	04/10/13 10:26	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Bis(2-ethylhexyl) phthalate	**1.0**	**J B**	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
Caprolactam	9.5	U	9.5	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
Carbazole	9.5	U	9.5	0.27	ug/L		04/06/13 09:54	04/10/13 10:26	1
Chrysene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		04/06/13 09:54	04/10/13 10:26	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/06/13 09:54	04/10/13 10:26	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/06/13 09:54	04/10/13 10:26	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040113-CT-003
Date Collected: 04/01/13 14:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		04/06/13 09:54	04/10/13 10:26	1
Hexachlorocyclopentadiene	4.8	U *	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/06/13 09:54	04/10/13 10:26	1
Naphthalene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/06/13 09:54	04/10/13 10:26	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:26	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/06/13 09:54	04/10/13 10:26	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/06/13 09:54	04/10/13 10:26	1
Phenol	4.8	U	4.8	0.57	ug/L		04/06/13 09:54	04/10/13 10:26	1
Phenanthrene	1.9	U	1.9	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
Pyrene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:26	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		04/06/13 09:54	04/10/13 10:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*54*		*20 - 110*	*04/06/13 09:54*	*04/10/13 10:26*	*1*
2-Fluorophenol (Surr)	*60*		*10 - 110*	*04/06/13 09:54*	*04/10/13 10:26*	*1*
2,4,6-Tribromophenol (Surr)	*67*		*21 - 110*	*04/06/13 09:54*	*04/10/13 10:26*	*1*
Nitrobenzene-d5 (Surr)	*56*		*21 - 110*	*04/06/13 09:54*	*04/10/13 10:26*	*1*
Phenol-d5 (Surr)	*60*		*21 - 110*	*04/06/13 09:54*	*04/10/13 10:26*	*1*
Terphenyl-d14 (Surr)	*43*		*24 - 110*	*04/06/13 09:54*	*04/10/13 10:26*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040113-CT-004
Date Collected: 04/01/13 14:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/06/13 09:54	04/10/13 10:48	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/06/13 09:54	04/10/13 10:48	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 10:48	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/06/13 09:54	04/10/13 10:48	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/06/13 09:54	04/10/13 10:48	1
2-Methylnaphthalene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
2-Nitroaniline	19	U	19	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/06/13 09:54	04/10/13 10:48	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		04/06/13 09:54	04/10/13 10:48	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/06/13 09:54	04/10/13 10:48	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 10:48	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/06/13 09:54	04/10/13 10:48	1
4-Nitroaniline	19	U	19	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 10:48	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Acetophenone	4.8	U	4.8	0.32	ug/L		04/06/13 09:54	04/10/13 10:48	1
Anthracene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Atrazine	2.9	U	2.9	0.32	ug/L		04/06/13 09:54	04/10/13 10:48	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/06/13 09:54	04/10/13 10:48	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		04/06/13 09:54	04/10/13 10:48	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Bis(2-ethylhexyl) phthalate	**1.5**	**J B**	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
Caprolactam	9.5	U	9.5	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
Carbazole	9.5	U	9.5	0.27	ug/L		04/06/13 09:54	04/10/13 10:48	1
Chrysene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		04/06/13 09:54	04/10/13 10:48	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/06/13 09:54	04/10/13 10:48	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/06/13 09:54	04/10/13 10:48	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040113-CT-004
Date Collected: 04/01/13 14:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		04/06/13 09:54	04/10/13 10:48	1
Hexachlorocyclopentadiene	4.8	U *	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/06/13 09:54	04/10/13 10:48	1
Naphthalene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/06/13 09:54	04/10/13 10:48	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		04/06/13 09:54	04/10/13 10:48	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/06/13 09:54	04/10/13 10:48	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/06/13 09:54	04/10/13 10:48	1
Phenol	4.8	U	4.8	0.57	ug/L		04/06/13 09:54	04/10/13 10:48	1
Phenanthrene	1.9	U	1.9	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
Pyrene	4.8	U	4.8	0.095	ug/L		04/06/13 09:54	04/10/13 10:48	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		04/06/13 09:54	04/10/13 10:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*56*		*20 - 110*	*04/06/13 09:54*	*04/10/13 10:48*	*1*
2-Fluorophenol (Surr)	*57*		*10 - 110*	*04/06/13 09:54*	*04/10/13 10:48*	*1*
2,4,6-Tribromophenol (Surr)	*71*		*21 - 110*	*04/06/13 09:54*	*04/10/13 10:48*	*1*
Nitrobenzene-d5 (Surr)	*58*		*21 - 110*	*04/06/13 09:54*	*04/10/13 10:48*	*1*
Phenol-d5 (Surr)	*62*		*21 - 110*	*04/06/13 09:54*	*04/10/13 10:48*	*1*
Terphenyl-d14 (Surr)	*49*		*24 - 110*	*04/06/13 09:54*	*04/10/13 10:48*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040113-CT-005
Date Collected: 04/01/13 15:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.9	U	4.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
2,2'-oxybis[1-chloropropane]	4.9	U	4.9	0.39	ug/L		04/06/13 09:54	04/10/13 11:12	1
2,4,5-Trichlorophenol	4.9	U	4.9	0.29	ug/L		04/06/13 09:54	04/10/13 11:12	1
2,4,6-Trichlorophenol	3.9	U	3.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
2,4-Dichlorophenol	9.7	U	9.7	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
2,4-Dimethylphenol	4.9	U	4.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 11:12	1
2,4-Dinitrotoluene	4.9	U	4.9	0.26	ug/L		04/06/13 09:54	04/10/13 11:12	1
2,6-Dinitrotoluene	4.9	U	4.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
2-Chloronaphthalene	4.9	U	4.9	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
2-Chlorophenol	4.9	U	4.9	0.28	ug/L		04/06/13 09:54	04/10/13 11:12	1
2-Methylnaphthalene	4.9	U	4.9	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
2-Methylphenol	4.9	U	4.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
2-Nitroaniline	19	U	19	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
2-Nitrophenol	4.9	U	4.9	0.27	ug/L		04/06/13 09:54	04/10/13 11:12	1
3,3'-Dichlorobenzidine	0.97	U	0.97	0.36	ug/L		04/06/13 09:54	04/10/13 11:12	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/06/13 09:54	04/10/13 11:12	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 11:12	1
4-Bromophenyl phenyl ether	4.9	U	4.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
4-Chloro-3-methylphenol	4.9	U	4.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
4-Chloroaniline	9.7	U	9.7	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
4-Chlorophenyl phenyl ether	4.9	U	4.9	0.29	ug/L		04/06/13 09:54	04/10/13 11:12	1
4-Nitroaniline	19	U	19	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/06/13 09:54	04/10/13 11:12	1
Acenaphthene	4.9	U	4.9	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Acenaphthylene	4.9	U	4.9	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Acetophenone	4.9	U	4.9	0.33	ug/L		04/06/13 09:54	04/10/13 11:12	1
Anthracene	4.9	U	4.9	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Atrazine	2.9	U	2.9	0.33	ug/L		04/06/13 09:54	04/10/13 11:12	1
Benzaldehyde	4.9	U	4.9	0.38	ug/L		04/06/13 09:54	04/10/13 11:12	1
Benzo[a]anthracene	0.97	U	0.97	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Benzo[a]pyrene	0.97	U	0.97	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Benzo[b]fluoranthene	0.97	U	0.97	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Benzo[g,h,i]perylene	0.97	U	0.97	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Benzo[k]fluoranthene	0.97	U	0.97	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Bis(2-chloroethoxy)methane	4.9	U	4.9	0.31	ug/L		04/06/13 09:54	04/10/13 11:12	1
Bis(2-chloroethyl)ether	0.97	U	0.97	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Bis(2-ethylhexyl) phthalate	**1.2**	**J B**	4.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
Butyl benzyl phthalate	4.9	U	4.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
Caprolactam	9.7	U	9.7	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
Carbazole	9.7	U	9.7	0.27	ug/L		04/06/13 09:54	04/10/13 11:12	1
Chrysene	0.97	U	0.97	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Dibenzofuran	3.9	U	3.9	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Diethyl phthalate	4.9	U	4.9	0.58	ug/L		04/06/13 09:54	04/10/13 11:12	1
Dimethyl phthalate	4.9	U	4.9	0.28	ug/L		04/06/13 09:54	04/10/13 11:12	1
Di-n-butyl phthalate	4.9	U	4.9	0.65	ug/L		04/06/13 09:54	04/10/13 11:12	1
Di-n-octyl phthalate	4.9	U	4.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
Fluoranthene	0.97	U	0.97	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040113-CT-005
Date Collected: 04/01/13 15:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.9	U	4.9	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Hexachlorobenzene	0.19	U	0.19	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Hexachlorobutadiene	0.97	U	0.97	0.26	ug/L		04/06/13 09:54	04/10/13 11:12	1
Hexachlorocyclopentadiene	4.9	U *	4.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
Hexachloroethane	4.9	U	4.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Isophorone	4.9	U	4.9	0.26	ug/L		04/06/13 09:54	04/10/13 11:12	1
Naphthalene	4.9	U	4.9	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Nitrobenzene	2.9	U	2.9	0.039	ug/L		04/06/13 09:54	04/10/13 11:12	1
N-Nitrosodi-n-propylamine	4.9	U	4.9	0.78	ug/L		04/06/13 09:54	04/10/13 11:12	1
N-Nitrosodiphenylamine	4.9	U	4.9	0.30	ug/L		04/06/13 09:54	04/10/13 11:12	1
Pentachlorophenol	4.9	U	4.9	2.3	ug/L		04/06/13 09:54	04/10/13 11:12	1
Phenol	4.9	U	4.9	0.58	ug/L		04/06/13 09:54	04/10/13 11:12	1
Phenanthrene	1.9	U	1.9	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
Pyrene	4.9	U	4.9	0.097	ug/L		04/06/13 09:54	04/10/13 11:12	1
3 & 4 Methylphenol	4.9	U	4.9	0.73	ug/L		04/06/13 09:54	04/10/13 11:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*50*		*20 - 110*	*04/06/13 09:54*	*04/10/13 11:12*	*1*
2-Fluorophenol (Surr)	*53*		*10 - 110*	*04/06/13 09:54*	*04/10/13 11:12*	*1*
2,4,6-Tribromophenol (Surr)	*65*		*21 - 110*	*04/06/13 09:54*	*04/10/13 11:12*	*1*
Nitrobenzene-d5 (Surr)	*51*		*21 - 110*	*04/06/13 09:54*	*04/10/13 11:12*	*1*
Phenol-d5 (Surr)	*54*		*21 - 110*	*04/06/13 09:54*	*04/10/13 11:12*	*1*
Terphenyl-d14 (Surr)	*44*		*24 - 110*	*04/06/13 09:54*	*04/10/13 11:12*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040113-DR-006
Date Collected: 04/01/13 14:30
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.40	ug/L		04/06/13 09:54	04/10/13 11:34	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.30	ug/L		04/06/13 09:54	04/10/13 11:34	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
2,4-Dichlorophenol	10	U	10	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
2,4-Dimethylphenol	5.1	U	5.1	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/06/13 09:54	04/10/13 11:34	1
2,4-Dinitrotoluene	5.1	U	5.1	0.27	ug/L		04/06/13 09:54	04/10/13 11:34	1
2,6-Dinitrotoluene	5.1	U	5.1	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
2-Chlorophenol	5.1	U	5.1	0.29	ug/L		04/06/13 09:54	04/10/13 11:34	1
2-Methylnaphthalene	**0.22**	**J**	5.1	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
2-Methylphenol	5.1	U	5.1	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
2-Nitroaniline	20	U	20	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
2-Nitrophenol	5.1	U	5.1	0.28	ug/L		04/06/13 09:54	04/10/13 11:34	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/06/13 09:54	04/10/13 11:34	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/06/13 09:54	04/10/13 11:34	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/06/13 09:54	04/10/13 11:34	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
4-Chloroaniline	10	U	10	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.30	ug/L		04/06/13 09:54	04/10/13 11:34	1
4-Nitroaniline	20	U	20	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/06/13 09:54	04/10/13 11:34	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Acetophenone	5.1	U	5.1	0.34	ug/L		04/06/13 09:54	04/10/13 11:34	1
Anthracene	5.1	U	5.1	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/06/13 09:54	04/10/13 11:34	1
Benzaldehyde	5.1	U	5.1	0.39	ug/L		04/06/13 09:54	04/10/13 11:34	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.32	ug/L		04/06/13 09:54	04/10/13 11:34	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Bis(2-ethylhexyl) phthalate	**0.99**	**J B**	5.1	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
Butyl benzyl phthalate	5.1	U	5.1	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
Caprolactam	10	U	10	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
Carbazole	10	U	10	0.28	ug/L		04/06/13 09:54	04/10/13 11:34	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		04/06/13 09:54	04/10/13 11:34	1
Dimethyl phthalate	5.1	U	5.1	0.29	ug/L		04/06/13 09:54	04/10/13 11:34	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		04/06/13 09:54	04/10/13 11:34	1
Di-n-octyl phthalate	5.1	U	5.1	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040113-DR-006
Date Collected: 04/01/13 14:30
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**0.20**	**J**	5.1	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/06/13 09:54	04/10/13 11:34	1
Hexachlorocyclopentadiene	5.1	U *	5.1	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
Hexachloroethane	5.1	U	5.1	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Isophorone	5.1	U	5.1	0.27	ug/L		04/06/13 09:54	04/10/13 11:34	1
Naphthalene	5.1	U	5.1	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/06/13 09:54	04/10/13 11:34	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.81	ug/L		04/06/13 09:54	04/10/13 11:34	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.31	ug/L		04/06/13 09:54	04/10/13 11:34	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		04/06/13 09:54	04/10/13 11:34	1
Phenol	5.1	U	5.1	0.61	ug/L		04/06/13 09:54	04/10/13 11:34	1
Phenanthrene	**0.23**	**J**	2.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
Pyrene	5.1	U	5.1	0.10	ug/L		04/06/13 09:54	04/10/13 11:34	1
3 & 4 Methylphenol	5.1	U	5.1	0.76	ug/L		04/06/13 09:54	04/10/13 11:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*20 - 110*	*04/06/13 09:54*	*04/10/13 11:34*	*1*
2-Fluorophenol (Surr)	*63*		*10 - 110*	*04/06/13 09:54*	*04/10/13 11:34*	*1*
2,4,6-Tribromophenol (Surr)	*74*		*21 - 110*	*04/06/13 09:54*	*04/10/13 11:34*	*1*
Nitrobenzene-d5 (Surr)	*63*		*21 - 110*	*04/06/13 09:54*	*04/10/13 11:34*	*1*
Phenol-d5 (Surr)	*64*		*21 - 110*	*04/06/13 09:54*	*04/10/13 11:34*	*1*
Terphenyl-d14 (Surr)	*50*		*24 - 110*	*04/06/13 09:54*	*04/10/13 11:34*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040113-DR-007
Date Collected: 04/01/13 16:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.2	U	5.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
2,2'-oxybis[1-chloropropane]	5.2	U	5.2	0.42	ug/L		04/06/13 09:54	04/10/13 11:56	1
2,4,5-Trichlorophenol	5.2	U	5.2	0.31	ug/L		04/06/13 09:54	04/10/13 11:56	1
2,4,6-Trichlorophenol	4.2	U	4.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
2,4-Dichlorophenol	10	U	10	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
2,4-Dimethylphenol	5.2	U	5.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		04/06/13 09:54	04/10/13 11:56	1
2,4-Dinitrotoluene	5.2	U	5.2	0.28	ug/L		04/06/13 09:54	04/10/13 11:56	1
2,6-Dinitrotoluene	5.2	U	5.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
2-Chloronaphthalene	5.2	U	5.2	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
2-Chlorophenol	5.2	U	5.2	0.30	ug/L		04/06/13 09:54	04/10/13 11:56	1
2-Methylnaphthalene	5.2	U	5.2	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
2-Methylphenol	5.2	U	5.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
2-Nitroaniline	21	U	21	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
2-Nitrophenol	5.2	U	5.2	0.29	ug/L		04/06/13 09:54	04/10/13 11:56	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.39	ug/L		04/06/13 09:54	04/10/13 11:56	1
3-Nitroaniline	21	U	21	0.29	ug/L		04/06/13 09:54	04/10/13 11:56	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		04/06/13 09:54	04/10/13 11:56	1
4-Bromophenyl phenyl ether	5.2	U	5.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
4-Chloro-3-methylphenol	5.2	U	5.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
4-Chloroaniline	10	U	10	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
4-Chlorophenyl phenyl ether	5.2	U	5.2	0.31	ug/L		04/06/13 09:54	04/10/13 11:56	1
4-Nitroaniline	21	U	21	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
4-Nitrophenol	21	U	21	2.5	ug/L		04/06/13 09:54	04/10/13 11:56	1
Acenaphthene	5.2	U	5.2	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Acenaphthylene	5.2	U	5.2	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Acetophenone	5.2	U	5.2	0.35	ug/L		04/06/13 09:54	04/10/13 11:56	1
Anthracene	5.2	U	5.2	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Atrazine	3.1	U	3.1	0.35	ug/L		04/06/13 09:54	04/10/13 11:56	1
Benzaldehyde	5.2	U	5.2	0.41	ug/L		04/06/13 09:54	04/10/13 11:56	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Bis(2-chloroethoxy)methane	5.2	U	5.2	0.33	ug/L		04/06/13 09:54	04/10/13 11:56	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Bis(2-ethylhexyl) phthalate	**1.6**	**J B**	5.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
Butyl benzyl phthalate	5.2	U	5.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
Caprolactam	10	U	10	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
Carbazole	10	U	10	0.29	ug/L		04/06/13 09:54	04/10/13 11:56	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Dibenzofuran	4.2	U	4.2	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Diethyl phthalate	5.2	U	5.2	0.62	ug/L		04/06/13 09:54	04/10/13 11:56	1
Dimethyl phthalate	5.2	U	5.2	0.30	ug/L		04/06/13 09:54	04/10/13 11:56	1
Di-n-butyl phthalate	5.2	U	5.2	0.70	ug/L		04/06/13 09:54	04/10/13 11:56	1
Di-n-octyl phthalate	5.2	U	5.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040113-DR-007
Date Collected: 04/01/13 16:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.2	U	5.2	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Hexachlorobenzene	0.21	U	0.21	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		04/06/13 09:54	04/10/13 11:56	1
Hexachlorocyclopentadiene	5.2	U *	5.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
Hexachloroethane	5.2	U	5.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Isophorone	5.2	U	5.2	0.28	ug/L		04/06/13 09:54	04/10/13 11:56	1
Naphthalene	5.2	U	5.2	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Nitrobenzene	3.1	U	3.1	0.042	ug/L		04/06/13 09:54	04/10/13 11:56	1
N-Nitrosodi-n-propylamine	5.2	U	5.2	0.83	ug/L		04/06/13 09:54	04/10/13 11:56	1
N-Nitrosodiphenylamine	5.2	U	5.2	0.32	ug/L		04/06/13 09:54	04/10/13 11:56	1
Pentachlorophenol	5.2	U	5.2	2.5	ug/L		04/06/13 09:54	04/10/13 11:56	1
Phenol	5.2	U	5.2	0.62	ug/L		04/06/13 09:54	04/10/13 11:56	1
Phenanthrene	2.1	U	2.1	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
Pyrene	5.2	U	5.2	0.10	ug/L		04/06/13 09:54	04/10/13 11:56	1
3 & 4 Methylphenol	5.2	U	5.2	0.78	ug/L		04/06/13 09:54	04/10/13 11:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*49*		*20 - 110*	*04/06/13 09:54*	*04/10/13 11:56*	*1*
2-Fluorophenol (Surr)	*52*		*10 - 110*	*04/06/13 09:54*	*04/10/13 11:56*	*1*
2,4,6-Tribromophenol (Surr)	*63*		*21 - 110*	*04/06/13 09:54*	*04/10/13 11:56*	*1*
Nitrobenzene-d5 (Surr)	*49*		*21 - 110*	*04/06/13 09:54*	*04/10/13 11:56*	*1*
Phenol-d5 (Surr)	*54*		*21 - 110*	*04/06/13 09:54*	*04/10/13 11:56*	*1*
Terphenyl-d14 (Surr)	*48*		*24 - 110*	*04/06/13 09:54*	*04/10/13 11:56*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040213-CT-008
Date Collected: 04/02/13 09:40
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/08/13 09:07	04/10/13 17:25	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/08/13 09:07	04/10/13 17:25	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 17:25	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/08/13 09:07	04/10/13 17:25	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/08/13 09:07	04/10/13 17:25	1
2-Methylnaphthalene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
2-Nitroaniline	19	U	19	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/08/13 09:07	04/10/13 17:25	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		04/08/13 09:07	04/10/13 17:25	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/08/13 09:07	04/10/13 17:25	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 17:25	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/08/13 09:07	04/10/13 17:25	1
4-Nitroaniline	19	U	19	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 17:25	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Acetophenone	4.8	U	4.8	0.32	ug/L		04/08/13 09:07	04/10/13 17:25	1
Anthracene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Atrazine	2.9	U	2.9	0.32	ug/L		04/08/13 09:07	04/10/13 17:25	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/08/13 09:07	04/10/13 17:25	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		04/08/13 09:07	04/10/13 17:25	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Bis(2-ethylhexyl) phthalate	**0.87**	**J B**	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
Caprolactam	9.5	U	9.5	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
Carbazole	9.5	U	9.5	0.27	ug/L		04/08/13 09:07	04/10/13 17:25	1
Chrysene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		04/08/13 09:07	04/10/13 17:25	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/08/13 09:07	04/10/13 17:25	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/08/13 09:07	04/10/13 17:25	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040213-CT-008
Date Collected: 04/02/13 09:40
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		04/08/13 09:07	04/10/13 17:25	1
Hexachlorocyclopentadiene	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/08/13 09:07	04/10/13 17:25	1
Naphthalene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/08/13 09:07	04/10/13 17:25	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:25	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/08/13 09:07	04/10/13 17:25	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/08/13 09:07	04/10/13 17:25	1
Phenol	4.8	U	4.8	0.57	ug/L		04/08/13 09:07	04/10/13 17:25	1
Phenanthrene	1.9	U	1.9	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
Pyrene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:25	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		04/08/13 09:07	04/10/13 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*55*		*20 - 110*	*04/08/13 09:07*	*04/10/13 17:25*	*1*
2-Fluorophenol (Surr)	*56*		*10 - 110*	*04/08/13 09:07*	*04/10/13 17:25*	*1*
2,4,6-Tribromophenol (Surr)	*63*		*21 - 110*	*04/08/13 09:07*	*04/10/13 17:25*	*1*
Nitrobenzene-d5 (Surr)	*55*		*21 - 110*	*04/08/13 09:07*	*04/10/13 17:25*	*1*
Phenol-d5 (Surr)	*57*		*21 - 110*	*04/08/13 09:07*	*04/10/13 17:25*	*1*
Terphenyl-d14 (Surr)	*46*		*24 - 110*	*04/08/13 09:07*	*04/10/13 17:25*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040213-CT-009
Date Collected: 04/02/13 09:50
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/08/13 09:07	04/10/13 17:46	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/08/13 09:07	04/10/13 17:46	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 17:46	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/08/13 09:07	04/10/13 17:46	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/08/13 09:07	04/10/13 17:46	1
2-Methylnaphthalene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
2-Nitroaniline	19	U	19	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/08/13 09:07	04/10/13 17:46	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		04/08/13 09:07	04/10/13 17:46	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/08/13 09:07	04/10/13 17:46	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 17:46	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/08/13 09:07	04/10/13 17:46	1
4-Nitroaniline	19	U	19	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 17:46	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Acetophenone	4.8	U	4.8	0.32	ug/L		04/08/13 09:07	04/10/13 17:46	1
Anthracene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Atrazine	2.9	U	2.9	0.32	ug/L		04/08/13 09:07	04/10/13 17:46	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/08/13 09:07	04/10/13 17:46	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		04/08/13 09:07	04/10/13 17:46	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Bis(2-ethylhexyl) phthalate	**0.77**	**J B**	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
Caprolactam	9.5	U	9.5	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
Carbazole	9.5	U	9.5	0.27	ug/L		04/08/13 09:07	04/10/13 17:46	1
Chrysene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		04/08/13 09:07	04/10/13 17:46	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/08/13 09:07	04/10/13 17:46	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/08/13 09:07	04/10/13 17:46	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040213-CT-009
Date Collected: 04/02/13 09:50
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		04/08/13 09:07	04/10/13 17:46	1
Hexachlorocyclopentadiene	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/08/13 09:07	04/10/13 17:46	1
Naphthalene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/08/13 09:07	04/10/13 17:46	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 17:46	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/08/13 09:07	04/10/13 17:46	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/08/13 09:07	04/10/13 17:46	1
Phenol	4.8	U	4.8	0.57	ug/L		04/08/13 09:07	04/10/13 17:46	1
Phenanthrene	1.9	U	1.9	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
Pyrene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 17:46	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		04/08/13 09:07	04/10/13 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*56*		*20 - 110*	*04/08/13 09:07*	*04/10/13 17:46*	*1*
2-Fluorophenol (Surr)	*58*		*10 - 110*	*04/08/13 09:07*	*04/10/13 17:46*	*1*
2,4,6-Tribromophenol (Surr)	*60*		*21 - 110*	*04/08/13 09:07*	*04/10/13 17:46*	*1*
Nitrobenzene-d5 (Surr)	*59*		*21 - 110*	*04/08/13 09:07*	*04/10/13 17:46*	*1*
Phenol-d5 (Surr)	*58*		*21 - 110*	*04/08/13 09:07*	*04/10/13 17:46*	*1*
Terphenyl-d14 (Surr)	*47*		*24 - 110*	*04/08/13 09:07*	*04/10/13 17:46*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040213-CT-010
Date Collected: 04/02/13 11:15
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.9	U	4.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
2,2'-oxybis[1-chloropropane]	4.9	U	4.9	0.39	ug/L		04/08/13 09:07	04/10/13 18:08	1
2,4,5-Trichlorophenol	4.9	U	4.9	0.29	ug/L		04/08/13 09:07	04/10/13 18:08	1
2,4,6-Trichlorophenol	3.9	U	3.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
2,4-Dichlorophenol	9.7	U	9.7	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
2,4-Dimethylphenol	4.9	U	4.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 18:08	1
2,4-Dinitrotoluene	4.9	U	4.9	0.26	ug/L		04/08/13 09:07	04/10/13 18:08	1
2,6-Dinitrotoluene	4.9	U	4.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
2-Chloronaphthalene	4.9	U	4.9	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
2-Chlorophenol	4.9	U	4.9	0.28	ug/L		04/08/13 09:07	04/10/13 18:08	1
2-Methylnaphthalene	4.9	U	4.9	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
2-Methylphenol	4.9	U	4.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
2-Nitroaniline	19	U	19	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
2-Nitrophenol	4.9	U	4.9	0.27	ug/L		04/08/13 09:07	04/10/13 18:08	1
3,3'-Dichlorobenzidine	0.97	U	0.97	0.36	ug/L		04/08/13 09:07	04/10/13 18:08	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/08/13 09:07	04/10/13 18:08	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 18:08	1
4-Bromophenyl phenyl ether	4.9	U	4.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
4-Chloro-3-methylphenol	4.9	U	4.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
4-Chloroaniline	9.7	U	9.7	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
4-Chlorophenyl phenyl ether	4.9	U	4.9	0.29	ug/L		04/08/13 09:07	04/10/13 18:08	1
4-Nitroaniline	19	U	19	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 18:08	1
Acenaphthene	4.9	U	4.9	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Acenaphthylene	4.9	U	4.9	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Acetophenone	4.9	U	4.9	0.33	ug/L		04/08/13 09:07	04/10/13 18:08	1
Anthracene	4.9	U	4.9	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Atrazine	2.9	U	2.9	0.33	ug/L		04/08/13 09:07	04/10/13 18:08	1
Benzaldehyde	4.9	U	4.9	0.38	ug/L		04/08/13 09:07	04/10/13 18:08	1
Benzo[a]anthracene	0.97	U	0.97	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Benzo[a]pyrene	0.97	U	0.97	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Benzo[b]fluoranthene	0.97	U	0.97	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Benzo[g,h,i]perylene	0.97	U	0.97	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Benzo[k]fluoranthene	0.97	U	0.97	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Bis(2-chloroethoxy)methane	4.9	U	4.9	0.31	ug/L		04/08/13 09:07	04/10/13 18:08	1
Bis(2-chloroethyl)ether	0.97	U	0.97	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Bis(2-ethylhexyl) phthalate	**0.97**	**J B**	4.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
Butyl benzyl phthalate	4.9	U	4.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
Caprolactam	9.7	U	9.7	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
Carbazole	9.7	U	9.7	0.27	ug/L		04/08/13 09:07	04/10/13 18:08	1
Chrysene	0.97	U	0.97	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Dibenzofuran	3.9	U	3.9	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Diethyl phthalate	4.9	U	4.9	0.58	ug/L		04/08/13 09:07	04/10/13 18:08	1
Dimethyl phthalate	4.9	U	4.9	0.28	ug/L		04/08/13 09:07	04/10/13 18:08	1
Di-n-butyl phthalate	4.9	U	4.9	0.65	ug/L		04/08/13 09:07	04/10/13 18:08	1
Di-n-octyl phthalate	4.9	U	4.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
Fluoranthene	0.97	U	0.97	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040213-CT-010
Date Collected: 04/02/13 11:15
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.9	U	4.9	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Hexachlorobenzene	0.19	U	0.19	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Hexachlorobutadiene	0.97	U	0.97	0.26	ug/L		04/08/13 09:07	04/10/13 18:08	1
Hexachlorocyclopentadiene	4.9	U	4.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
Hexachloroethane	4.9	U	4.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Isophorone	4.9	U	4.9	0.26	ug/L		04/08/13 09:07	04/10/13 18:08	1
Naphthalene	4.9	U	4.9	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Nitrobenzene	2.9	U	2.9	0.039	ug/L		04/08/13 09:07	04/10/13 18:08	1
N-Nitrosodi-n-propylamine	4.9	U	4.9	0.78	ug/L		04/08/13 09:07	04/10/13 18:08	1
N-Nitrosodiphenylamine	4.9	U	4.9	0.30	ug/L		04/08/13 09:07	04/10/13 18:08	1
Pentachlorophenol	4.9	U	4.9	2.3	ug/L		04/08/13 09:07	04/10/13 18:08	1
Phenol	4.9	U	4.9	0.58	ug/L		04/08/13 09:07	04/10/13 18:08	1
Phenanthrene	1.9	U	1.9	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
Pyrene	4.9	U	4.9	0.097	ug/L		04/08/13 09:07	04/10/13 18:08	1
3 & 4 Methylphenol	4.9	U	4.9	0.73	ug/L		04/08/13 09:07	04/10/13 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*20 - 110*	*04/08/13 09:07*	*04/10/13 18:08*	*1*
2-Fluorophenol (Surr)	*63*		*10 - 110*	*04/08/13 09:07*	*04/10/13 18:08*	*1*
2,4,6-Tribromophenol (Surr)	*73*		*21 - 110*	*04/08/13 09:07*	*04/10/13 18:08*	*1*
Nitrobenzene-d5 (Surr)	*65*		*21 - 110*	*04/08/13 09:07*	*04/10/13 18:08*	*1*
Phenol-d5 (Surr)	*66*		*21 - 110*	*04/08/13 09:07*	*04/10/13 18:08*	*1*
Terphenyl-d14 (Surr)	*53*		*24 - 110*	*04/08/13 09:07*	*04/10/13 18:08*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040213-CT-011
Date Collected: 04/02/13 11:16
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/08/13 09:07	04/10/13 18:30	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/08/13 09:07	04/10/13 18:30	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 18:30	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/08/13 09:07	04/10/13 18:30	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/08/13 09:07	04/10/13 18:30	1
2-Methylnaphthalene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
2-Nitroaniline	19	U	19	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/08/13 09:07	04/10/13 18:30	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		04/08/13 09:07	04/10/13 18:30	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/08/13 09:07	04/10/13 18:30	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 18:30	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/08/13 09:07	04/10/13 18:30	1
4-Nitroaniline	19	U	19	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 18:30	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Acetophenone	4.8	U	4.8	0.32	ug/L		04/08/13 09:07	04/10/13 18:30	1
Anthracene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Atrazine	2.9	U	2.9	0.32	ug/L		04/08/13 09:07	04/10/13 18:30	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/08/13 09:07	04/10/13 18:30	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		04/08/13 09:07	04/10/13 18:30	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Bis(2-ethylhexyl) phthalate	**0.90**	**J B**	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
Caprolactam	9.5	U	9.5	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
Carbazole	9.5	U	9.5	0.27	ug/L		04/08/13 09:07	04/10/13 18:30	1
Chrysene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		04/08/13 09:07	04/10/13 18:30	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/08/13 09:07	04/10/13 18:30	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/08/13 09:07	04/10/13 18:30	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040213-CT-011
Date Collected: 04/02/13 11:16
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		04/08/13 09:07	04/10/13 18:30	1
Hexachlorocyclopentadiene	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/08/13 09:07	04/10/13 18:30	1
Naphthalene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/08/13 09:07	04/10/13 18:30	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		04/08/13 09:07	04/10/13 18:30	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/08/13 09:07	04/10/13 18:30	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/08/13 09:07	04/10/13 18:30	1
Phenol	4.8	U	4.8	0.57	ug/L		04/08/13 09:07	04/10/13 18:30	1
Phenanthrene	1.9	U	1.9	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
Pyrene	4.8	U	4.8	0.095	ug/L		04/08/13 09:07	04/10/13 18:30	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		04/08/13 09:07	04/10/13 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*55*		*20 - 110*	*04/08/13 09:07*	*04/10/13 18:30*	*1*
2-Fluorophenol (Surr)	*59*		*10 - 110*	*04/08/13 09:07*	*04/10/13 18:30*	*1*
2,4,6-Tribromophenol (Surr)	*63*		*21 - 110*	*04/08/13 09:07*	*04/10/13 18:30*	*1*
Nitrobenzene-d5 (Surr)	*59*		*21 - 110*	*04/08/13 09:07*	*04/10/13 18:30*	*1*
Phenol-d5 (Surr)	*60*		*21 - 110*	*04/08/13 09:07*	*04/10/13 18:30*	*1*
Terphenyl-d14 (Surr)	*48*		*24 - 110*	*04/08/13 09:07*	*04/10/13 18:30*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040213-CT-012
Date Collected: 04/02/13 15:15
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/08/13 09:07	04/10/13 19:14	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/08/13 09:07	04/10/13 19:14	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
2,4-Dichlorophenol	9.6	U	9.6	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
2,4-Dimethylphenol	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 19:14	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/08/13 09:07	04/10/13 19:14	1
2,6-Dinitrotoluene	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
2-Chloronaphthalene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/08/13 09:07	04/10/13 19:14	1
2-Methylnaphthalene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
2-Methylphenol	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
2-Nitroaniline	19	U	19	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/08/13 09:07	04/10/13 19:14	1
3,3'-Dichlorobenzidine	0.96	U	0.96	0.36	ug/L		04/08/13 09:07	04/10/13 19:14	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/08/13 09:07	04/10/13 19:14	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 19:14	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
4-Chloroaniline	9.6	U	9.6	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/08/13 09:07	04/10/13 19:14	1
4-Nitroaniline	19	U	19	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 19:14	1
Acenaphthene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Acenaphthylene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Acetophenone	4.8	U	4.8	0.33	ug/L		04/08/13 09:07	04/10/13 19:14	1
Anthracene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Atrazine	2.9	U	2.9	0.33	ug/L		04/08/13 09:07	04/10/13 19:14	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/08/13 09:07	04/10/13 19:14	1
Benzo[a]anthracene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Benzo[a]pyrene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Benzo[b]fluoranthene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Benzo[g,h,i]perylene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Benzo[k]fluoranthene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.31	ug/L		04/08/13 09:07	04/10/13 19:14	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Bis(2-ethylhexyl) phthalate	**0.89**	**J B**	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
Butyl benzyl phthalate	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
Caprolactam	9.6	U	9.6	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
Carbazole	9.6	U	9.6	0.27	ug/L		04/08/13 09:07	04/10/13 19:14	1
Chrysene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Dibenzofuran	3.8	U	3.8	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Diethyl phthalate	4.8	U	4.8	0.58	ug/L		04/08/13 09:07	04/10/13 19:14	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/08/13 09:07	04/10/13 19:14	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/08/13 09:07	04/10/13 19:14	1
Di-n-octyl phthalate	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
Fluoranthene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040213-CT-012
Date Collected: 04/02/13 15:15
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Hexachlorobenzene	0.19	U	0.19	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Hexachlorobutadiene	0.96	U	0.96	0.26	ug/L		04/08/13 09:07	04/10/13 19:14	1
Hexachlorocyclopentadiene	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
Hexachloroethane	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/08/13 09:07	04/10/13 19:14	1
Naphthalene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/08/13 09:07	04/10/13 19:14	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 19:14	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/08/13 09:07	04/10/13 19:14	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/08/13 09:07	04/10/13 19:14	1
Phenol	4.8	U	4.8	0.58	ug/L		04/08/13 09:07	04/10/13 19:14	1
Phenanthrene	1.9	U	1.9	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
Pyrene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 19:14	1
3 & 4 Methylphenol	4.8	U	4.8	0.72	ug/L		04/08/13 09:07	04/10/13 19:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*20 - 110*	*04/08/13 09:07*	*04/10/13 19:14*	*1*
2-Fluorophenol (Surr)	*63*		*10 - 110*	*04/08/13 09:07*	*04/10/13 19:14*	*1*
2,4,6-Tribromophenol (Surr)	*70*		*21 - 110*	*04/08/13 09:07*	*04/10/13 19:14*	*1*
Nitrobenzene-d5 (Surr)	*63*		*21 - 110*	*04/08/13 09:07*	*04/10/13 19:14*	*1*
Phenol-d5 (Surr)	*65*		*21 - 110*	*04/08/13 09:07*	*04/10/13 19:14*	*1*
Terphenyl-d14 (Surr)	*48*		*24 - 110*	*04/08/13 09:07*	*04/10/13 19:14*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040213-CT-013
Date Collected: 04/02/13 15:10
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/08/13 09:07	04/12/13 12:22	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/08/13 09:07	04/12/13 12:22	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
2,4-Dichlorophenol	9.6	U	9.6	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
2,4-Dimethylphenol	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/12/13 12:22	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/08/13 09:07	04/12/13 12:22	1
2,6-Dinitrotoluene	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
2-Chloronaphthalene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/08/13 09:07	04/12/13 12:22	1
2-Methylnaphthalene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
2-Methylphenol	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
2-Nitroaniline	19	U	19	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/08/13 09:07	04/12/13 12:22	1
3,3'-Dichlorobenzidine	0.96	U	0.96	0.36	ug/L		04/08/13 09:07	04/12/13 12:22	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/08/13 09:07	04/12/13 12:22	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/12/13 12:22	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
4-Chloroaniline	9.6	U	9.6	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/08/13 09:07	04/12/13 12:22	1
4-Nitroaniline	19	U	19	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/12/13 12:22	1
Acenaphthene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Acenaphthylene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Acetophenone	4.8	U	4.8	0.33	ug/L		04/08/13 09:07	04/12/13 12:22	1
Anthracene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Atrazine	2.9	U	2.9	0.33	ug/L		04/08/13 09:07	04/12/13 12:22	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/08/13 09:07	04/12/13 12:22	1
Benzo[a]anthracene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Benzo[a]pyrene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Benzo[b]fluoranthene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Benzo[g,h,i]perylene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Benzo[k]fluoranthene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.31	ug/L		04/08/13 09:07	04/12/13 12:22	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Bis(2-ethylhexyl) phthalate	**0.89**	**J B**	4.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
Butyl benzyl phthalate	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
Caprolactam	9.6	U	9.6	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
Carbazole	9.6	U	9.6	0.27	ug/L		04/08/13 09:07	04/12/13 12:22	1
Chrysene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Dibenzofuran	3.8	U	3.8	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Diethyl phthalate	4.8	U	4.8	0.58	ug/L		04/08/13 09:07	04/12/13 12:22	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/08/13 09:07	04/12/13 12:22	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/08/13 09:07	04/12/13 12:22	1
Di-n-octyl phthalate	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
Fluoranthene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040213-CT-013
Date Collected: 04/02/13 15:10
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Hexachlorobenzene	0.19	U	0.19	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Hexachlorobutadiene	0.96	U	0.96	0.26	ug/L		04/08/13 09:07	04/12/13 12:22	1
Hexachlorocyclopentadiene	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
Hexachloroethane	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/08/13 09:07	04/12/13 12:22	1
Naphthalene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/08/13 09:07	04/12/13 12:22	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/12/13 12:22	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/08/13 09:07	04/12/13 12:22	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/08/13 09:07	04/12/13 12:22	1
Phenol	4.8	U	4.8	0.58	ug/L		04/08/13 09:07	04/12/13 12:22	1
Phenanthrene	1.9	U	1.9	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
Pyrene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/12/13 12:22	1
3 & 4 Methylphenol	4.8	U	4.8	0.72	ug/L		04/08/13 09:07	04/12/13 12:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*50*		*20 - 110*	*04/08/13 09:07*	*04/12/13 12:22*	*1*
2-Fluorophenol (Surr)	*50*		*10 - 110*	*04/08/13 09:07*	*04/12/13 12:22*	*1*
2,4,6-Tribromophenol (Surr)	*58*		*21 - 110*	*04/08/13 09:07*	*04/12/13 12:22*	*1*
Nitrobenzene-d5 (Surr)	*51*		*21 - 110*	*04/08/13 09:07*	*04/12/13 12:22*	*1*
Phenol-d5 (Surr)	*52*		*21 - 110*	*04/08/13 09:07*	*04/12/13 12:22*	*1*
Terphenyl-d14 (Surr)	*42*		*24 - 110*	*04/08/13 09:07*	*04/12/13 12:22*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040213-CT-014
Date Collected: 04/02/13 16:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/08/13 09:07	04/10/13 18:52	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/08/13 09:07	04/10/13 18:52	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
2,4-Dichlorophenol	9.6	U	9.6	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
2,4-Dimethylphenol	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 18:52	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/08/13 09:07	04/10/13 18:52	1
2,6-Dinitrotoluene	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
2-Chloronaphthalene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/08/13 09:07	04/10/13 18:52	1
2-Methylnaphthalene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
2-Methylphenol	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
2-Nitroaniline	19	U	19	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/08/13 09:07	04/10/13 18:52	1
3,3'-Dichlorobenzidine	0.96	U	0.96	0.36	ug/L		04/08/13 09:07	04/10/13 18:52	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/08/13 09:07	04/10/13 18:52	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 18:52	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
4-Chloroaniline	9.6	U	9.6	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/08/13 09:07	04/10/13 18:52	1
4-Nitroaniline	19	U	19	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/08/13 09:07	04/10/13 18:52	1
Acenaphthene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Acenaphthylene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Acetophenone	4.8	U	4.8	0.33	ug/L		04/08/13 09:07	04/10/13 18:52	1
Anthracene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Atrazine	2.9	U	2.9	0.33	ug/L		04/08/13 09:07	04/10/13 18:52	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/08/13 09:07	04/10/13 18:52	1
Benzo[a]anthracene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Benzo[a]pyrene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Benzo[b]fluoranthene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Benzo[g,h,i]perylene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Benzo[k]fluoranthene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.31	ug/L		04/08/13 09:07	04/10/13 18:52	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Bis(2-ethylhexyl) phthalate	**6.6**	**B**	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
Butyl benzyl phthalate	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
Caprolactam	9.6	U	9.6	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
Carbazole	9.6	U	9.6	0.27	ug/L		04/08/13 09:07	04/10/13 18:52	1
Chrysene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Dibenzofuran	3.8	U	3.8	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Diethyl phthalate	4.8	U	4.8	0.58	ug/L		04/08/13 09:07	04/10/13 18:52	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/08/13 09:07	04/10/13 18:52	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/08/13 09:07	04/10/13 18:52	1
Di-n-octyl phthalate	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
Fluoranthene	0.96	U	0.96	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040213-CT-014
Date Collected: 04/02/13 16:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Hexachlorobenzene	0.19	U	0.19	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Hexachlorobutadiene	0.96	U	0.96	0.26	ug/L		04/08/13 09:07	04/10/13 18:52	1
Hexachlorocyclopentadiene	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
Hexachloroethane	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/08/13 09:07	04/10/13 18:52	1
Naphthalene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/08/13 09:07	04/10/13 18:52	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.77	ug/L		04/08/13 09:07	04/10/13 18:52	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/08/13 09:07	04/10/13 18:52	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/08/13 09:07	04/10/13 18:52	1
Phenol	4.8	U	4.8	0.58	ug/L		04/08/13 09:07	04/10/13 18:52	1
Phenanthrene	1.9	U	1.9	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
Pyrene	4.8	U	4.8	0.096	ug/L		04/08/13 09:07	04/10/13 18:52	1
3 & 4 Methylphenol	4.8	U	4.8	0.72	ug/L		04/08/13 09:07	04/10/13 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*50*		*20 - 110*	*04/08/13 09:07*	*04/10/13 18:52*	*1*
2-Fluorophenol (Surr)	*52*		*10 - 110*	*04/08/13 09:07*	*04/10/13 18:52*	*1*
2,4,6-Tribromophenol (Surr)	*60*		*21 - 110*	*04/08/13 09:07*	*04/10/13 18:52*	*1*
Nitrobenzene-d5 (Surr)	*54*		*21 - 110*	*04/08/13 09:07*	*04/10/13 18:52*	*1*
Phenol-d5 (Surr)	*53*		*21 - 110*	*04/08/13 09:07*	*04/10/13 18:52*	*1*
Terphenyl-d14 (Surr)	*46*		*24 - 110*	*04/08/13 09:07*	*04/10/13 18:52*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040313-CT-015
Date Collected: 04/03/13 10:00
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/09/13 10:13	04/12/13 12:47	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/09/13 10:13	04/12/13 12:47	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/09/13 10:13	04/12/13 12:47	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/09/13 10:13	04/12/13 12:47	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/09/13 10:13	04/12/13 12:47	1
2-Methylnaphthalene	4.8	U	4.8	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
2-Nitroaniline	19	U	19	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/09/13 10:13	04/12/13 12:47	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		04/09/13 10:13	04/12/13 12:47	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/09/13 10:13	04/12/13 12:47	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/09/13 10:13	04/12/13 12:47	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/09/13 10:13	04/12/13 12:47	1
4-Nitroaniline	19	U	19	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/09/13 10:13	04/12/13 12:47	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Acetophenone	4.8	U	4.8	0.32	ug/L		04/09/13 10:13	04/12/13 12:47	1
Anthracene	4.8	U	4.8	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Atrazine	2.9	U *	2.9	0.32	ug/L		04/09/13 10:13	04/12/13 12:47	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/09/13 10:13	04/12/13 12:47	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		04/09/13 10:13	04/12/13 12:47	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Bis(2-ethylhexyl) phthalate	**1.0**	**J B**	4.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
Caprolactam	9.5	U	9.5	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
Carbazole	9.5	U	9.5	0.27	ug/L		04/09/13 10:13	04/12/13 12:47	1
Chrysene	0.95	U	0.95	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		04/09/13 10:13	04/12/13 12:47	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/09/13 10:13	04/12/13 12:47	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/09/13 10:13	04/12/13 12:47	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040313-CT-015
Date Collected: 04/03/13 10:00
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		04/09/13 10:13	04/12/13 12:47	1
Hexachlorocyclopentadiene	4.8	U	4.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/09/13 10:13	04/12/13 12:47	1
Naphthalene	4.8	U	4.8	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/09/13 10:13	04/12/13 12:47	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		04/09/13 10:13	04/12/13 12:47	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/09/13 10:13	04/12/13 12:47	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/09/13 10:13	04/12/13 12:47	1
Phenol	4.8	U	4.8	0.57	ug/L		04/09/13 10:13	04/12/13 12:47	1
Phenanthrene	1.9	U	1.9	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
Pyrene	4.8	U	4.8	0.095	ug/L		04/09/13 10:13	04/12/13 12:47	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		04/09/13 10:13	04/12/13 12:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*20 - 110*	*04/09/13 10:13*	*04/12/13 12:47*	*1*
2-Fluorophenol (Surr)	*51*		*10 - 110*	*04/09/13 10:13*	*04/12/13 12:47*	*1*
2,4,6-Tribromophenol (Surr)	*48*		*21 - 110*	*04/09/13 10:13*	*04/12/13 12:47*	*1*
Nitrobenzene-d5 (Surr)	*64*		*21 - 110*	*04/09/13 10:13*	*04/12/13 12:47*	*1*
Phenol-d5 (Surr)	*52*		*21 - 110*	*04/09/13 10:13*	*04/12/13 12:47*	*1*
Terphenyl-d14 (Surr)	*56*		*24 - 110*	*04/09/13 10:13*	*04/12/13 12:47*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040313-CT-016
Date Collected: 04/03/13 10:05
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
2,2'-oxybis[1-chloropropane]	5.2	U	5.2	0.41	ug/L		04/09/13 10:13	04/12/13 16:02	1
2,4,5-Trichlorophenol	5.2	U	5.2	0.31	ug/L		04/09/13 10:13	04/12/13 16:02	1
2,4,6-Trichlorophenol	4.1	U	4.1	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
2,4-Dichlorophenol	10	U	10	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
2,4-Dimethylphenol	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		04/09/13 10:13	04/12/13 16:02	1
2,4-Dinitrotoluene	5.2	U	5.2	0.28	ug/L		04/09/13 10:13	04/12/13 16:02	1
2,6-Dinitrotoluene	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
2-Chloronaphthalene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
2-Chlorophenol	5.2	U	5.2	0.30	ug/L		04/09/13 10:13	04/12/13 16:02	1
2-Methylnaphthalene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
2-Methylphenol	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
2-Nitroaniline	21	U	21	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
2-Nitrophenol	5.2	U	5.2	0.29	ug/L		04/09/13 10:13	04/12/13 16:02	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.38	ug/L		04/09/13 10:13	04/12/13 16:02	1
3-Nitroaniline	21	U	21	0.29	ug/L		04/09/13 10:13	04/12/13 16:02	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		04/09/13 10:13	04/12/13 16:02	1
4-Bromophenyl phenyl ether	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
4-Chloro-3-methylphenol	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
4-Chloroaniline	10	U	10	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
4-Chlorophenyl phenyl ether	5.2	U	5.2	0.31	ug/L		04/09/13 10:13	04/12/13 16:02	1
4-Nitroaniline	21	U	21	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
4-Nitrophenol	21	U	21	2.5	ug/L		04/09/13 10:13	04/12/13 16:02	1
Acenaphthene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Acenaphthylene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Acetophenone	5.2	U	5.2	0.35	ug/L		04/09/13 10:13	04/12/13 16:02	1
Anthracene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Atrazine	3.1	U *	3.1	0.35	ug/L		04/09/13 10:13	04/12/13 16:02	1
Benzaldehyde	5.2	U	5.2	0.40	ug/L		04/09/13 10:13	04/12/13 16:02	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Benzo[g,h,i]perylene	**0.13**	**J**	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Bis(2-chloroethoxy)methane	5.2	U	5.2	0.33	ug/L		04/09/13 10:13	04/12/13 16:02	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Bis(2-ethylhexyl) phthalate	**1.3**	**J B**	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
Butyl benzyl phthalate	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
Caprolactam	10	U	10	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
Carbazole	10	U	10	0.29	ug/L		04/09/13 10:13	04/12/13 16:02	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Dibenz(a,h)anthracene	**0.21**	**J**	2.1	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Dibenzofuran	4.1	U	4.1	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Diethyl phthalate	5.2	U	5.2	0.62	ug/L		04/09/13 10:13	04/12/13 16:02	1
Dimethyl phthalate	5.2	U	5.2	0.30	ug/L		04/09/13 10:13	04/12/13 16:02	1
Di-n-butyl phthalate	5.2	U	5.2	0.69	ug/L		04/09/13 10:13	04/12/13 16:02	1
Di-n-octyl phthalate	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040313-CT-016
Date Collected: 04/03/13 10:05
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Hexachlorobenzene	0.21	U	0.21	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		04/09/13 10:13	04/12/13 16:02	1
Hexachlorocyclopentadiene	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
Hexachloroethane	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
Indeno[1,2,3-cd]pyrene	**0.15**	**J**	2.1	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Isophorone	5.2	U	5.2	0.28	ug/L		04/09/13 10:13	04/12/13 16:02	1
Naphthalene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Nitrobenzene	3.1	U	3.1	0.041	ug/L		04/09/13 10:13	04/12/13 16:02	1
N-Nitrosodi-n-propylamine	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 16:02	1
N-Nitrosodiphenylamine	5.2	U	5.2	0.32	ug/L		04/09/13 10:13	04/12/13 16:02	1
Pentachlorophenol	5.2	U	5.2	2.5	ug/L		04/09/13 10:13	04/12/13 16:02	1
Phenol	5.2	U	5.2	0.62	ug/L		04/09/13 10:13	04/12/13 16:02	1
Phenanthrene	2.1	U	2.1	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
Pyrene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 16:02	1
3 & 4 Methylphenol	5.2	U	5.2	0.77	ug/L		04/09/13 10:13	04/12/13 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*20 - 110*	*04/09/13 10:13*	*04/12/13 16:02*	*1*
2-Fluorophenol (Surr)	*48*		*10 - 110*	*04/09/13 10:13*	*04/12/13 16:02*	*1*
2,4,6-Tribromophenol (Surr)	*47*		*21 - 110*	*04/09/13 10:13*	*04/12/13 16:02*	*1*
Nitrobenzene-d5 (Surr)	*66*		*21 - 110*	*04/09/13 10:13*	*04/12/13 16:02*	*1*
Phenol-d5 (Surr)	*50*		*21 - 110*	*04/09/13 10:13*	*04/12/13 16:02*	*1*
Terphenyl-d14 (Surr)	*55*		*24 - 110*	*04/09/13 10:13*	*04/12/13 16:02*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040313-CT-017
Date Collected: 04/03/13 11:15
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.3	U	5.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
2,2'-oxybis[1-chloropropane]	5.3	U	5.3	0.43	ug/L		04/09/13 10:13	04/12/13 16:27	1
2,4,5-Trichlorophenol	5.3	U	5.3	0.32	ug/L		04/09/13 10:13	04/12/13 16:27	1
2,4,6-Trichlorophenol	4.3	U	4.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
2,4-Dichlorophenol	11	U	11	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
2,4-Dimethylphenol	5.3	U	5.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
2,4-Dinitrophenol	21	U	21	2.6	ug/L		04/09/13 10:13	04/12/13 16:27	1
2,4-Dinitrotoluene	5.3	U	5.3	0.29	ug/L		04/09/13 10:13	04/12/13 16:27	1
2,6-Dinitrotoluene	5.3	U	5.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
2-Chloronaphthalene	5.3	U	5.3	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
2-Chlorophenol	5.3	U	5.3	0.31	ug/L		04/09/13 10:13	04/12/13 16:27	1
2-Methylnaphthalene	5.3	U	5.3	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
2-Methylphenol	5.3	U	5.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
2-Nitroaniline	21	U	21	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
2-Nitrophenol	5.3	U	5.3	0.30	ug/L		04/09/13 10:13	04/12/13 16:27	1
3,3'-Dichlorobenzidine	1.1	U	1.1	0.39	ug/L		04/09/13 10:13	04/12/13 16:27	1
3-Nitroaniline	21	U	21	0.30	ug/L		04/09/13 10:13	04/12/13 16:27	1
4,6-Dinitro-2-methylphenol	21	U	21	2.6	ug/L		04/09/13 10:13	04/12/13 16:27	1
4-Bromophenyl phenyl ether	5.3	U	5.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
4-Chloro-3-methylphenol	5.3	U	5.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
4-Chloroaniline	11	U	11	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
4-Chlorophenyl phenyl ether	5.3	U	5.3	0.32	ug/L		04/09/13 10:13	04/12/13 16:27	1
4-Nitroaniline	21	U	21	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
4-Nitrophenol	21	U	21	2.6	ug/L		04/09/13 10:13	04/12/13 16:27	1
Acenaphthene	5.3	U	5.3	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Acenaphthylene	5.3	U	5.3	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Acetophenone	5.3	U	5.3	0.36	ug/L		04/09/13 10:13	04/12/13 16:27	1
Anthracene	5.3	U	5.3	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Atrazine	3.2	U *	3.2	0.36	ug/L		04/09/13 10:13	04/12/13 16:27	1
Benzaldehyde	5.3	U	5.3	0.41	ug/L		04/09/13 10:13	04/12/13 16:27	1
Benzo[a]anthracene	1.1	U	1.1	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Benzo[a]pyrene	1.1	U	1.1	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Benzo[b]fluoranthene	1.1	U	1.1	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Benzo[g,h,i]perylene	1.1	U	1.1	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Benzo[k]fluoranthene	1.1	U	1.1	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Bis(2-chloroethoxy)methane	5.3	U	5.3	0.34	ug/L		04/09/13 10:13	04/12/13 16:27	1
Bis(2-chloroethyl)ether	1.1	U	1.1	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Bis(2-ethylhexyl) phthalate	**1.1**	**J B**	5.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
Butyl benzyl phthalate	5.3	U	5.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
Caprolactam	**5.1**	**J**	11	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
Carbazole	11	U	11	0.30	ug/L		04/09/13 10:13	04/12/13 16:27	1
Chrysene	1.1	U	1.1	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Dibenzofuran	4.3	U	4.3	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Diethyl phthalate	5.3	U	5.3	0.64	ug/L		04/09/13 10:13	04/12/13 16:27	1
Dimethyl phthalate	5.3	U	5.3	0.31	ug/L		04/09/13 10:13	04/12/13 16:27	1
Di-n-butyl phthalate	5.3	U	5.3	0.71	ug/L		04/09/13 10:13	04/12/13 16:27	1
Di-n-octyl phthalate	5.3	U	5.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
Fluoranthene	1.1	U	1.1	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040313-CT-017
Date Collected: 04/03/13 11:15
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.3	U	5.3	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Hexachlorobenzene	0.21	U	0.21	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Hexachlorobutadiene	1.1	U	1.1	0.29	ug/L		04/09/13 10:13	04/12/13 16:27	1
Hexachlorocyclopentadiene	5.3	U	5.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
Hexachloroethane	5.3	U	5.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Isophorone	5.3	U	5.3	0.29	ug/L		04/09/13 10:13	04/12/13 16:27	1
Naphthalene	5.3	U	5.3	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Nitrobenzene	3.2	U	3.2	0.043	ug/L		04/09/13 10:13	04/12/13 16:27	1
N-Nitrosodi-n-propylamine	5.3	U	5.3	0.85	ug/L		04/09/13 10:13	04/12/13 16:27	1
N-Nitrosodiphenylamine	5.3	U	5.3	0.33	ug/L		04/09/13 10:13	04/12/13 16:27	1
Pentachlorophenol	5.3	U	5.3	2.6	ug/L		04/09/13 10:13	04/12/13 16:27	1
Phenol	5.3	U	5.3	0.64	ug/L		04/09/13 10:13	04/12/13 16:27	1
Phenanthrene	2.1	U	2.1	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
Pyrene	5.3	U	5.3	0.11	ug/L		04/09/13 10:13	04/12/13 16:27	1
3 & 4 Methylphenol	5.3	U	5.3	0.80	ug/L		04/09/13 10:13	04/12/13 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*56*		*20 - 110*	*04/09/13 10:13*	*04/12/13 16:27*	*1*
2-Fluorophenol (Surr)	*47*		*10 - 110*	*04/09/13 10:13*	*04/12/13 16:27*	*1*
2,4,6-Tribromophenol (Surr)	*45*		*21 - 110*	*04/09/13 10:13*	*04/12/13 16:27*	*1*
Nitrobenzene-d5 (Surr)	*64*		*21 - 110*	*04/09/13 10:13*	*04/12/13 16:27*	*1*
Phenol-d5 (Surr)	*49*		*21 - 110*	*04/09/13 10:13*	*04/12/13 16:27*	*1*
Terphenyl-d14 (Surr)	*57*		*24 - 110*	*04/09/13 10:13*	*04/12/13 16:27*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040313-CT-018
Date Collected: 04/03/13 11:25
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.9	U	4.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
2,2'-oxybis[1-chloropropane]	4.9	U	4.9	0.39	ug/L		04/09/13 10:13	04/12/13 16:51	1
2,4,5-Trichlorophenol	4.9	U	4.9	0.29	ug/L		04/09/13 10:13	04/12/13 16:51	1
2,4,6-Trichlorophenol	3.9	U	3.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
2,4-Dichlorophenol	9.8	U	9.8	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
2,4-Dimethylphenol	4.9	U	4.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/09/13 10:13	04/12/13 16:51	1
2,4-Dinitrotoluene	4.9	U	4.9	0.26	ug/L		04/09/13 10:13	04/12/13 16:51	1
2,6-Dinitrotoluene	4.9	U	4.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
2-Chloronaphthalene	4.9	U	4.9	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
2-Chlorophenol	4.9	U	4.9	0.28	ug/L		04/09/13 10:13	04/12/13 16:51	1
2-Methylnaphthalene	4.9	U	4.9	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
2-Methylphenol	4.9	U	4.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
2-Nitroaniline	20	U	20	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
2-Nitrophenol	4.9	U	4.9	0.27	ug/L		04/09/13 10:13	04/12/13 16:51	1
3,3'-Dichlorobenzidine	0.98	U	0.98	0.36	ug/L		04/09/13 10:13	04/12/13 16:51	1
3-Nitroaniline	20	U	20	0.27	ug/L		04/09/13 10:13	04/12/13 16:51	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/09/13 10:13	04/12/13 16:51	1
4-Bromophenyl phenyl ether	4.9	U	4.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
4-Chloro-3-methylphenol	4.9	U	4.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
4-Chloroaniline	9.8	U	9.8	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
4-Chlorophenyl phenyl ether	4.9	U	4.9	0.29	ug/L		04/09/13 10:13	04/12/13 16:51	1
4-Nitroaniline	20	U	20	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/09/13 10:13	04/12/13 16:51	1
Acenaphthene	4.9	U	4.9	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Acenaphthylene	4.9	U	4.9	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Acetophenone	4.9	U	4.9	0.33	ug/L		04/09/13 10:13	04/12/13 16:51	1
Anthracene	4.9	U	4.9	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Atrazine	2.9	U *	2.9	0.33	ug/L		04/09/13 10:13	04/12/13 16:51	1
Benzaldehyde	4.9	U	4.9	0.38	ug/L		04/09/13 10:13	04/12/13 16:51	1
Benzo[a]anthracene	0.98	U	0.98	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Benzo[a]pyrene	0.98	U	0.98	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Benzo[b]fluoranthene	0.98	U	0.98	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Benzo[g,h,i]perylene	0.98	U	0.98	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Benzo[k]fluoranthene	0.98	U	0.98	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Bis(2-chloroethoxy)methane	4.9	U	4.9	0.31	ug/L		04/09/13 10:13	04/12/13 16:51	1
Bis(2-chloroethyl)ether	0.98	U	0.98	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Bis(2-ethylhexyl) phthalate	**1.1**	**J B**	4.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
Butyl benzyl phthalate	4.9	U	4.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
Caprolactam	9.8	U	9.8	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
Carbazole	9.8	U	9.8	0.27	ug/L		04/09/13 10:13	04/12/13 16:51	1
Chrysene	0.98	U	0.98	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Dibenzofuran	3.9	U	3.9	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Diethyl phthalate	4.9	U	4.9	0.59	ug/L		04/09/13 10:13	04/12/13 16:51	1
Dimethyl phthalate	4.9	U	4.9	0.28	ug/L		04/09/13 10:13	04/12/13 16:51	1
Di-n-butyl phthalate	4.9	U	4.9	0.66	ug/L		04/09/13 10:13	04/12/13 16:51	1
Di-n-octyl phthalate	4.9	U	4.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
Fluoranthene	0.98	U	0.98	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040313-CT-018
Date Collected: 04/03/13 11:25
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.9	U	4.9	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Hexachlorobenzene	0.20	U	0.20	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Hexachlorobutadiene	0.98	U	0.98	0.26	ug/L		04/09/13 10:13	04/12/13 16:51	1
Hexachlorocyclopentadiene	4.9	U	4.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
Hexachloroethane	4.9	U	4.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Isophorone	4.9	U	4.9	0.26	ug/L		04/09/13 10:13	04/12/13 16:51	1
Naphthalene	4.9	U	4.9	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Nitrobenzene	2.9	U	2.9	0.039	ug/L		04/09/13 10:13	04/12/13 16:51	1
N-Nitrosodi-n-propylamine	4.9	U	4.9	0.78	ug/L		04/09/13 10:13	04/12/13 16:51	1
N-Nitrosodiphenylamine	4.9	U	4.9	0.30	ug/L		04/09/13 10:13	04/12/13 16:51	1
Pentachlorophenol	4.9	U	4.9	2.4	ug/L		04/09/13 10:13	04/12/13 16:51	1
Phenol	4.9	U	4.9	0.59	ug/L		04/09/13 10:13	04/12/13 16:51	1
Phenanthrene	2.0	U	2.0	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
Pyrene	4.9	U	4.9	0.098	ug/L		04/09/13 10:13	04/12/13 16:51	1
3 & 4 Methylphenol	4.9	U	4.9	0.74	ug/L		04/09/13 10:13	04/12/13 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*20 - 110*	*04/09/13 10:13*	*04/12/13 16:51*	*1*
2-Fluorophenol (Surr)	*52*		*10 - 110*	*04/09/13 10:13*	*04/12/13 16:51*	*1*
2,4,6-Tribromophenol (Surr)	*48*		*21 - 110*	*04/09/13 10:13*	*04/12/13 16:51*	*1*
Nitrobenzene-d5 (Surr)	*71*		*21 - 110*	*04/09/13 10:13*	*04/12/13 16:51*	*1*
Phenol-d5 (Surr)	*54*		*21 - 110*	*04/09/13 10:13*	*04/12/13 16:51*	*1*
Terphenyl-d14 (Surr)	*52*		*24 - 110*	*04/09/13 10:13*	*04/12/13 16:51*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040313-CT-019
Date Collected: 04/03/13 15:55
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
2,2'-oxybis[1-chloropropane]	5.2	U	5.2	0.41	ug/L		04/09/13 10:13	04/12/13 15:14	1
2,4,5-Trichlorophenol	5.2	U	5.2	0.31	ug/L		04/09/13 10:13	04/12/13 15:14	1
2,4,6-Trichlorophenol	4.1	U	4.1	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
2,4-Dichlorophenol	10	U	10	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
2,4-Dimethylphenol	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		04/09/13 10:13	04/12/13 15:14	1
2,4-Dinitrotoluene	5.2	U	5.2	0.28	ug/L		04/09/13 10:13	04/12/13 15:14	1
2,6-Dinitrotoluene	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
2-Chloronaphthalene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
2-Chlorophenol	5.2	U	5.2	0.30	ug/L		04/09/13 10:13	04/12/13 15:14	1
2-Methylnaphthalene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
2-Methylphenol	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
2-Nitroaniline	21	U	21	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
2-Nitrophenol	5.2	U	5.2	0.29	ug/L		04/09/13 10:13	04/12/13 15:14	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.38	ug/L		04/09/13 10:13	04/12/13 15:14	1
3-Nitroaniline	21	U	21	0.29	ug/L		04/09/13 10:13	04/12/13 15:14	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		04/09/13 10:13	04/12/13 15:14	1
4-Bromophenyl phenyl ether	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
4-Chloro-3-methylphenol	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
4-Chloroaniline	10	U	10	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
4-Chlorophenyl phenyl ether	5.2	U	5.2	0.31	ug/L		04/09/13 10:13	04/12/13 15:14	1
4-Nitroaniline	21	U	21	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
4-Nitrophenol	21	U	21	2.5	ug/L		04/09/13 10:13	04/12/13 15:14	1
Acenaphthene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Acenaphthylene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Acetophenone	5.2	U	5.2	0.35	ug/L		04/09/13 10:13	04/12/13 15:14	1
Anthracene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Atrazine	3.1	U *	3.1	0.35	ug/L		04/09/13 10:13	04/12/13 15:14	1
Benzaldehyde	5.2	U	5.2	0.40	ug/L		04/09/13 10:13	04/12/13 15:14	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Bis(2-chloroethoxy)methane	5.2	U	5.2	0.33	ug/L		04/09/13 10:13	04/12/13 15:14	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Bis(2-ethylhexyl) phthalate	**1.2**	**J B**	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
Butyl benzyl phthalate	**0.86**	**J**	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
Caprolactam	**1.1**	**J**	10	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
Carbazole	10	U	10	0.29	ug/L		04/09/13 10:13	04/12/13 15:14	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Dibenzofuran	4.1	U	4.1	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Diethyl phthalate	5.2	U	5.2	0.62	ug/L		04/09/13 10:13	04/12/13 15:14	1
Dimethyl phthalate	5.2	U	5.2	0.30	ug/L		04/09/13 10:13	04/12/13 15:14	1
Di-n-butyl phthalate	5.2	U	5.2	0.69	ug/L		04/09/13 10:13	04/12/13 15:14	1
Di-n-octyl phthalate	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040313-CT-019
Date Collected: 04/03/13 15:55
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Hexachlorobenzene	0.21	U	0.21	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		04/09/13 10:13	04/12/13 15:14	1
Hexachlorocyclopentadiene	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
Hexachloroethane	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Isophorone	5.2	U	5.2	0.28	ug/L		04/09/13 10:13	04/12/13 15:14	1
Naphthalene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Nitrobenzene	3.1	U	3.1	0.041	ug/L		04/09/13 10:13	04/12/13 15:14	1
N-Nitrosodi-n-propylamine	5.2	U	5.2	0.82	ug/L		04/09/13 10:13	04/12/13 15:14	1
N-Nitrosodiphenylamine	5.2	U	5.2	0.32	ug/L		04/09/13 10:13	04/12/13 15:14	1
Pentachlorophenol	5.2	U	5.2	2.5	ug/L		04/09/13 10:13	04/12/13 15:14	1
Phenol	5.2	U	5.2	0.62	ug/L		04/09/13 10:13	04/12/13 15:14	1
Phenanthrene	2.1	U	2.1	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
Pyrene	5.2	U	5.2	0.10	ug/L		04/09/13 10:13	04/12/13 15:14	1
3 & 4 Methylphenol	5.2	U	5.2	0.77	ug/L		04/09/13 10:13	04/12/13 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*20 - 110*	*04/09/13 10:13*	*04/12/13 15:14*	*1*
2-Fluorophenol (Surr)	*49*		*10 - 110*	*04/09/13 10:13*	*04/12/13 15:14*	*1*
2,4,6-Tribromophenol (Surr)	*46*		*21 - 110*	*04/09/13 10:13*	*04/12/13 15:14*	*1*
Nitrobenzene-d5 (Surr)	*66*		*21 - 110*	*04/09/13 10:13*	*04/12/13 15:14*	*1*
Phenol-d5 (Surr)	*51*		*21 - 110*	*04/09/13 10:13*	*04/12/13 15:14*	*1*
Terphenyl-d14 (Surr)	*61*		*24 - 110*	*04/09/13 10:13*	*04/12/13 15:14*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-040313-CT-020
Date Collected: 04/03/13 15:30
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/09/13 10:13	04/12/13 15:38	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/09/13 10:13	04/12/13 15:38	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
2,4-Dichlorophenol	9.6	U	9.6	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
2,4-Dimethylphenol	4.8	U	4.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/09/13 10:13	04/12/13 15:38	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/09/13 10:13	04/12/13 15:38	1
2,6-Dinitrotoluene	4.8	U	4.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
2-Chloronaphthalene	4.8	U	4.8	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/09/13 10:13	04/12/13 15:38	1
2-Methylnaphthalene	4.8	U	4.8	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
2-Methylphenol	4.8	U	4.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
2-Nitroaniline	19	U	19	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/09/13 10:13	04/12/13 15:38	1
3,3'-Dichlorobenzidine	0.96	U	0.96	0.36	ug/L		04/09/13 10:13	04/12/13 15:38	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/09/13 10:13	04/12/13 15:38	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/09/13 10:13	04/12/13 15:38	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
4-Chloroaniline	9.6	U	9.6	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/09/13 10:13	04/12/13 15:38	1
4-Nitroaniline	19	U	19	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/09/13 10:13	04/12/13 15:38	1
Acenaphthene	4.8	U	4.8	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Acenaphthylene	4.8	U	4.8	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Acetophenone	4.8	U	4.8	0.33	ug/L		04/09/13 10:13	04/12/13 15:38	1
Anthracene	4.8	U	4.8	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Atrazine	2.9	U *	2.9	0.33	ug/L		04/09/13 10:13	04/12/13 15:38	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/09/13 10:13	04/12/13 15:38	1
Benzo[a]anthracene	0.96	U	0.96	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Benzo[a]pyrene	0.96	U	0.96	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Benzo[b]fluoranthene	0.96	U	0.96	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Benzo[g,h,i]perylene	0.96	U	0.96	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Benzo[k]fluoranthene	0.96	U	0.96	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.31	ug/L		04/09/13 10:13	04/12/13 15:38	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Bis(2-ethylhexyl) phthalate	**1.7**	**J B**	4.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
Butyl benzyl phthalate	4.8	U	4.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
Caprolactam	**1.1**	**J**	9.6	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
Carbazole	9.6	U	9.6	0.27	ug/L		04/09/13 10:13	04/12/13 15:38	1
Chrysene	0.96	U	0.96	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Dibenzofuran	3.8	U	3.8	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Diethyl phthalate	4.8	U	4.8	0.58	ug/L		04/09/13 10:13	04/12/13 15:38	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/09/13 10:13	04/12/13 15:38	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/09/13 10:13	04/12/13 15:38	1
Di-n-octyl phthalate	4.8	U	4.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
Fluoranthene	0.96	U	0.96	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-040313-CT-020
Date Collected: 04/03/13 15:30
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Hexachlorobenzene	0.19	U	0.19	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Hexachlorobutadiene	0.96	U	0.96	0.26	ug/L		04/09/13 10:13	04/12/13 15:38	1
Hexachlorocyclopentadiene	4.8	U	4.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
Hexachloroethane	4.8	U	4.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/09/13 10:13	04/12/13 15:38	1
Naphthalene	4.8	U	4.8	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/09/13 10:13	04/12/13 15:38	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.77	ug/L		04/09/13 10:13	04/12/13 15:38	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/09/13 10:13	04/12/13 15:38	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/09/13 10:13	04/12/13 15:38	1
Phenol	4.8	U	4.8	0.58	ug/L		04/09/13 10:13	04/12/13 15:38	1
Phenanthrene	1.9	U	1.9	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
Pyrene	4.8	U	4.8	0.096	ug/L		04/09/13 10:13	04/12/13 15:38	1
3 & 4 Methylphenol	4.8	U	4.8	0.72	ug/L		04/09/13 10:13	04/12/13 15:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*20 - 110*	*04/09/13 10:13*	*04/12/13 15:38*	*1*
2-Fluorophenol (Surr)	*53*		*10 - 110*	*04/09/13 10:13*	*04/12/13 15:38*	*1*
2,4,6-Tribromophenol (Surr)	*48*		*21 - 110*	*04/09/13 10:13*	*04/12/13 15:38*	*1*
Nitrobenzene-d5 (Surr)	*72*		*21 - 110*	*04/09/13 10:13*	*04/12/13 15:38*	*1*
Phenol-d5 (Surr)	*54*		*21 - 110*	*04/09/13 10:13*	*04/12/13 15:38*	*1*
Terphenyl-d14 (Surr)	*56*		*24 - 110*	*04/09/13 10:13*	*04/12/13 15:38*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040113-JY-001
Date Collected: 04/01/13 14:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/06/13 09:50	04/08/13 15:55	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/06/13 09:50	04/08/13 15:55	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/06/13 09:50	04/08/13 15:55	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/06/13 09:50	04/08/13 15:55	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/06/13 09:50	04/08/13 15:55	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/06/13 09:50	04/08/13 15:55	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/06/13 09:50	04/08/13 15:55	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/06/13 09:50	04/08/13 15:55	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/06/13 09:50	04/08/13 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*46*		*23 - 136*	*04/06/13 09:50*	*04/08/13 15:55*	*1*
DCB Decachlorobiphenyl	*7*	*X*	*10 - 130*	*04/06/13 09:50*	*04/08/13 15:55*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040113-JY-002
Date Collected: 04/01/13 15:05
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/06/13 09:50	04/08/13 16:10	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/06/13 09:50	04/08/13 16:10	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/06/13 09:50	04/08/13 16:10	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/06/13 09:50	04/08/13 16:10	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/06/13 09:50	04/08/13 16:10	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/06/13 09:50	04/08/13 16:10	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/06/13 09:50	04/08/13 16:10	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/06/13 09:50	04/08/13 16:10	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/06/13 09:50	04/08/13 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*23 - 136*	*04/06/13 09:50*	*04/08/13 16:10*	*1*
DCB Decachlorobiphenyl	*62*		*10 - 130*	*04/06/13 09:50*	*04/08/13 16:10*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040113-CT-003
Date Collected: 04/01/13 14:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.098	U	0.098	0.043	ug/L		04/06/13 09:50	04/08/13 16:25	1
Aroclor-1221	0.098	U	0.098	0.044	ug/L		04/06/13 09:50	04/08/13 16:25	1
Aroclor-1232	0.098	U	0.098	0.072	ug/L		04/06/13 09:50	04/08/13 16:25	1
Aroclor-1242	0.098	U	0.098	0.059	ug/L		04/06/13 09:50	04/08/13 16:25	1
Aroclor-1248	0.098	U	0.098	0.060	ug/L		04/06/13 09:50	04/08/13 16:25	1
Aroclor-1254	0.098	U	0.098	0.031	ug/L		04/06/13 09:50	04/08/13 16:25	1
Aroclor-1260	0.098	U	0.098	0.037	ug/L		04/06/13 09:50	04/08/13 16:25	1
Aroclor-1262	0.098	U	0.098	0.035	ug/L		04/06/13 09:50	04/08/13 16:25	1
Aroclor-1268	0.098	U	0.098	0.054	ug/L		04/06/13 09:50	04/08/13 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*23 - 136*	*04/06/13 09:50*	*04/08/13 16:25*	*1*
DCB Decachlorobiphenyl	*43*		*10 - 130*	*04/06/13 09:50*	*04/08/13 16:25*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040113-CT-004
Date Collected: 04/01/13 14:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.045	ug/L		04/06/13 09:50	04/08/13 16:40	1
Aroclor-1221	0.10	U	0.10	0.046	ug/L		04/06/13 09:50	04/08/13 16:40	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		04/06/13 09:50	04/08/13 16:40	1
Aroclor-1242	0.10	U	0.10	0.061	ug/L		04/06/13 09:50	04/08/13 16:40	1
Aroclor-1248	0.10	U	0.10	0.062	ug/L		04/06/13 09:50	04/08/13 16:40	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/06/13 09:50	04/08/13 16:40	1
Aroclor-1260	0.10	U	0.10	0.039	ug/L		04/06/13 09:50	04/08/13 16:40	1
Aroclor-1262	0.10	U	0.10	0.037	ug/L		04/06/13 09:50	04/08/13 16:40	1
Aroclor-1268	0.10	U	0.10	0.056	ug/L		04/06/13 09:50	04/08/13 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*53*		*23 - 136*	*04/06/13 09:50*	*04/08/13 16:40*	*1*
DCB Decachlorobiphenyl	*34*		*10 - 130*	*04/06/13 09:50*	*04/08/13 16:40*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040113-CT-005
Date Collected: 04/01/13 15:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/06/13 09:50	04/08/13 16:55	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/06/13 09:50	04/08/13 16:55	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		04/06/13 09:50	04/08/13 16:55	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		04/06/13 09:50	04/08/13 16:55	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		04/06/13 09:50	04/08/13 16:55	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/06/13 09:50	04/08/13 16:55	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/06/13 09:50	04/08/13 16:55	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/06/13 09:50	04/08/13 16:55	1
Aroclor-1268	0.10	U	0.10	0.055	ug/L		04/06/13 09:50	04/08/13 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*62*		*23 - 136*	*04/06/13 09:50*	*04/08/13 16:55*	*1*
DCB Decachlorobiphenyl	*49*		*10 - 130*	*04/06/13 09:50*	*04/08/13 16:55*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040113-DR-006
Date Collected: 04/01/13 14:30
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/06/13 09:50	04/09/13 08:42	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/06/13 09:50	04/09/13 08:42	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		04/06/13 09:50	04/09/13 08:42	1
Aroclor-1242	0.10	U	0.10	0.061	ug/L		04/06/13 09:50	04/09/13 08:42	1
Aroclor-1248	0.10	U	0.10	0.062	ug/L		04/06/13 09:50	04/09/13 08:42	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/06/13 09:50	04/09/13 08:42	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/06/13 09:50	04/09/13 08:42	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/06/13 09:50	04/09/13 08:42	1
Aroclor-1268	0.10	U	0.10	0.056	ug/L		04/06/13 09:50	04/09/13 08:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*39*		*23 - 136*	*04/06/13 09:50*	*04/09/13 08:42*	*1*
DCB Decachlorobiphenyl	*24*		*10 - 130*	*04/06/13 09:50*	*04/09/13 08:42*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040113-DR-007
Date Collected: 04/01/13 16:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.098	U	0.098	0.043	ug/L		04/06/13 09:50	04/08/13 17:25	1
Aroclor-1221	0.098	U	0.098	0.044	ug/L		04/06/13 09:50	04/08/13 17:25	1
Aroclor-1232	0.098	U	0.098	0.072	ug/L		04/06/13 09:50	04/08/13 17:25	1
Aroclor-1242	0.098	U	0.098	0.059	ug/L		04/06/13 09:50	04/08/13 17:25	1
Aroclor-1248	0.098	U	0.098	0.060	ug/L		04/06/13 09:50	04/08/13 17:25	1
Aroclor-1254	0.098	U	0.098	0.031	ug/L		04/06/13 09:50	04/08/13 17:25	1
Aroclor-1260	0.098	U	0.098	0.037	ug/L		04/06/13 09:50	04/08/13 17:25	1
Aroclor-1262	0.098	U	0.098	0.035	ug/L		04/06/13 09:50	04/08/13 17:25	1
Aroclor-1268	0.098	U	0.098	0.054	ug/L		04/06/13 09:50	04/08/13 17:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*56*		*23 - 136*	*04/06/13 09:50*	*04/08/13 17:25*	*1*
DCB Decachlorobiphenyl	*57*		*10 - 130*	*04/06/13 09:50*	*04/08/13 17:25*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040213-CT-008
Date Collected: 04/02/13 09:40
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/06/13 09:50	04/08/13 17:40	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/06/13 09:50	04/08/13 17:40	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/06/13 09:50	04/08/13 17:40	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/06/13 09:50	04/08/13 17:40	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/06/13 09:50	04/08/13 17:40	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/06/13 09:50	04/08/13 17:40	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/06/13 09:50	04/08/13 17:40	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/06/13 09:50	04/08/13 17:40	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/06/13 09:50	04/08/13 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*56*		*23 - 136*	*04/06/13 09:50*	*04/08/13 17:40*	*1*
DCB Decachlorobiphenyl	*43*		*10 - 130*	*04/06/13 09:50*	*04/08/13 17:40*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040213-CT-009
Date Collected: 04/02/13 09:50
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/06/13 09:50	04/08/13 17:55	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/06/13 09:50	04/08/13 17:55	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/06/13 09:50	04/08/13 17:55	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/06/13 09:50	04/08/13 17:55	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/06/13 09:50	04/08/13 17:55	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/06/13 09:50	04/08/13 17:55	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/06/13 09:50	04/08/13 17:55	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/06/13 09:50	04/08/13 17:55	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/06/13 09:50	04/08/13 17:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*57*		*23 - 136*	*04/06/13 09:50*	*04/08/13 17:55*	*1*
DCB Decachlorobiphenyl	*41*		*10 - 130*	*04/06/13 09:50*	*04/08/13 17:55*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040213-CT-010
Date Collected: 04/02/13 11:15
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/06/13 09:50	04/08/13 18:10	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/06/13 09:50	04/08/13 18:10	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/06/13 09:50	04/08/13 18:10	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/06/13 09:50	04/08/13 18:10	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/06/13 09:50	04/08/13 18:10	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/06/13 09:50	04/08/13 18:10	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/06/13 09:50	04/08/13 18:10	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/06/13 09:50	04/08/13 18:10	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/06/13 09:50	04/08/13 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*64*		*23 - 136*	*04/06/13 09:50*	*04/08/13 18:10*	*1*
DCB Decachlorobiphenyl	*45*		*10 - 130*	*04/06/13 09:50*	*04/08/13 18:10*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040213-CT-011
Date Collected: 04/02/13 11:16
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.096	U	0.096	0.042	ug/L		04/06/13 09:50	04/08/13 18:25	1
Aroclor-1221	0.096	U	0.096	0.043	ug/L		04/06/13 09:50	04/08/13 18:25	1
Aroclor-1232	0.096	U	0.096	0.070	ug/L		04/06/13 09:50	04/08/13 18:25	1
Aroclor-1242	0.096	U	0.096	0.058	ug/L		04/06/13 09:50	04/08/13 18:25	1
Aroclor-1248	0.096	U	0.096	0.059	ug/L		04/06/13 09:50	04/08/13 18:25	1
Aroclor-1254	0.096	U	0.096	0.031	ug/L		04/06/13 09:50	04/08/13 18:25	1
Aroclor-1260	0.096	U	0.096	0.037	ug/L		04/06/13 09:50	04/08/13 18:25	1
Aroclor-1262	0.096	U	0.096	0.035	ug/L		04/06/13 09:50	04/08/13 18:25	1
Aroclor-1268	0.096	U	0.096	0.053	ug/L		04/06/13 09:50	04/08/13 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*56*		*23 - 136*	*04/06/13 09:50*	*04/08/13 18:25*	*1*
DCB Decachlorobiphenyl	*52*		*10 - 130*	*04/06/13 09:50*	*04/08/13 18:25*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040213-CT-012
Date Collected: 04/02/13 15:15
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/06/13 09:50	04/08/13 18:40	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/06/13 09:50	04/08/13 18:40	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/06/13 09:50	04/08/13 18:40	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/06/13 09:50	04/08/13 18:40	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/06/13 09:50	04/08/13 18:40	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/06/13 09:50	04/08/13 18:40	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/06/13 09:50	04/08/13 18:40	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/06/13 09:50	04/08/13 18:40	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/06/13 09:50	04/08/13 18:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*51*		*23 - 136*	*04/06/13 09:50*	*04/08/13 18:40*	*1*
DCB Decachlorobiphenyl	*38*		*10 - 130*	*04/06/13 09:50*	*04/08/13 18:40*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040213-CT-013
Date Collected: 04/02/13 15:10
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/06/13 09:50	04/08/13 18:55	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/06/13 09:50	04/08/13 18:55	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/06/13 09:50	04/08/13 18:55	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/06/13 09:50	04/08/13 18:55	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/06/13 09:50	04/08/13 18:55	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/06/13 09:50	04/08/13 18:55	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/06/13 09:50	04/08/13 18:55	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/06/13 09:50	04/08/13 18:55	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/06/13 09:50	04/08/13 18:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*58*		*23 - 136*	*04/06/13 09:50*	*04/08/13 18:55*	*1*
DCB Decachlorobiphenyl	*44*		*10 - 130*	*04/06/13 09:50*	*04/08/13 18:55*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040213-CT-014
Date Collected: 04/02/13 16:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/06/13 09:50	04/08/13 19:10	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/06/13 09:50	04/08/13 19:10	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/06/13 09:50	04/08/13 19:10	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/06/13 09:50	04/08/13 19:10	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/06/13 09:50	04/08/13 19:10	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/06/13 09:50	04/08/13 19:10	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/06/13 09:50	04/08/13 19:10	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/06/13 09:50	04/08/13 19:10	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/06/13 09:50	04/08/13 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*58*		*23 - 136*	*04/06/13 09:50*	*04/08/13 19:10*	*1*
DCB Decachlorobiphenyl	*45*		*10 - 130*	*04/06/13 09:50*	*04/08/13 19:10*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040313-CT-015
Date Collected: 04/03/13 10:00
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/06/13 09:50	04/08/13 19:25	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/06/13 09:50	04/08/13 19:25	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/06/13 09:50	04/08/13 19:25	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/06/13 09:50	04/08/13 19:25	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/06/13 09:50	04/08/13 19:25	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/06/13 09:50	04/08/13 19:25	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/06/13 09:50	04/08/13 19:25	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/06/13 09:50	04/08/13 19:25	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/06/13 09:50	04/08/13 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*57*		*23 - 136*	*04/06/13 09:50*	*04/08/13 19:25*	*1*
DCB Decachlorobiphenyl	*46*		*10 - 130*	*04/06/13 09:50*	*04/08/13 19:25*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040313-CT-016
Date Collected: 04/03/13 10:05
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.046	ug/L		04/06/13 09:50	04/08/13 20:09	1
Aroclor-1221	0.10	U	0.10	0.047	ug/L		04/06/13 09:50	04/08/13 20:09	1
Aroclor-1232	0.10	U	0.10	0.076	ug/L		04/06/13 09:50	04/08/13 20:09	1
Aroclor-1242	0.10	U	0.10	0.063	ug/L		04/06/13 09:50	04/08/13 20:09	1
Aroclor-1248	0.10	U	0.10	0.064	ug/L		04/06/13 09:50	04/08/13 20:09	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/06/13 09:50	04/08/13 20:09	1
Aroclor-1260	0.10	U	0.10	0.040	ug/L		04/06/13 09:50	04/08/13 20:09	1
Aroclor-1262	0.10	U	0.10	0.038	ug/L		04/06/13 09:50	04/08/13 20:09	1
Aroclor-1268	0.10	U	0.10	0.057	ug/L		04/06/13 09:50	04/08/13 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*51*		*23 - 136*	*04/06/13 09:50*	*04/08/13 20:09*	*1*
DCB Decachlorobiphenyl	*33*		*10 - 130*	*04/06/13 09:50*	*04/08/13 20:09*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040313-CT-017
Date Collected: 04/03/13 11:15
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.11	U	0.11	0.047	ug/L		04/06/13 09:50	04/08/13 20:24	1
Aroclor-1221	0.11	U	0.11	0.048	ug/L		04/06/13 09:50	04/08/13 20:24	1
Aroclor-1232	0.11	U	0.11	0.078	ug/L		04/06/13 09:50	04/08/13 20:24	1
Aroclor-1242	0.11	U	0.11	0.064	ug/L		04/06/13 09:50	04/08/13 20:24	1
Aroclor-1248	0.11	U	0.11	0.065	ug/L		04/06/13 09:50	04/08/13 20:24	1
Aroclor-1254	0.11	U	0.11	0.034	ug/L		04/06/13 09:50	04/08/13 20:24	1
Aroclor-1260	0.11	U	0.11	0.040	ug/L		04/06/13 09:50	04/08/13 20:24	1
Aroclor-1262	0.11	U	0.11	0.038	ug/L		04/06/13 09:50	04/08/13 20:24	1
Aroclor-1268	0.11	U	0.11	0.059	ug/L		04/06/13 09:50	04/08/13 20:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*59*		*23 - 136*	*04/06/13 09:50*	*04/08/13 20:24*	*1*
DCB Decachlorobiphenyl	*50*		*10 - 130*	*04/06/13 09:50*	*04/08/13 20:24*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040313-CT-018
Date Collected: 04/03/13 11:25
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.098	U	0.098	0.043	ug/L		04/06/13 09:50	04/08/13 20:39	1
Aroclor-1221	0.098	U	0.098	0.044	ug/L		04/06/13 09:50	04/08/13 20:39	1
Aroclor-1232	0.098	U	0.098	0.072	ug/L		04/06/13 09:50	04/08/13 20:39	1
Aroclor-1242	0.098	U	0.098	0.059	ug/L		04/06/13 09:50	04/08/13 20:39	1
Aroclor-1248	0.098	U	0.098	0.060	ug/L		04/06/13 09:50	04/08/13 20:39	1
Aroclor-1254	0.098	U	0.098	0.031	ug/L		04/06/13 09:50	04/08/13 20:39	1
Aroclor-1260	0.098	U	0.098	0.037	ug/L		04/06/13 09:50	04/08/13 20:39	1
Aroclor-1262	0.098	U	0.098	0.035	ug/L		04/06/13 09:50	04/08/13 20:39	1
Aroclor-1268	0.098	U	0.098	0.054	ug/L		04/06/13 09:50	04/08/13 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*57*		*23 - 136*	*04/06/13 09:50*	*04/08/13 20:39*	*1*
DCB Decachlorobiphenyl	*39*		*10 - 130*	*04/06/13 09:50*	*04/08/13 20:39*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040313-CT-019
Date Collected: 04/03/13 15:55
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.045	ug/L		04/10/13 09:19	04/11/13 16:36	1
Aroclor-1221	0.10	U	0.10	0.046	ug/L		04/10/13 09:19	04/11/13 16:36	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		04/10/13 09:19	04/11/13 16:36	1
Aroclor-1242	0.10	U	0.10	0.061	ug/L		04/10/13 09:19	04/11/13 16:36	1
Aroclor-1248	0.10	U	0.10	0.062	ug/L		04/10/13 09:19	04/11/13 16:36	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/10/13 09:19	04/11/13 16:36	1
Aroclor-1260	0.10	U	0.10	0.039	ug/L		04/10/13 09:19	04/11/13 16:36	1
Aroclor-1262	0.10	U	0.10	0.037	ug/L		04/10/13 09:19	04/11/13 16:36	1
Aroclor-1268	0.10	U	0.10	0.056	ug/L		04/10/13 09:19	04/11/13 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*68*		*23 - 136*	*04/10/13 09:19*	*04/11/13 16:36*	*1*
DCB Decachlorobiphenyl	*37*		*10 - 130*	*04/10/13 09:19*	*04/11/13 16:36*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-040313-CT-020
Date Collected: 04/03/13 15:30
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.0097	U	0.0097	0.0043	ug/L		04/10/13 09:19	04/11/13 16:51	1
Aroclor-1221	0.0097	U	0.0097	0.0044	ug/L		04/10/13 09:19	04/11/13 16:51	1
Aroclor-1232	0.0097	U	0.0097	0.0071	ug/L		04/10/13 09:19	04/11/13 16:51	1
Aroclor-1242	0.0097	U	0.0097	0.0058	ug/L		04/10/13 09:19	04/11/13 16:51	1
Aroclor-1248	0.0097	U	0.0097	0.0059	ug/L		04/10/13 09:19	04/11/13 16:51	1
Aroclor-1254	0.0097	U	0.0097	0.0031	ug/L		04/10/13 09:19	04/11/13 16:51	1
Aroclor-1260	0.0097	U	0.0097	0.0037	ug/L		04/10/13 09:19	04/11/13 16:51	1
Aroclor-1262	0.0097	U	0.0097	0.0035	ug/L		04/10/13 09:19	04/11/13 16:51	1
Aroclor-1268	0.0097	U	0.0097	0.0053	ug/L		04/10/13 09:19	04/11/13 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*23 - 136*	*04/10/13 09:19*	*04/11/13 16:51*	*1*
DCB Decachlorobiphenyl	*27*		*10 - 130*	*04/10/13 09:19*	*04/11/13 16:51*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography - RE

Client Sample ID: GW-17358-040113-JY-001
Date Collected: 04/01/13 14:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U H	0.095	0.042	ug/L		04/10/13 09:19	04/11/13 16:21	1
Aroclor-1221	0.095	U H	0.095	0.043	ug/L		04/10/13 09:19	04/11/13 16:21	1
Aroclor-1232	0.095	U H	0.095	0.070	ug/L		04/10/13 09:19	04/11/13 16:21	1
Aroclor-1242	0.095	U H	0.095	0.057	ug/L		04/10/13 09:19	04/11/13 16:21	1
Aroclor-1248	0.095	U H	0.095	0.058	ug/L		04/10/13 09:19	04/11/13 16:21	1
Aroclor-1254	0.095	U H	0.095	0.030	ug/L		04/10/13 09:19	04/11/13 16:21	1
Aroclor-1260	0.095	U H	0.095	0.036	ug/L		04/10/13 09:19	04/11/13 16:21	1
Aroclor-1262	0.095	U H	0.095	0.034	ug/L		04/10/13 09:19	04/11/13 16:21	1
Aroclor-1268	0.095	U H	0.095	0.052	ug/L		04/10/13 09:19	04/11/13 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*23 - 136*	*04/10/13 09:19*	*04/11/13 16:21*	*1*
DCB Decachlorobiphenyl	*15*		*10 - 130*	*04/10/13 09:19*	*04/11/13 16:21*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040113-JY-001
Date Collected: 04/01/13 14:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/15/13 09:40	04/16/13 17:48	1
Antimony	**0.59**	**J B**	2.0	0.13	ug/L		04/15/13 09:40	04/16/13 17:48	1
Arsenic	**48**		5.0	0.40	ug/L		04/15/13 09:40	04/16/13 17:48	1
Barium	**610**	**B**	100	0.19	ug/L		04/15/13 09:40	04/16/13 17:48	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/15/13 09:40	04/16/13 17:48	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/15/13 09:40	04/16/13 17:48	1
Cobalt	**0.52**	**J**	20	0.058	ug/L		04/15/13 09:40	04/16/13 17:48	1
Chromium	**1.5**	**J**	10	0.71	ug/L		04/15/13 09:40	04/16/13 17:48	1
Copper	4.0	U	4.0	0.29	ug/L		04/15/13 09:40	04/16/13 17:48	1
Iron	**20000**	**B**	200	26	ug/L		04/15/13 09:40	04/16/13 17:48	1
Manganese	**280**	**B**	50	0.83	ug/L		04/15/13 09:40	04/16/13 17:48	1
Nickel	**3.2**	**J B**	20	0.20	ug/L		04/15/13 09:40	04/16/13 17:48	1
Lead	**0.59**	**J B**	3.0	0.18	ug/L		04/15/13 09:40	04/16/13 17:48	1
Selenium	5.0	U	5.0	0.57	ug/L		04/15/13 09:40	04/16/13 17:48	1
Thallium	**0.29**	**J**	2.0	0.14	ug/L		04/15/13 09:40	04/16/13 17:48	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/15/13 09:40	04/16/13 17:48	1
Zinc	**22**	**J B**	50	2.3	ug/L		04/15/13 09:40	04/16/13 17:48	1
Silver	0.20	U	0.20	0.080	ug/L		04/15/13 09:40	04/16/13 17:48	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040113-JY-002
Date Collected: 04/01/13 15:05
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/15/13 09:40	04/16/13 17:55	1
Antimony	**0.55**	**J B**	2.0	0.13	ug/L		04/15/13 09:40	04/16/13 17:55	1
Arsenic	**18**		5.0	0.40	ug/L		04/15/13 09:40	04/16/13 17:55	1
Barium	**120**	**B**	100	0.19	ug/L		04/15/13 09:40	04/16/13 17:55	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/15/13 09:40	04/16/13 17:55	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/15/13 09:40	04/16/13 17:55	1
Cobalt	**0.69**	**J**	20	0.058	ug/L		04/15/13 09:40	04/16/13 17:55	1
Chromium	10	U	10	0.71	ug/L		04/15/13 09:40	04/16/13 17:55	1
Copper	4.0	U	4.0	0.29	ug/L		04/15/13 09:40	04/16/13 17:55	1
Iron	**340**	**B**	200	26	ug/L		04/15/13 09:40	04/16/13 17:55	1
Manganese	**120**	**B**	50	0.83	ug/L		04/15/13 09:40	04/16/13 17:55	1
Nickel	**1.5**	**J B**	20	0.20	ug/L		04/15/13 09:40	04/16/13 17:55	1
Lead	**0.56**	**J B**	3.0	0.18	ug/L		04/15/13 09:40	04/16/13 17:55	1
Selenium	5.0	U	5.0	0.57	ug/L		04/15/13 09:40	04/16/13 17:55	1
Thallium	**0.24**	**J**	2.0	0.14	ug/L		04/15/13 09:40	04/16/13 17:55	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/15/13 09:40	04/16/13 17:55	1
Zinc	**38**	**J B**	50	2.3	ug/L		04/15/13 09:40	04/16/13 17:55	1
Silver	0.20	U	0.20	0.080	ug/L		04/15/13 09:40	04/16/13 17:55	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040113-CT-003
Date Collected: 04/01/13 14:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**22**	**J**	50	19	ug/L		04/15/13 09:40	04/16/13 18:18	1
Antimony	**0.61**	**J B**	2.0	0.13	ug/L		04/15/13 09:40	04/16/13 18:18	1
Arsenic	**4.7**	**J**	5.0	0.40	ug/L		04/15/13 09:40	04/16/13 18:18	1
Barium	**160**	**B**	100	0.19	ug/L		04/15/13 09:40	04/16/13 18:18	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/15/13 09:40	04/16/13 18:18	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/15/13 09:40	04/16/13 18:18	1
Cobalt	**0.31**	**J**	20	0.058	ug/L		04/15/13 09:40	04/16/13 18:18	1
Chromium	10	U	10	0.71	ug/L		04/15/13 09:40	04/16/13 18:18	1
Copper	**0.46**	**J B**	4.0	0.29	ug/L		04/15/13 09:40	04/16/13 18:18	1
Iron	**3100**	**B**	200	26	ug/L		04/15/13 09:40	04/16/13 18:18	1
Manganese	**59**	**B**	50	0.83	ug/L		04/15/13 09:40	04/16/13 18:18	1
Nickel	**55**	**B**	20	0.20	ug/L		04/15/13 09:40	04/16/13 18:18	1
Lead	**0.41**	**J B**	3.0	0.18	ug/L		04/15/13 09:40	04/16/13 18:18	1
Selenium	5.0	U	5.0	0.57	ug/L		04/15/13 09:40	04/16/13 18:18	1
Thallium	**0.14**	**J**	2.0	0.14	ug/L		04/15/13 09:40	04/16/13 18:18	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/15/13 09:40	04/16/13 18:18	1
Zinc	**27**	**J B**	50	2.3	ug/L		04/15/13 09:40	04/16/13 18:18	1
Silver	0.20	U	0.20	0.080	ug/L		04/15/13 09:40	04/16/13 18:18	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040113-CT-004
Date Collected: 04/01/13 14:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**28**	**J**	50	19	ug/L		04/16/13 08:13	04/17/13 18:36	1
Antimony	**0.45**	**J B**	2.0	0.13	ug/L		04/16/13 08:13	04/17/13 18:36	1
Arsenic	**4.5**	**J**	5.0	0.40	ug/L		04/16/13 08:13	04/17/13 18:36	1
Barium	**160**	**B**	100	0.19	ug/L		04/16/13 08:13	04/17/13 18:36	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/16/13 08:13	04/17/13 18:36	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/16/13 08:13	04/17/13 18:36	1
Cobalt	**0.38**	**J**	20	0.058	ug/L		04/16/13 08:13	04/17/13 18:36	1
Chromium	10	U	10	0.71	ug/L		04/16/13 08:13	04/17/13 18:36	1
Copper	**0.85**	**J**	4.0	0.29	ug/L		04/16/13 08:13	04/17/13 18:36	1
Iron	**2700**	**B**	200	26	ug/L		04/16/13 08:13	04/17/13 18:36	1
Manganese	**66**	**B**	50	0.83	ug/L		04/16/13 08:13	04/20/13 03:01	1
Nickel	**52**	**B**	20	0.20	ug/L		04/16/13 08:13	04/17/13 18:36	1
Lead	**0.46**	**J**	3.0	0.18	ug/L		04/16/13 08:13	04/17/13 18:36	1
Selenium	5.0	U	5.0	0.57	ug/L		04/16/13 08:13	04/17/13 18:36	1
Thallium	**0.20**	**J**	2.0	0.14	ug/L		04/16/13 08:13	04/17/13 18:36	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/16/13 08:13	04/17/13 18:36	1
Zinc	**18**	**J B**	50	2.3	ug/L		04/16/13 08:13	04/17/13 18:36	1
Silver	0.20	U	0.20	0.080	ug/L		04/16/13 08:13	04/17/13 18:36	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040113-CT-005
Date Collected: 04/01/13 15:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/16/13 08:13	04/17/13 18:43	1
Antimony	**0.43**	**J B**	2.0	0.13	ug/L		04/16/13 08:13	04/17/13 18:43	1
Arsenic	**17**		5.0	0.40	ug/L		04/16/13 08:13	04/17/13 18:43	1
Barium	**180**	**B**	100	0.19	ug/L		04/16/13 08:13	04/17/13 18:43	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/16/13 08:13	04/17/13 18:43	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/16/13 08:13	04/17/13 18:43	1
Cobalt	**0.23**	**J**	20	0.058	ug/L		04/16/13 08:13	04/17/13 18:43	1
Chromium	10	U	10	0.71	ug/L		04/16/13 08:13	04/17/13 18:43	1
Copper	**0.42**	**J**	4.0	0.29	ug/L		04/16/13 08:13	04/17/13 18:43	1
Iron	**3700**	**B**	200	26	ug/L		04/16/13 08:13	04/17/13 18:43	1
Manganese	**49**	**J B**	50	0.83	ug/L		04/16/13 08:13	04/20/13 03:08	1
Nickel	**5.4**	**J B**	20	0.20	ug/L		04/16/13 08:13	04/17/13 18:43	1
Lead	**0.35**	**J**	3.0	0.18	ug/L		04/16/13 08:13	04/17/13 18:43	1
Selenium	5.0	U	5.0	0.57	ug/L		04/16/13 08:13	04/17/13 18:43	1
Thallium	**0.17**	**J**	2.0	0.14	ug/L		04/16/13 08:13	04/17/13 18:43	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/16/13 08:13	04/17/13 18:43	1
Zinc	**7.8**	**J B**	50	2.3	ug/L		04/16/13 08:13	04/17/13 18:43	1
Silver	0.20	U	0.20	0.080	ug/L		04/16/13 08:13	04/17/13 18:43	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040113-DR-006
Date Collected: 04/01/13 14:30
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**19**	**J**	50	19	ug/L		04/16/13 08:13	04/17/13 18:51	1
Antimony	**0.41**	**J B**	2.0	0.13	ug/L		04/16/13 08:13	04/17/13 18:51	1
Arsenic	**40**		5.0	0.40	ug/L		04/16/13 08:13	04/17/13 18:51	1
Barium	**82**	**J B**	100	0.19	ug/L		04/16/13 08:13	04/17/13 18:51	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/16/13 08:13	04/17/13 18:51	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/16/13 08:13	04/17/13 18:51	1
Cobalt	**0.26**	**J**	20	0.058	ug/L		04/16/13 08:13	04/17/13 18:51	1
Chromium	10	U	10	0.71	ug/L		04/16/13 08:13	04/17/13 18:51	1
Copper	**0.40**	**J**	4.0	0.29	ug/L		04/16/13 08:13	04/17/13 18:51	1
Iron	**1200**	**B**	200	26	ug/L		04/16/13 08:13	04/17/13 18:51	1
Manganese	**40**	**J B**	50	0.83	ug/L		04/16/13 08:13	04/20/13 03:16	1
Nickel	**31**	**B**	20	0.20	ug/L		04/16/13 08:13	04/17/13 18:51	1
Lead	**0.33**	**J**	3.0	0.18	ug/L		04/16/13 08:13	04/17/13 18:51	1
Selenium	5.0	U	5.0	0.57	ug/L		04/16/13 08:13	04/17/13 18:51	1
Thallium	2.0	U	2.0	0.14	ug/L		04/16/13 08:13	04/17/13 18:51	1
Vanadium	**1.9**	**J**	4.0	0.44	ug/L		04/16/13 08:13	04/17/13 18:51	1
Zinc	**19**	**J B**	50	2.3	ug/L		04/16/13 08:13	04/17/13 18:51	1
Silver	0.20	U	0.20	0.080	ug/L		04/16/13 08:13	04/17/13 18:51	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040113-DR-007
Date Collected: 04/01/13 16:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/16/13 08:13	04/17/13 18:58	1
Antimony	**0.45**	**J B**	2.0	0.13	ug/L		04/16/13 08:13	04/17/13 18:58	1
Arsenic	**1.4**	**J**	5.0	0.40	ug/L		04/16/13 08:13	04/17/13 18:58	1
Barium	**130**	**B**	100	0.19	ug/L		04/16/13 08:13	04/17/13 18:58	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/16/13 08:13	04/17/13 18:58	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/16/13 08:13	04/17/13 18:58	1
Cobalt	**1.8**	**J**	20	0.058	ug/L		04/16/13 08:13	04/17/13 18:58	1
Chromium	10	U	10	0.71	ug/L		04/16/13 08:13	04/17/13 18:58	1
Copper	**0.88**	**J**	4.0	0.29	ug/L		04/16/13 08:13	04/17/13 18:58	1
Iron	**980**	**B**	200	26	ug/L		04/16/13 08:13	04/17/13 18:58	1
Manganese	**330**	**B**	50	0.83	ug/L		04/16/13 08:13	04/20/13 03:23	1
Nickel	**5.3**	**J B**	20	0.20	ug/L		04/16/13 08:13	04/17/13 18:58	1
Lead	3.0	U	3.0	0.18	ug/L		04/16/13 08:13	04/17/13 18:58	1
Selenium	5.0	U	5.0	0.57	ug/L		04/16/13 08:13	04/17/13 18:58	1
Thallium	2.0	U	2.0	0.14	ug/L		04/16/13 08:13	04/17/13 18:58	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/16/13 08:13	04/17/13 18:58	1
Zinc	**7.9**	**J B**	50	2.3	ug/L		04/16/13 08:13	04/17/13 18:58	1
Silver	0.20	U	0.20	0.080	ug/L		04/16/13 08:13	04/17/13 18:58	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040213-CT-008
Date Collected: 04/02/13 09:40
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**39**	**J**	50	19	ug/L		04/16/13 08:13	04/17/13 19:06	1
Antimony	**0.50**	**J B**	2.0	0.13	ug/L		04/16/13 08:13	04/17/13 19:06	1
Arsenic	**0.94**	**J**	5.0	0.40	ug/L		04/16/13 08:13	04/17/13 19:06	1
Barium	**87**	**J B**	100	0.19	ug/L		04/16/13 08:13	04/17/13 19:06	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/16/13 08:13	04/17/13 19:06	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/16/13 08:13	04/17/13 19:06	1
Cobalt	**0.27**	**J**	20	0.058	ug/L		04/16/13 08:13	04/17/13 19:06	1
Chromium	**2.4**	**J B**	10	0.71	ug/L		04/16/13 08:13	04/17/13 19:06	1
Copper	**0.59**	**J**	4.0	0.29	ug/L		04/16/13 08:13	04/17/13 19:06	1
Iron	**230**	**B**	200	26	ug/L		04/16/13 08:13	04/17/13 19:06	1
Manganese	**72**	**B**	50	0.83	ug/L		04/16/13 08:13	04/20/13 03:31	1
Nickel	**1.4**	**J B**	20	0.20	ug/L		04/16/13 08:13	04/17/13 19:06	1
Lead	3.0	U	3.0	0.18	ug/L		04/16/13 08:13	04/17/13 19:06	1
Selenium	5.0	U	5.0	0.57	ug/L		04/16/13 08:13	04/17/13 19:06	1
Thallium	2.0	U	2.0	0.14	ug/L		04/16/13 08:13	04/17/13 19:06	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/16/13 08:13	04/17/13 19:06	1
Zinc	**8.6**	**J B**	50	2.3	ug/L		04/16/13 08:13	04/17/13 19:06	1
Silver	0.20	U	0.20	0.080	ug/L		04/16/13 08:13	04/17/13 19:06	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040213-CT-009
Date Collected: 04/02/13 09:50
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**110**		50	19	ug/L		04/16/13 08:13	04/17/13 19:28	1
Antimony	**0.52**	**J B**	2.0	0.13	ug/L		04/16/13 08:13	04/17/13 19:28	1
Arsenic	**1.0**	**J**	5.0	0.40	ug/L		04/16/13 08:13	04/17/13 19:28	1
Barium	**87**	**J B**	100	0.19	ug/L		04/16/13 08:13	04/17/13 19:28	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/16/13 08:13	04/17/13 19:28	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/16/13 08:13	04/17/13 19:28	1
Cobalt	**1.2**	**J**	20	0.058	ug/L		04/16/13 08:13	04/17/13 19:28	1
Chromium	**1.6**	**J B**	10	0.71	ug/L		04/16/13 08:13	04/17/13 19:28	1
Copper	**1.2**	**J**	4.0	0.29	ug/L		04/16/13 08:13	04/17/13 19:28	1
Iron	**340**	**B**	200	26	ug/L		04/16/13 08:13	04/17/13 19:28	1
Manganese	**410**	**B**	50	0.83	ug/L		04/16/13 08:13	04/18/13 23:30	1
Nickel	**2.2**	**J B**	20	0.20	ug/L		04/16/13 08:13	04/17/13 19:28	1
Lead	**0.24**	**J**	3.0	0.18	ug/L		04/16/13 08:13	04/17/13 19:28	1
Selenium	5.0	U	5.0	0.57	ug/L		04/16/13 08:13	04/17/13 19:28	1
Thallium	2.0	U	2.0	0.14	ug/L		04/16/13 08:13	04/17/13 19:28	1
Vanadium	**0.55**	**J**	4.0	0.44	ug/L		04/16/13 08:13	04/17/13 19:28	1
Zinc	**21**	**J B**	50	2.3	ug/L		04/16/13 08:13	04/17/13 19:28	1
Silver	0.20	U	0.20	0.080	ug/L		04/16/13 08:13	04/17/13 19:28	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040213-CT-010
Date Collected: 04/02/13 11:15
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**36**	**J**	50	19	ug/L		04/16/13 08:13	04/17/13 19:35	1
Antimony	**0.92**	**J B**	2.0	0.13	ug/L		04/16/13 08:13	04/17/13 19:35	1
Arsenic	**5.2**		5.0	0.40	ug/L		04/16/13 08:13	04/17/13 19:35	1
Barium	**190**	**B**	100	0.19	ug/L		04/16/13 08:13	04/17/13 19:35	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/16/13 08:13	04/17/13 19:35	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/16/13 08:13	04/17/13 19:35	1
Cobalt	**0.59**	**J**	20	0.058	ug/L		04/16/13 08:13	04/17/13 19:35	1
Chromium	**1.2**	**J B**	10	0.71	ug/L		04/16/13 08:13	04/17/13 19:35	1
Copper	**1.0**	**J**	4.0	0.29	ug/L		04/16/13 08:13	04/17/13 19:35	1
Iron	**2000**	**B**	200	26	ug/L		04/16/13 08:13	04/17/13 19:35	1
Manganese	**350**	**B**	50	0.83	ug/L		04/16/13 08:13	04/18/13 23:38	1
Nickel	**1.6**	**J B**	20	0.20	ug/L		04/16/13 08:13	04/17/13 19:35	1
Lead	**0.49**	**J**	3.0	0.18	ug/L		04/16/13 08:13	04/17/13 19:35	1
Selenium	5.0	U	5.0	0.57	ug/L		04/16/13 08:13	04/17/13 19:35	1
Thallium	2.0	U	2.0	0.14	ug/L		04/16/13 08:13	04/17/13 19:35	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/16/13 08:13	04/17/13 19:35	1
Zinc	**28**	**J B**	50	2.3	ug/L		04/16/13 08:13	04/17/13 19:35	1
Silver	0.20	U	0.20	0.080	ug/L		04/16/13 08:13	04/17/13 19:35	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040213-CT-011
Date Collected: 04/02/13 11:16
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**51**		50	19	ug/L		04/16/13 08:13	04/17/13 19:43	1
Antimony	**0.81**	**J B**	2.0	0.13	ug/L		04/16/13 08:13	04/17/13 19:43	1
Arsenic	**0.92**	**J**	5.0	0.40	ug/L		04/16/13 08:13	04/17/13 19:43	1
Barium	**38**	**J B**	100	0.19	ug/L		04/16/13 08:13	04/17/13 19:43	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/16/13 08:13	04/17/13 19:43	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/16/13 08:13	04/17/13 19:43	1
Cobalt	**0.26**	**J**	20	0.058	ug/L		04/16/13 08:13	04/17/13 19:43	1
Chromium	10	U	10	0.71	ug/L		04/16/13 08:13	04/17/13 19:43	1
Copper	**1.7**	**J**	4.0	0.29	ug/L		04/16/13 08:13	04/17/13 19:43	1
Iron	**30**	**J B**	200	26	ug/L		04/16/13 08:13	04/17/13 19:43	1
Manganese	**73**	**B**	50	0.83	ug/L		04/16/13 08:13	04/18/13 23:45	1
Nickel	**2.2**	**J B**	20	0.20	ug/L		04/16/13 08:13	04/17/13 19:43	1
Lead	**0.19**	**J**	3.0	0.18	ug/L		04/16/13 08:13	04/17/13 19:43	1
Selenium	**1.1**	**J**	5.0	0.57	ug/L		04/16/13 08:13	04/17/13 19:43	1
Thallium	2.0	U	2.0	0.14	ug/L		04/16/13 08:13	04/17/13 19:43	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/16/13 08:13	04/17/13 19:43	1
Zinc	**16**	**J B**	50	2.3	ug/L		04/16/13 08:13	04/17/13 19:43	1
Silver	0.20	U	0.20	0.080	ug/L		04/16/13 08:13	04/17/13 19:43	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040213-CT-012
Date Collected: 04/02/13 15:15
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/16/13 08:13	04/17/13 19:50	1
Antimony	**0.66**	**J B**	2.0	0.13	ug/L		04/16/13 08:13	04/17/13 19:50	1
Arsenic	**1.1**	**J**	5.0	0.40	ug/L		04/16/13 08:13	04/17/13 19:50	1
Barium	**140**	**B**	100	0.19	ug/L		04/16/13 08:13	04/17/13 19:50	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/16/13 08:13	04/17/13 19:50	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/16/13 08:13	04/17/13 19:50	1
Cobalt	20	U	20	0.058	ug/L		04/16/13 08:13	04/17/13 19:50	1
Chromium	**2.1**	**J B**	10	0.71	ug/L		04/16/13 08:13	04/17/13 19:50	1
Copper	**1.2**	**J**	4.0	0.29	ug/L		04/16/13 08:13	04/17/13 19:50	1
Iron	200	U	200	26	ug/L		04/16/13 08:13	04/17/13 19:50	1
Manganese	50	U	50	0.83	ug/L		04/16/13 08:13	04/18/13 23:53	1
Nickel	**0.64**	**J B**	20	0.20	ug/L		04/16/13 08:13	04/17/13 19:50	1
Lead	3.0	U	3.0	0.18	ug/L		04/16/13 08:13	04/17/13 19:50	1
Selenium	**5.2**		5.0	0.57	ug/L		04/16/13 08:13	04/17/13 19:50	1
Thallium	2.0	U	2.0	0.14	ug/L		04/16/13 08:13	04/17/13 19:50	1
Vanadium	**0.61**	**J**	4.0	0.44	ug/L		04/16/13 08:13	04/17/13 19:50	1
Zinc	**5.7**	**J B**	50	2.3	ug/L		04/16/13 08:13	04/17/13 19:50	1
Silver	0.20	U	0.20	0.080	ug/L		04/16/13 08:13	04/17/13 19:50	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040213-CT-013
Date Collected: 04/02/13 15:10
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**28**	**J**	50	19	ug/L		04/16/13 08:13	04/17/13 19:58	1
Antimony	**0.41**	**J B**	2.0	0.13	ug/L		04/16/13 08:13	04/17/13 19:58	1
Arsenic	**4.9**	**J**	5.0	0.40	ug/L		04/16/13 08:13	04/17/13 19:58	1
Barium	**81**	**J B**	100	0.19	ug/L		04/16/13 08:13	04/17/13 19:58	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/16/13 08:13	04/17/13 19:58	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/16/13 08:13	04/17/13 19:58	1
Cobalt	20	U	20	0.058	ug/L		04/16/13 08:13	04/17/13 19:58	1
Chromium	10	U	10	0.71	ug/L		04/16/13 08:13	04/17/13 19:58	1
Copper	**0.56**	**J**	4.0	0.29	ug/L		04/16/13 08:13	04/17/13 19:58	1
Iron	**1300**	**B**	200	26	ug/L		04/16/13 08:13	04/17/13 19:58	1
Manganese	**190**	**B**	50	0.83	ug/L		04/16/13 08:13	04/19/13 00:00	1
Nickel	**0.34**	**J B**	20	0.20	ug/L		04/16/13 08:13	04/17/13 19:58	1
Lead	**0.20**	**J**	3.0	0.18	ug/L		04/16/13 08:13	04/17/13 19:58	1
Selenium	5.0	U	5.0	0.57	ug/L		04/16/13 08:13	04/17/13 19:58	1
Thallium	2.0	U	2.0	0.14	ug/L		04/16/13 08:13	04/17/13 19:58	1
Vanadium	**0.67**	**J**	4.0	0.44	ug/L		04/16/13 08:13	04/17/13 19:58	1
Zinc	**16**	**J B**	50	2.3	ug/L		04/16/13 08:13	04/17/13 19:58	1
Silver	0.20	U	0.20	0.080	ug/L		04/16/13 08:13	04/17/13 19:58	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040213-CT-014
Date Collected: 04/02/13 16:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**150**		50	19	ug/L		04/16/13 08:13	04/17/13 20:05	1
Antimony	**0.38**	**J B**	2.0	0.13	ug/L		04/16/13 08:13	04/17/13 20:05	1
Arsenic	**12**		5.0	0.40	ug/L		04/16/13 08:13	04/17/13 20:05	1
Barium	**100**	**B**	100	0.19	ug/L		04/16/13 08:13	04/17/13 20:05	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/16/13 08:13	04/17/13 20:05	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/16/13 08:13	04/17/13 20:05	1
Cobalt	**0.16**	**J**	20	0.058	ug/L		04/16/13 08:13	04/17/13 20:05	1
Chromium	**0.98**	**J B**	10	0.71	ug/L		04/16/13 08:13	04/17/13 20:05	1
Copper	**0.70**	**J**	4.0	0.29	ug/L		04/16/13 08:13	04/17/13 20:05	1
Iron	**5800**	**B**	200	26	ug/L		04/16/13 08:13	04/17/13 20:05	1
Manganese	**160**	**B**	50	0.83	ug/L		04/16/13 08:13	04/19/13 00:08	1
Nickel	**0.79**	**J B**	20	0.20	ug/L		04/16/13 08:13	04/17/13 20:05	1
Lead	**0.30**	**J**	3.0	0.18	ug/L		04/16/13 08:13	04/17/13 20:05	1
Selenium	5.0	U	5.0	0.57	ug/L		04/16/13 08:13	04/17/13 20:05	1
Thallium	2.0	U	2.0	0.14	ug/L		04/16/13 08:13	04/17/13 20:05	1
Vanadium	**0.54**	**J**	4.0	0.44	ug/L		04/16/13 08:13	04/17/13 20:05	1
Zinc	**7.4**	**J B**	50	2.3	ug/L		04/16/13 08:13	04/17/13 20:05	1
Silver	0.20	U	0.20	0.080	ug/L		04/16/13 08:13	04/17/13 20:05	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040313-CT-015
Date Collected: 04/03/13 10:00
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**21**	**J**	50	19	ug/L		04/15/13 09:30	04/16/13 11:42	1
Antimony	**0.79**	**J B**	2.0	0.13	ug/L		04/15/13 09:30	04/16/13 11:42	1
Arsenic	**4.5**	**J**	5.0	0.40	ug/L		04/15/13 09:30	04/16/13 11:42	1
Barium	**280**	**B**	100	0.19	ug/L		04/15/13 09:30	04/16/13 11:42	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/15/13 09:30	04/16/13 11:42	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/15/13 09:30	04/16/13 11:42	1
Cobalt	**0.47**	**J**	20	0.058	ug/L		04/15/13 09:30	04/16/13 11:42	1
Chromium	10	U	10	0.71	ug/L		04/15/13 09:30	04/16/13 11:42	1
Copper	4.0	U	4.0	0.29	ug/L		04/15/13 09:30	04/16/13 11:42	1
Iron	**1500**		200	26	ug/L		04/15/13 09:30	04/16/13 11:42	1
Manganese	**260**	**B**	50	0.83	ug/L		04/15/13 09:30	04/16/13 11:42	1
Nickel	**3.9**	**J**	20	0.20	ug/L		04/15/13 09:30	04/16/13 11:42	1
Lead	3.0	U	3.0	0.18	ug/L		04/15/13 09:30	04/16/13 11:42	1
Selenium	5.0	U	5.0	0.57	ug/L		04/15/13 09:30	04/16/13 11:42	1
Thallium	**0.80**	**J**	2.0	0.14	ug/L		04/15/13 09:30	04/16/13 11:42	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/15/13 09:30	04/16/13 11:42	1
Zinc	**6.6**	**J B**	50	2.3	ug/L		04/15/13 09:30	04/16/13 11:42	1
Silver	0.20	U	0.20	0.080	ug/L		04/15/13 09:30	04/16/13 11:42	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040313-CT-016
Date Collected: 04/03/13 10:05
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1200**		50	19	ug/L		04/15/13 09:30	04/16/13 12:27	1
Antimony	**2.0**	**B**	2.0	0.13	ug/L		04/15/13 09:30	04/16/13 12:27	1
Arsenic	**2.8**	**J**	5.0	0.40	ug/L		04/15/13 09:30	04/16/13 12:27	1
Barium	**16**	**J B**	100	0.19	ug/L		04/15/13 09:30	04/16/13 12:27	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/15/13 09:30	04/16/13 12:27	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/15/13 09:30	04/16/13 12:27	1
Cobalt	**0.81**	**J**	20	0.058	ug/L		04/15/13 09:30	04/16/13 12:27	1
Chromium	**12**		10	0.71	ug/L		04/15/13 09:30	04/16/13 12:27	1
Copper	**3.1**	**J B**	4.0	0.29	ug/L		04/15/13 09:30	04/16/13 12:27	1
Iron	**1200**		200	26	ug/L		04/15/13 09:30	04/16/13 12:27	1
Manganese	**17**	**J B**	50	0.83	ug/L		04/15/13 09:30	04/16/13 12:27	1
Nickel	**2.0**	**J**	20	0.20	ug/L		04/15/13 09:30	04/16/13 12:27	1
Lead	**0.82**	**J**	3.0	0.18	ug/L		04/15/13 09:30	04/16/13 12:27	1
Selenium	**3.9**	**J**	5.0	0.57	ug/L		04/15/13 09:30	04/16/13 12:27	1
Thallium	**0.43**	**J**	2.0	0.14	ug/L		04/15/13 09:30	04/16/13 12:27	1
Vanadium	**2.9**	**J**	4.0	0.44	ug/L		04/15/13 09:30	04/16/13 12:27	1
Zinc	**13**	**J B**	50	2.3	ug/L		04/15/13 09:30	04/16/13 12:27	1
Silver	0.20	U	0.20	0.080	ug/L		04/15/13 09:30	04/16/13 12:27	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040313-CT-017
Date Collected: 04/03/13 11:15
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/15/13 09:30	04/16/13 12:34	1
Antimony	**0.98**	**J B**	2.0	0.13	ug/L		04/15/13 09:30	04/16/13 12:34	1
Arsenic	**6.2**		5.0	0.40	ug/L		04/15/13 09:30	04/16/13 12:34	1
Barium	**85**	**J B**	100	0.19	ug/L		04/15/13 09:30	04/16/13 12:34	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/15/13 09:30	04/16/13 12:34	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/15/13 09:30	04/16/13 12:34	1
Cobalt	**0.33**	**J**	20	0.058	ug/L		04/15/13 09:30	04/16/13 12:34	1
Chromium	10	U	10	0.71	ug/L		04/15/13 09:30	04/16/13 12:34	1
Copper	**1.2**	**J B**	4.0	0.29	ug/L		04/15/13 09:30	04/16/13 12:34	1
Iron	**350**		200	26	ug/L		04/15/13 09:30	04/16/13 12:34	1
Manganese	**210**	**B**	50	0.83	ug/L		04/15/13 09:30	04/16/13 12:34	1
Nickel	**1.7**	**J**	20	0.20	ug/L		04/15/13 09:30	04/16/13 12:34	1
Lead	**1.5**	**J**	3.0	0.18	ug/L		04/15/13 09:30	04/16/13 12:34	1
Selenium	5.0	U	5.0	0.57	ug/L		04/15/13 09:30	04/16/13 12:34	1
Thallium	**0.28**	**J**	2.0	0.14	ug/L		04/15/13 09:30	04/16/13 12:34	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/15/13 09:30	04/16/13 12:34	1
Zinc	**20**	**J B**	50	2.3	ug/L		04/15/13 09:30	04/16/13 12:34	1
Silver	0.20	U	0.20	0.080	ug/L		04/15/13 09:30	04/16/13 12:34	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040313-CT-018
Date Collected: 04/03/13 11:25
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**27**	**J**	50	19	ug/L		04/15/13 09:30	04/16/13 12:42	1
Antimony	**3.2**	**B**	2.0	0.13	ug/L		04/15/13 09:30	04/16/13 12:42	1
Arsenic	**2.0**	**J**	5.0	0.40	ug/L		04/15/13 09:30	04/16/13 12:42	1
Barium	**33**	**J B**	100	0.19	ug/L		04/15/13 09:30	04/16/13 12:42	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/15/13 09:30	04/16/13 12:42	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/15/13 09:30	04/16/13 12:42	1
Cobalt	**0.45**	**J**	20	0.058	ug/L		04/15/13 09:30	04/16/13 12:42	1
Chromium	**17**		10	0.71	ug/L		04/15/13 09:30	04/16/13 12:42	1
Copper	**2.6**	**J B**	4.0	0.29	ug/L		04/15/13 09:30	04/16/13 12:42	1
Iron	200	U	200	26	ug/L		04/15/13 09:30	04/16/13 12:42	1
Manganese	**2.3**	**J B**	50	0.83	ug/L		04/15/13 09:30	04/16/13 12:42	1
Nickel	**1.5**	**J**	20	0.20	ug/L		04/15/13 09:30	04/16/13 12:42	1
Lead	3.0	U	3.0	0.18	ug/L		04/15/13 09:30	04/16/13 12:42	1
Selenium	**4.8**	**J**	5.0	0.57	ug/L		04/15/13 09:30	04/16/13 12:42	1
Thallium	**0.21**	**J**	2.0	0.14	ug/L		04/15/13 09:30	04/16/13 12:42	1
Vanadium	**0.49**	**J**	4.0	0.44	ug/L		04/15/13 09:30	04/16/13 12:42	1
Zinc	**14**	**J B**	50	2.3	ug/L		04/15/13 09:30	04/16/13 12:42	1
Silver	0.20	U	0.20	0.080	ug/L		04/15/13 09:30	04/16/13 12:42	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040313-CT-019
Date Collected: 04/03/13 15:55
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/15/13 09:30	04/16/13 12:49	1
Antimony	**0.70**	**J B**	2.0	0.13	ug/L		04/15/13 09:30	04/16/13 12:49	1
Arsenic	**1.5**	**J**	5.0	0.40	ug/L		04/15/13 09:30	04/16/13 12:49	1
Barium	**19**	**J B**	100	0.19	ug/L		04/15/13 09:30	04/16/13 12:49	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/15/13 09:30	04/16/13 12:49	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/15/13 09:30	04/16/13 12:49	1
Cobalt	**1.3**	**J**	20	0.058	ug/L		04/15/13 09:30	04/16/13 12:49	1
Chromium	10	U	10	0.71	ug/L		04/15/13 09:30	04/16/13 12:49	1
Copper	4.0	U	4.0	0.29	ug/L		04/15/13 09:30	04/16/13 12:49	1
Iron	**3700**		200	26	ug/L		04/15/13 09:30	04/16/13 12:49	1
Manganese	**520**	**B**	50	0.83	ug/L		04/15/13 09:30	04/16/13 12:49	1
Nickel	**2.0**	**J**	20	0.20	ug/L		04/15/13 09:30	04/16/13 12:49	1
Lead	3.0	U	3.0	0.18	ug/L		04/15/13 09:30	04/16/13 12:49	1
Selenium	**4.3**	**J**	5.0	0.57	ug/L		04/15/13 09:30	04/16/13 12:49	1
Thallium	**0.18**	**J**	2.0	0.14	ug/L		04/15/13 09:30	04/16/13 12:49	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/15/13 09:30	04/16/13 12:49	1
Zinc	**34**	**J B**	50	2.3	ug/L		04/15/13 09:30	04/16/13 12:49	1
Silver	0.20	U	0.20	0.080	ug/L		04/15/13 09:30	04/16/13 12:49	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-040313-CT-020
Date Collected: 04/03/13 15:30
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/15/13 09:30	04/16/13 12:57	1
Antimony	**0.93**	**J B**	2.0	0.13	ug/L		04/15/13 09:30	04/16/13 12:57	1
Arsenic	**11**		5.0	0.40	ug/L		04/15/13 09:30	04/16/13 12:57	1
Barium	**320**	**B**	100	0.19	ug/L		04/15/13 09:30	04/16/13 12:57	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/15/13 09:30	04/16/13 12:57	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/15/13 09:30	04/16/13 12:57	1
Cobalt	**0.27**	**J**	20	0.058	ug/L		04/15/13 09:30	04/16/13 12:57	1
Chromium	10	U	10	0.71	ug/L		04/15/13 09:30	04/16/13 12:57	1
Copper	**0.92**	**J B**	4.0	0.29	ug/L		04/15/13 09:30	04/16/13 12:57	1
Iron	**2500**		200	26	ug/L		04/15/13 09:30	04/16/13 12:57	1
Manganese	**250**	**B**	50	0.83	ug/L		04/15/13 09:30	04/16/13 12:57	1
Nickel	**3.1**	**J**	20	0.20	ug/L		04/15/13 09:30	04/16/13 12:57	1
Lead	**3.0**		3.0	0.18	ug/L		04/15/13 09:30	04/16/13 12:57	1
Selenium	5.0	U	5.0	0.57	ug/L		04/15/13 09:30	04/16/13 12:57	1
Thallium	2.0	U	2.0	0.14	ug/L		04/15/13 09:30	04/16/13 12:57	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/15/13 09:30	04/16/13 12:57	1
Zinc	**5.7**	**J B**	50	2.3	ug/L		04/15/13 09:30	04/16/13 12:57	1
Silver	0.20	U	0.20	0.080	ug/L		04/15/13 09:30	04/16/13 12:57	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040113-JY-001
Date Collected: 04/01/13 14:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 12:20	04/09/13 15:12	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040113-JY-002
Date Collected: 04/01/13 15:05
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 12:20	04/09/13 15:01	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040113-CT-003
Date Collected: 04/01/13 14:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 12:20	04/09/13 15:13	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040113-CT-004
Date Collected: 04/01/13 14:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 12:20	04/09/13 15:15	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040113-CT-005
Date Collected: 04/01/13 15:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 12:20	04/09/13 15:16	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040113-DR-006
Date Collected: 04/01/13 14:30
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 12:20	04/09/13 15:17	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040113-DR-007
Date Collected: 04/01/13 16:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 12:20	04/09/13 15:19	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040213-CT-008
Date Collected: 04/02/13 09:40
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 12:20	04/09/13 15:20	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040213-CT-009
Date Collected: 04/02/13 09:50
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:28	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040213-CT-010
Date Collected: 04/02/13 11:15
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:33	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040213-CT-011
Date Collected: 04/02/13 11:16
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:35	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040213-CT-012
Date Collected: 04/02/13 15:15
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:37	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040213-CT-013
Date Collected: 04/02/13 15:10
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:39	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040213-CT-014
Date Collected: 04/02/13 16:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:41	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040313-CT-015
Date Collected: 04/03/13 10:00
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:22	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040313-CT-016
Date Collected: 04/03/13 10:05
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:43	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040313-CT-017
Date Collected: 04/03/13 11:15
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:45	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040313-CT-018
Date Collected: 04/03/13 11:25
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:47	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040313-CT-019
Date Collected: 04/03/13 15:55
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:49	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-040313-CT-020
Date Collected: 04/03/13 15:30
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:51	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

General Chemistry

Client Sample ID: GW-17358-040113-JY-001
Date Collected: 04/01/13 14:00
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.11		0.10	0.033	mg/L		04/05/13 06:39	04/05/13 13:41	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

General Chemistry

Client Sample ID: GW-17358-040113-JY-002
Date Collected: 04/01/13 15:05
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/05/13 06:40	04/05/13 13:41	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

General Chemistry

Client Sample ID: GW-17358-040113-CT-003
Date Collected: 04/01/13 14:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/05/13 06:42	04/05/13 13:41	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

General Chemistry

Client Sample ID: GW-17358-040113-CT-004
Date Collected: 04/01/13 14:35
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/05/13 06:43	04/05/13 13:44	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

General Chemistry

Client Sample ID: GW-17358-040213-CT-011
Date Collected: 04/02/13 11:16
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/05/13 06:45	04/05/13 13:44	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

General Chemistry

Client Sample ID: GW-17358-040213-CT-014
Date Collected: 04/02/13 16:20
Date Received: 04/03/13 09:00

Lab Sample ID: 240-22693-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.036	J	0.10	0.033	mg/L		04/05/13 06:46	04/05/13 13:44	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

General Chemistry

Client Sample ID: GW-17358-040313-CT-017
Date Collected: 04/03/13 11:15
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/05/13 06:48	04/05/13 13:44	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

General Chemistry

Client Sample ID: GW-17358-040313-CT-018
Date Collected: 04/03/13 11:25
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/10/13 07:28	04/10/13 14:06	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

General Chemistry

Client Sample ID: GW-17358-040313-CT-019
Date Collected: 04/03/13 15:55
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Amenable	0.0050	U	0.0050	0.0050	mg/L			04/11/13 14:52	1

GC/MS VOA

Analysis Batch: 81031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1	GW-17358-040113-JY-001	Total/NA	Water	8260B	
240-22693-2	GW-17358-040113-JY-002	Total/NA	Water	8260B	
240-22693-3	GW-17358-040113-CT-003	Total/NA	Water	8260B	
240-22693-4	GW-17358-040113-CT-004	Total/NA	Water	8260B	
240-22693-5	GW-17358-040113-CT-005	Total/NA	Water	8260B	
240-22693-6	GW-17358-040113-DR-006	Total/NA	Water	8260B	
240-22693-7	GW-17358-040113-DR-007	Total/NA	Water	8260B	
240-22693-8	GW-17358-040213-CT-008	Total/NA	Water	8260B	
240-22693-9	GW-17358-040213-CT-009	Total/NA	Water	8260B	
240-22693-10	GW-17358-040213-CT-010	Total/NA	Water	8260B	
240-22693-11	GW-17358-040213-CT-011	Total/NA	Water	8260B	
240-22693-12	GW-17358-040213-CT-012	Total/NA	Water	8260B	
240-22693-13	GW-17358-040213-CT-013	Total/NA	Water	8260B	
240-22693-14	GW-17358-040213-CT-014	Total/NA	Water	8260B	
240-22693-15	TB-17358-040213	Total/NA	Water	8260B	
LCS 240-81031/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-81031/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 81156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22773-2	GW-17358-040313-CT-016	Total/NA	Water	8260B	
240-22773-3	GW-17358-040313-CT-017	Total/NA	Water	8260B	
240-22773-4	GW-17358-040313-CT-018	Total/NA	Water	8260B	
240-22773-5	GW-17358-040313-CT-019	Total/NA	Water	8260B	
240-22773-6	GW-17358-040313-CT-020	Total/NA	Water	8260B	
240-22773-7	TB-17358-040313	Total/NA	WQ	8260B	
LCS 240-81156/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-81156/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 81347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22773-1	GW-17358-040313-CT-015	Total/NA	Water	8260B	
240-22773-1 MS	GW-17358-040313-CT-015	Total/NA	Water	8260B	
240-22773-1 MSD	GW-17358-040313-CT-015	Total/NA	Water	8260B	
LCS 240-81347/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-81347/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 80859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1	GW-17358-040113-JY-001	Total/NA	Water	3520C	
240-22693-2	GW-17358-040113-JY-002	Total/NA	Water	3520C	
240-22693-3	GW-17358-040113-CT-003	Total/NA	Water	3520C	
240-22693-4	GW-17358-040113-CT-004	Total/NA	Water	3520C	
240-22693-5	GW-17358-040113-CT-005	Total/NA	Water	3520C	
240-22693-6	GW-17358-040113-DR-006	Total/NA	Water	3520C	
240-22693-7	GW-17358-040113-DR-007	Total/NA	Water	3520C	
LCS 240-80859/19-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-80859/18-A	Method Blank	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 80935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-8	GW-17358-040213-CT-008	Total/NA	Water	3520C	
240-22693-9	GW-17358-040213-CT-009	Total/NA	Water	3520C	
240-22693-10	GW-17358-040213-CT-010	Total/NA	Water	3520C	
240-22693-11	GW-17358-040213-CT-011	Total/NA	Water	3520C	
240-22693-12	GW-17358-040213-CT-012	Total/NA	Water	3520C	
240-22693-13	GW-17358-040213-CT-013	Total/NA	Water	3520C	
240-22693-14	GW-17358-040213-CT-014	Total/NA	Water	3520C	
LCS 240-80935/23-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-80935/22-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 81078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-80859/19-A	Lab Control Sample	Total/NA	Water	8270C	80859
MB 240-80859/18-A	Method Blank	Total/NA	Water	8270C	80859

Prep Batch: 81130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22773-1	GW-17358-040313-CT-015	Total/NA	Water	3520C	
240-22773-1 MS	GW-17358-040313-CT-015	Total/NA	Water	3520C	
240-22773-1 MSD	GW-17358-040313-CT-015	Total/NA	Water	3520C	
240-22773-2	GW-17358-040313-CT-016	Total/NA	Water	3520C	
240-22773-3	GW-17358-040313-CT-017	Total/NA	Water	3520C	
240-22773-4	GW-17358-040313-CT-018	Total/NA	Water	3520C	
240-22773-5	GW-17358-040313-CT-019	Total/NA	Water	3520C	
240-22773-6	GW-17358-040313-CT-020	Total/NA	Water	3520C	
LCS 240-81130/23-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-81130/22-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 81249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1	GW-17358-040113-JY-001	Total/NA	Water	8270C	80859
240-22693-2	GW-17358-040113-JY-002	Total/NA	Water	8270C	80859
240-22693-3	GW-17358-040113-CT-003	Total/NA	Water	8270C	80859
240-22693-4	GW-17358-040113-CT-004	Total/NA	Water	8270C	80859
240-22693-5	GW-17358-040113-CT-005	Total/NA	Water	8270C	80859
240-22693-6	GW-17358-040113-DR-006	Total/NA	Water	8270C	80859
240-22693-7	GW-17358-040113-DR-007	Total/NA	Water	8270C	80859
240-22693-8	GW-17358-040213-CT-008	Total/NA	Water	8270C	80935
240-22693-9	GW-17358-040213-CT-009	Total/NA	Water	8270C	80935
240-22693-10	GW-17358-040213-CT-010	Total/NA	Water	8270C	80935
240-22693-11	GW-17358-040213-CT-011	Total/NA	Water	8270C	80935
240-22693-12	GW-17358-040213-CT-012	Total/NA	Water	8270C	80935
240-22693-14	GW-17358-040213-CT-014	Total/NA	Water	8270C	80935
LCS 240-80935/23-A	Lab Control Sample	Total/NA	Water	8270C	80935
MB 240-80935/22-A	Method Blank	Total/NA	Water	8270C	80935

Analysis Batch: 81646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-13	GW-17358-040213-CT-013	Total/NA	Water	8270C	80935

GC/MS Semi VOA (Continued)

Analysis Batch: 81678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22773-1	GW-17358-040313-CT-015	Total/NA	Water	8270C	81130
240-22773-1 MS	GW-17358-040313-CT-015	Total/NA	Water	8270C	81130
240-22773-1 MSD	GW-17358-040313-CT-015	Total/NA	Water	8270C	81130
240-22773-2	GW-17358-040313-CT-016	Total/NA	Water	8270C	81130
240-22773-3	GW-17358-040313-CT-017	Total/NA	Water	8270C	81130
240-22773-4	GW-17358-040313-CT-018	Total/NA	Water	8270C	81130
240-22773-5	GW-17358-040313-CT-019	Total/NA	Water	8270C	81130
240-22773-6	GW-17358-040313-CT-020	Total/NA	Water	8270C	81130
LCS 240-81130/23-A	Lab Control Sample	Total/NA	Water	8270C	81130
MB 240-81130/22-A	Method Blank	Total/NA	Water	8270C	81130

GC Semi VOA

Prep Batch: 80858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1	GW-17358-040113-JY-001	Total/NA	Water	3520C	
240-22693-2	GW-17358-040113-JY-002	Total/NA	Water	3520C	
240-22693-3	GW-17358-040113-CT-003	Total/NA	Water	3520C	
240-22693-4	GW-17358-040113-CT-004	Total/NA	Water	3520C	
240-22693-5	GW-17358-040113-CT-005	Total/NA	Water	3520C	
240-22693-6	GW-17358-040113-DR-006	Total/NA	Water	3520C	
240-22693-7	GW-17358-040113-DR-007	Total/NA	Water	3520C	
240-22693-8	GW-17358-040213-CT-008	Total/NA	Water	3520C	
240-22693-9	GW-17358-040213-CT-009	Total/NA	Water	3520C	
240-22693-10	GW-17358-040213-CT-010	Total/NA	Water	3520C	
240-22693-11	GW-17358-040213-CT-011	Total/NA	Water	3520C	
240-22693-12	GW-17358-040213-CT-012	Total/NA	Water	3520C	
240-22693-13	GW-17358-040213-CT-013	Total/NA	Water	3520C	
240-22693-14	GW-17358-040213-CT-014	Total/NA	Water	3520C	
240-22773-1	GW-17358-040313-CT-015	Total/NA	Water	3520C	
240-22773-1 MS	GW-17358-040313-CT-015	Total/NA	Water	3520C	
240-22773-1 MSD	GW-17358-040313-CT-015	Total/NA	Water	3520C	
240-22773-2	GW-17358-040313-CT-016	Total/NA	Water	3520C	
240-22773-3	GW-17358-040313-CT-017	Total/NA	Water	3520C	
240-22773-4	GW-17358-040313-CT-018	Total/NA	Water	3520C	
LCS 240-80858/22-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-80858/21-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 81041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1	GW-17358-040113-JY-001	Total/NA	Water	8082	80858
240-22693-2	GW-17358-040113-JY-002	Total/NA	Water	8082	80858
240-22693-3	GW-17358-040113-CT-003	Total/NA	Water	8082	80858
240-22693-4	GW-17358-040113-CT-004	Total/NA	Water	8082	80858
240-22693-5	GW-17358-040113-CT-005	Total/NA	Water	8082	80858
240-22693-7	GW-17358-040113-DR-007	Total/NA	Water	8082	80858
240-22693-8	GW-17358-040213-CT-008	Total/NA	Water	8082	80858
240-22693-9	GW-17358-040213-CT-009	Total/NA	Water	8082	80858
240-22693-10	GW-17358-040213-CT-010	Total/NA	Water	8082	80858
240-22693-11	GW-17358-040213-CT-011	Total/NA	Water	8082	80858

GC Semi VOA (Continued)

Analysis Batch: 81041 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-12	GW-17358-040213-CT-012	Total/NA	Water	8082	80858
240-22693-13	GW-17358-040213-CT-013	Total/NA	Water	8082	80858
240-22693-14	GW-17358-040213-CT-014	Total/NA	Water	8082	80858
240-22773-1	GW-17358-040313-CT-015	Total/NA	Water	8082	80858
240-22773-1 MS	GW-17358-040313-CT-015	Total/NA	Water	8082	80858
240-22773-1 MSD	GW-17358-040313-CT-015	Total/NA	Water	8082	80858
240-22773-2	GW-17358-040313-CT-016	Total/NA	Water	8082	80858
240-22773-3	GW-17358-040313-CT-017	Total/NA	Water	8082	80858
240-22773-4	GW-17358-040313-CT-018	Total/NA	Water	8082	80858
LCS 240-80858/22-A	Lab Control Sample	Total/NA	Water	8082	80858
MB 240-80858/21-A	Method Blank	Total/NA	Water	8082	80858

Analysis Batch: 81085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-6	GW-17358-040113-DR-006	Total/NA	Water	8082	80858

Prep Batch: 81283

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1 - RE	GW-17358-040113-JY-001	Total/NA	Water	3520C	
240-22773-5	GW-17358-040313-CT-019	Total/NA	Water	3520C	
240-22773-6	GW-17358-040313-CT-020	Total/NA	Water	3520C	
LCS 240-81283/17-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-81283/16-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 81580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1 - RE	GW-17358-040113-JY-001	Total/NA	Water	8082	81283
240-22773-5	GW-17358-040313-CT-019	Total/NA	Water	8082	81283
240-22773-6	GW-17358-040313-CT-020	Total/NA	Water	8082	81283
LCS 240-81283/17-A	Lab Control Sample	Total/NA	Water	8082	81283
MB 240-81283/16-A	Method Blank	Total/NA	Water	8082	81283

Metals

Prep Batch: 81097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-9	GW-17358-040213-CT-009	Total/NA	Water	7470A	
240-22693-10	GW-17358-040213-CT-010	Total/NA	Water	7470A	
240-22693-11	GW-17358-040213-CT-011	Total/NA	Water	7470A	
240-22693-12	GW-17358-040213-CT-012	Total/NA	Water	7470A	
240-22693-13	GW-17358-040213-CT-013	Total/NA	Water	7470A	
240-22693-14	GW-17358-040213-CT-014	Total/NA	Water	7470A	
240-22773-1	GW-17358-040313-CT-015	Total/NA	Water	7470A	
240-22773-1 MS	GW-17358-040313-CT-015	Total/NA	Water	7470A	
240-22773-1 MSD	GW-17358-040313-CT-015	Total/NA	Water	7470A	
240-22773-2	GW-17358-040313-CT-016	Total/NA	Water	7470A	
240-22773-3	GW-17358-040313-CT-017	Total/NA	Water	7470A	
240-22773-4	GW-17358-040313-CT-018	Total/NA	Water	7470A	
240-22773-5	GW-17358-040313-CT-019	Total/NA	Water	7470A	
240-22773-6	GW-17358-040313-CT-020	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 81097 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-81097/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-81097/1-A	Method Blank	Total/NA	Water	7470A	

Prep Batch: 81101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1	GW-17358-040113-JY-001	Total/NA	Water	7470A	
240-22693-2	GW-17358-040113-JY-002	Total/NA	Water	7470A	
240-22693-2 MS	GW-17358-040113-JY-002	Total/NA	Water	7470A	
240-22693-2 MSD	GW-17358-040113-JY-002	Total/NA	Water	7470A	
240-22693-3	GW-17358-040113-CT-003	Total/NA	Water	7470A	
240-22693-4	GW-17358-040113-CT-004	Total/NA	Water	7470A	
240-22693-5	GW-17358-040113-CT-005	Total/NA	Water	7470A	
240-22693-6	GW-17358-040113-DR-006	Total/NA	Water	7470A	
240-22693-7	GW-17358-040113-DR-007	Total/NA	Water	7470A	
240-22693-8	GW-17358-040213-CT-008	Total/NA	Water	7470A	
LCS 240-81101/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-81101/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 81255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1	GW-17358-040113-JY-001	Total/NA	Water	7470A	81101
240-22693-2	GW-17358-040113-JY-002	Total/NA	Water	7470A	81101
240-22693-2 MS	GW-17358-040113-JY-002	Total/NA	Water	7470A	81101
240-22693-2 MSD	GW-17358-040113-JY-002	Total/NA	Water	7470A	81101
240-22693-3	GW-17358-040113-CT-003	Total/NA	Water	7470A	81101
240-22693-4	GW-17358-040113-CT-004	Total/NA	Water	7470A	81101
240-22693-5	GW-17358-040113-CT-005	Total/NA	Water	7470A	81101
240-22693-6	GW-17358-040113-DR-006	Total/NA	Water	7470A	81101
240-22693-7	GW-17358-040113-DR-007	Total/NA	Water	7470A	81101
240-22693-8	GW-17358-040213-CT-008	Total/NA	Water	7470A	81101
LCS 240-81101/2-A	Lab Control Sample	Total/NA	Water	7470A	81101
MB 240-81101/1-A	Method Blank	Total/NA	Water	7470A	81101

Analysis Batch: 81441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-9	GW-17358-040213-CT-009	Total/NA	Water	7470A	81097
240-22693-10	GW-17358-040213-CT-010	Total/NA	Water	7470A	81097
240-22693-11	GW-17358-040213-CT-011	Total/NA	Water	7470A	81097
240-22693-12	GW-17358-040213-CT-012	Total/NA	Water	7470A	81097
240-22693-13	GW-17358-040213-CT-013	Total/NA	Water	7470A	81097
240-22693-14	GW-17358-040213-CT-014	Total/NA	Water	7470A	81097
240-22773-1	GW-17358-040313-CT-015	Total/NA	Water	7470A	81097
240-22773-1 MS	GW-17358-040313-CT-015	Total/NA	Water	7470A	81097
240-22773-1 MSD	GW-17358-040313-CT-015	Total/NA	Water	7470A	81097
240-22773-2	GW-17358-040313-CT-016	Total/NA	Water	7470A	81097
240-22773-3	GW-17358-040313-CT-017	Total/NA	Water	7470A	81097
240-22773-4	GW-17358-040313-CT-018	Total/NA	Water	7470A	81097
240-22773-5	GW-17358-040313-CT-019	Total/NA	Water	7470A	81097
240-22773-6	GW-17358-040313-CT-020	Total/NA	Water	7470A	81097
LCS 240-81097/2-A	Lab Control Sample	Total/NA	Water	7470A	81097
MB 240-81097/1-A	Method Blank	Total/NA	Water	7470A	81097

Metals (Continued)

Prep Batch: 81908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22773-1	GW-17358-040313-CT-015	Total Recoverable	Water	3005A	
240-22773-1 MS	GW-17358-040313-CT-015	Total Recoverable	Water	3005A	
240-22773-1 MSD	GW-17358-040313-CT-015	Total Recoverable	Water	3005A	
240-22773-2	GW-17358-040313-CT-016	Total Recoverable	Water	3005A	
240-22773-3	GW-17358-040313-CT-017	Total Recoverable	Water	3005A	
240-22773-4	GW-17358-040313-CT-018	Total Recoverable	Water	3005A	
240-22773-5	GW-17358-040313-CT-019	Total Recoverable	Water	3005A	
240-22773-6	GW-17358-040313-CT-020	Total Recoverable	Water	3005A	
LCS 240-81908/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-81908/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 81911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1	GW-17358-040113-JY-001	Total Recoverable	Water	3005A	
240-22693-2	GW-17358-040113-JY-002	Total Recoverable	Water	3005A	
240-22693-3	GW-17358-040113-CT-003	Total Recoverable	Water	3005A	
LCS 240-81911/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-81911/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 82065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-4	GW-17358-040113-CT-004	Total Recoverable	Water	3005A	
240-22693-5	GW-17358-040113-CT-005	Total Recoverable	Water	3005A	
240-22693-6	GW-17358-040113-DR-006	Total Recoverable	Water	3005A	
240-22693-7	GW-17358-040113-DR-007	Total Recoverable	Water	3005A	
240-22693-8	GW-17358-040213-CT-008	Total Recoverable	Water	3005A	
240-22693-9	GW-17358-040213-CT-009	Total Recoverable	Water	3005A	
240-22693-10	GW-17358-040213-CT-010	Total Recoverable	Water	3005A	
240-22693-11	GW-17358-040213-CT-011	Total Recoverable	Water	3005A	
240-22693-12	GW-17358-040213-CT-012	Total Recoverable	Water	3005A	
240-22693-13	GW-17358-040213-CT-013	Total Recoverable	Water	3005A	
240-22693-14	GW-17358-040213-CT-014	Total Recoverable	Water	3005A	
LCS 240-82065/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-82065/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 82269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1	GW-17358-040113-JY-001	Total Recoverable	Water	6020	81911
240-22693-2	GW-17358-040113-JY-002	Total Recoverable	Water	6020	81911
240-22693-3	GW-17358-040113-CT-003	Total Recoverable	Water	6020	81911
240-22773-1	GW-17358-040313-CT-015	Total Recoverable	Water	6020	81908
240-22773-1 MS	GW-17358-040313-CT-015	Total Recoverable	Water	6020	81908
240-22773-1 MSD	GW-17358-040313-CT-015	Total Recoverable	Water	6020	81908
240-22773-2	GW-17358-040313-CT-016	Total Recoverable	Water	6020	81908
240-22773-3	GW-17358-040313-CT-017	Total Recoverable	Water	6020	81908
240-22773-4	GW-17358-040313-CT-018	Total Recoverable	Water	6020	81908
240-22773-5	GW-17358-040313-CT-019	Total Recoverable	Water	6020	81908
240-22773-6	GW-17358-040313-CT-020	Total Recoverable	Water	6020	81908
LCS 240-81908/2-A	Lab Control Sample	Total Recoverable	Water	6020	81908
LCS 240-81911/2-A	Lab Control Sample	Total Recoverable	Water	6020	81911
MB 240-81908/1-A	Method Blank	Total Recoverable	Water	6020	81908

Metals (Continued)

Analysis Batch: 82269 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-81911/1-A	Method Blank	Total Recoverable	Water	6020	81911

Analysis Batch: 82444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-4	GW-17358-040113-CT-004	Total Recoverable	Water	6020	82065
240-22693-5	GW-17358-040113-CT-005	Total Recoverable	Water	6020	82065
240-22693-6	GW-17358-040113-DR-006	Total Recoverable	Water	6020	82065
240-22693-7	GW-17358-040113-DR-007	Total Recoverable	Water	6020	82065
240-22693-8	GW-17358-040213-CT-008	Total Recoverable	Water	6020	82065
240-22693-9	GW-17358-040213-CT-009	Total Recoverable	Water	6020	82065
240-22693-10	GW-17358-040213-CT-010	Total Recoverable	Water	6020	82065
240-22693-11	GW-17358-040213-CT-011	Total Recoverable	Water	6020	82065
240-22693-12	GW-17358-040213-CT-012	Total Recoverable	Water	6020	82065
240-22693-13	GW-17358-040213-CT-013	Total Recoverable	Water	6020	82065
240-22693-14	GW-17358-040213-CT-014	Total Recoverable	Water	6020	82065
LCS 240-82065/2-A	Lab Control Sample	Total Recoverable	Water	6020	82065
MB 240-82065/1-A	Method Blank	Total Recoverable	Water	6020	82065

Analysis Batch: 82626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-9	GW-17358-040213-CT-009	Total Recoverable	Water	6020	82065
240-22693-10	GW-17358-040213-CT-010	Total Recoverable	Water	6020	82065
240-22693-11	GW-17358-040213-CT-011	Total Recoverable	Water	6020	82065
240-22693-12	GW-17358-040213-CT-012	Total Recoverable	Water	6020	82065
240-22693-13	GW-17358-040213-CT-013	Total Recoverable	Water	6020	82065
240-22693-14	GW-17358-040213-CT-014	Total Recoverable	Water	6020	82065

Analysis Batch: 82904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-4	GW-17358-040113-CT-004	Total Recoverable	Water	6020	82065
240-22693-5	GW-17358-040113-CT-005	Total Recoverable	Water	6020	82065
240-22693-6	GW-17358-040113-DR-006	Total Recoverable	Water	6020	82065
240-22693-7	GW-17358-040113-DR-007	Total Recoverable	Water	6020	82065
240-22693-8	GW-17358-040213-CT-008	Total Recoverable	Water	6020	82065
LCS 240-82065/2-A	Lab Control Sample	Total Recoverable	Water	6020	82065
MB 240-82065/1-A	Method Blank	Total Recoverable	Water	6020	82065

General Chemistry

Prep Batch: 80693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1	GW-17358-040113-JY-001	Total/NA	Water	365.2/365.3/365	
240-22693-2	GW-17358-040113-JY-002	Total/NA	Water	365.2/365.3/365	
240-22693-3	GW-17358-040113-CT-003	Total/NA	Water	365.2/365.3/365	
240-22693-4	GW-17358-040113-CT-004	Total/NA	Water	365.2/365.3/365	
240-22693-11	GW-17358-040213-CT-011	Total/NA	Water	365.2/365.3/365	
240-22693-14	GW-17358-040213-CT-014	Total/NA	Water	365.2/365.3/365	
240-22773-3	GW-17358-040313-CT-017	Total/NA	Water	365.2/365.3/365	
LCS 240-80693/11-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
MB 240-80693/10-A	Method Blank	Total/NA	Water	365.2/365.3/365	

General Chemistry (Continued)

Analysis Batch: 80817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22693-1	GW-17358-040113-JY-001	Total/NA	Water	SM 4500 P E	80693
240-22693-2	GW-17358-040113-JY-002	Total/NA	Water	SM 4500 P E	80693
240-22693-3	GW-17358-040113-CT-003	Total/NA	Water	SM 4500 P E	80693
240-22693-4	GW-17358-040113-CT-004	Total/NA	Water	SM 4500 P E	80693
240-22693-11	GW-17358-040213-CT-011	Total/NA	Water	SM 4500 P E	80693
240-22693-14	GW-17358-040213-CT-014	Total/NA	Water	SM 4500 P E	80693
240-22773-3	GW-17358-040313-CT-017	Total/NA	Water	SM 4500 P E	80693
LCS 240-80693/11-A	Lab Control Sample	Total/NA	Water	SM 4500 P E	80693
MB 240-80693/10-A	Method Blank	Total/NA	Water	SM 4500 P E	80693

Prep Batch: 81296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22773-4	GW-17358-040313-CT-018	Total/NA	Water	365.2/365.3/365	
LCS 240-81296/11-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
MB 240-81296/10-A	Method Blank	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 81389

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22773-4	GW-17358-040313-CT-018	Total/NA	Water	SM 4500 P E	81296
LCS 240-81296/11-A	Lab Control Sample	Total/NA	Water	SM 4500 P E	81296
MB 240-81296/10-A	Method Blank	Total/NA	Water	SM 4500 P E	81296

Analysis Batch: 83443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-22773-5	GW-17358-040313-CT-019	Total/NA	Water	9012A	

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-81031/5
Matrix: Water
Analysis Batch: 81031

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 01:27	1
Benzene	1.0	U	1.0	0.13	ug/L			04/09/13 01:27	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 01:27	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 01:27	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 01:27	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 01:27	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 01:27	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 01:27	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 01:27	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 01:27	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 01:27	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 01:27	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 01:27	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 01:27	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 01:27	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 01:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 01:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 01:27	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 01:27	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 01:27	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/09/13 01:27	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 01:27	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 01:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 01:27	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 01:27	1
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 01:27	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 01:27	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 01:27	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 01:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 01:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 01:27	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 01:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 01:27	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 01:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 01:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 01:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 01:27	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 01:27	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 01:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 01:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 01:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 01:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 01:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 01:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 01:27	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 01:27	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 01:27	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 01:27	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-81031/5
Matrix: Water
Analysis Batch: 81031

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 129*		*04/09/13 01:27*	*1*
4-Bromofluorobenzene (Surr)	*87*		*66 - 117*		*04/09/13 01:27*	*1*
Toluene-d8 (Surr)	*94*		*74 - 115*		*04/09/13 01:27*	*1*
Dibromofluoromethane (Surr)	*86*		*75 - 121*		*04/09/13 01:27*	*1*

Lab Sample ID: LCS 240-81031/4
Matrix: Water
Analysis Batch: 81031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	15.7		ug/L		78	43 - 136
Benzene	10.0	9.89		ug/L		99	83 - 112
Bromodichloromethane	10.0	9.65		ug/L		97	72 - 121
Bromoform	10.0	6.99		ug/L		70	40 - 131
Bromomethane	10.0	8.54		ug/L		85	11 - 185
2-Butanone (MEK)	20.0	17.3		ug/L		87	60 - 126
Carbon disulfide	10.0	11.5		ug/L		115	62 - 142
Carbon tetrachloride	10.0	9.96		ug/L		100	66 - 128
Chlorobenzene	10.0	9.60		ug/L		96	85 - 110
Chloroethane	10.0	9.88		ug/L		99	25 - 153
Chloroform	10.0	9.95		ug/L		100	79 - 117
Chloromethane	10.0	9.09		ug/L		91	44 - 126
1,1-Dichloroethane	10.0	10.5		ug/L		105	82 - 115
1,2-Dichloroethane	10.0	9.68		ug/L		97	71 - 127
1,1-Dichloroethene	10.0	10.5		ug/L		105	78 - 131
1,2-Dichloropropane	10.0	9.92		ug/L		99	81 - 115
cis-1,3-Dichloropropene	10.0	7.46		ug/L		75	61 - 115
trans-1,3-Dichloropropene	10.0	7.76		ug/L		78	58 - 117
Ethylbenzene	10.0	10.3		ug/L		103	83 - 112
2-Hexanone	20.0	19.2		ug/L		96	55 - 133
Methylene Chloride	10.0	10.8		ug/L		108	66 - 131
4-Methyl-2-pentanone (MIBK)	20.0	18.0		ug/L		90	63 - 128
Styrene	10.0	9.40		ug/L		94	79 - 114
1,1,2,2-Tetrachloroethane	10.0	8.32		ug/L		83	68 - 118
Tetrachloroethene	10.0	9.22		ug/L		92	79 - 114
Toluene	10.0	9.82		ug/L		98	84 - 111
Trichloroethene	10.0	9.13		ug/L		91	76 - 117
Vinyl chloride	10.0	8.83		ug/L		88	53 - 127
Xylenes, Total	30.0	31.0		ug/L		103	83 - 112
1,1,1-Trichloroethane	10.0	9.87		ug/L		99	74 - 118
1,1,2-Trichloroethane	10.0	9.47		ug/L		95	80 - 112
Cyclohexane	10.0	9.76		ug/L		98	54 - 121
1,2-Dibromo-3-Chloropropane	10.0	6.93		ug/L		69	42 - 136
1,2-Dibromoethane	10.0	9.25		ug/L		92	79 - 113
Dichlorodifluoromethane	10.0	6.27		ug/L		63	19 - 129
cis-1,2-Dichloroethene	10.0	9.65		ug/L		96	80 - 113
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	83 - 117
Isopropylbenzene	10.0	10.1		ug/L		101	75 - 114

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-81031/4
Matrix: Water
Analysis Batch: 81031

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	10.0	9.88	J	ug/L		99	58 - 131
Methyl tert-butyl ether	10.0	9.40		ug/L		94	52 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.5		ug/L		105	74 - 151
1,2,4-Trichlorobenzene	10.0	7.35		ug/L		74	48 - 135
1,2-Dichlorobenzene	10.0	9.24		ug/L		92	81 - 110
1,3-Dichlorobenzene	10.0	9.24		ug/L		92	80 - 110
1,4-Dichlorobenzene	10.0	8.65		ug/L		87	82 - 110
Trichlorofluoromethane	10.0	8.69		ug/L		87	49 - 157
Dibromochloromethane	10.0	7.44		ug/L		74	64 - 119
Methylcyclohexane	10.0	9.23		ug/L		92	56 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*63 - 129*
4-Bromofluorobenzene (Surr)	*103*		*66 - 117*
Toluene-d8 (Surr)	*98*		*74 - 115*
Dibromofluoromethane (Surr)	*89*		*75 - 121*

Lab Sample ID: MB 240-81156/6
Matrix: Water
Analysis Batch: 81156

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/09/13 14:39	1
Benzene	0.222	J	1.0	0.13	ug/L			04/09/13 14:39	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/09/13 14:39	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/09/13 14:39	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/09/13 14:39	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/09/13 14:39	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/09/13 14:39	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/09/13 14:39	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 14:39	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/09/13 14:39	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/09/13 14:39	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/09/13 14:39	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/09/13 14:39	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 14:39	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 14:39	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/09/13 14:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/09/13 14:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/09/13 14:39	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/09/13 14:39	1
2-Hexanone	10	U	10	0.41	ug/L			04/09/13 14:39	1
Methylene Chloride	1.26	J	5.0	0.33	ug/L			04/09/13 14:39	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/09/13 14:39	1
Styrene	1.0	U	1.0	0.11	ug/L			04/09/13 14:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/09/13 14:39	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/09/13 14:39	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-81156/6
Matrix: Water
Analysis Batch: 81156

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	1.0	U	1.0	0.13	ug/L			04/09/13 14:39	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 14:39	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/09/13 14:39	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/09/13 14:39	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/09/13 14:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/09/13 14:39	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/09/13 14:39	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/09/13 14:39	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/09/13 14:39	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/09/13 14:39	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/09/13 14:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/09/13 14:39	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/09/13 14:39	1
Methyl acetate	10	U	10	0.38	ug/L			04/09/13 14:39	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/09/13 14:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/09/13 14:39	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/09/13 14:39	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 14:39	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/09/13 14:39	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/09/13 14:39	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/09/13 14:39	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/09/13 14:39	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/09/13 14:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*63 - 129*		*04/09/13 14:39*	*1*
4-Bromofluorobenzene (Surr)	*84*		*66 - 117*		*04/09/13 14:39*	*1*
Toluene-d8 (Surr)	*85*		*74 - 115*		*04/09/13 14:39*	*1*
Dibromofluoromethane (Surr)	*80*		*75 - 121*		*04/09/13 14:39*	*1*

Lab Sample ID: LCS 240-81156/4
Matrix: Water
Analysis Batch: 81156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	17.3		ug/L		87	43 - 136
Benzene	10.0	9.76		ug/L		98	83 - 112
Bromodichloromethane	10.0	9.62		ug/L		96	72 - 121
Bromoform	10.0	9.01		ug/L		90	40 - 131
Bromomethane	10.0	8.99		ug/L		90	11 - 185
2-Butanone (MEK)	20.0	17.9		ug/L		89	60 - 126
Carbon disulfide	10.0	8.37		ug/L		84	62 - 142
Carbon tetrachloride	10.0	8.81		ug/L		88	66 - 128
Chlorobenzene	10.0	9.95		ug/L		99	85 - 110
Chloroethane	10.0	5.56		ug/L		56	25 - 153
Chloroform	10.0	9.21		ug/L		92	79 - 117
Chloromethane	10.0	9.38		ug/L		94	44 - 126
1,1-Dichloroethane	10.0	9.07		ug/L		91	82 - 115

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-81156/4
Matrix: Water
Analysis Batch: 81156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	9.57		ug/L		96	71 - 127
1,1-Dichloroethene	10.0	9.25		ug/L		92	78 - 131
1,2-Dichloropropane	10.0	9.95		ug/L		99	81 - 115
cis-1,3-Dichloropropene	10.0	9.17		ug/L		92	61 - 115
trans-1,3-Dichloropropene	10.0	9.01		ug/L		90	58 - 117
Ethylbenzene	10.0	10.2		ug/L		102	83 - 112
2-Hexanone	20.0	19.7		ug/L		99	55 - 133
Methylene Chloride	10.0	9.50		ug/L		95	66 - 131
4-Methyl-2-pentanone (MIBK)	20.0	19.0		ug/L		95	63 - 128
Styrene	10.0	9.12		ug/L		91	79 - 114
1,1,2,2-Tetrachloroethane	10.0	8.78		ug/L		88	68 - 118
Tetrachloroethene	10.0	10.1		ug/L		101	79 - 114
Toluene	10.0	9.51		ug/L		95	84 - 111
Trichloroethene	10.0	9.95		ug/L		99	76 - 117
Vinyl chloride	10.0	9.04		ug/L		90	53 - 127
Xylenes, Total	30.0	30.2		ug/L		101	83 - 112
1,1,1-Trichloroethane	10.0	8.44		ug/L		84	74 - 118
1,1,2-Trichloroethane	10.0	9.79		ug/L		98	80 - 112
Cyclohexane	10.0	8.43		ug/L		84	54 - 121
1,2-Dibromo-3-Chloropropane	10.0	8.45		ug/L		84	42 - 136
1,2-Dibromoethane	10.0	9.63		ug/L		96	79 - 113
Dichlorodifluoromethane	10.0	11.5		ug/L		115	19 - 129
cis-1,2-Dichloroethene	10.0	9.47		ug/L		95	80 - 113
trans-1,2-Dichloroethene	10.0	8.97		ug/L		90	83 - 117
Isopropylbenzene	10.0	9.81		ug/L		98	75 - 114
Methyl acetate	10.0	9.75	J	ug/L		98	58 - 131
Methyl tert-butyl ether	10.0	8.36		ug/L		84	52 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	12.8		ug/L		128	74 - 151
1,2,4-Trichlorobenzene	10.0	9.84		ug/L		98	48 - 135
1,2-Dichlorobenzene	10.0	10.0		ug/L		100	81 - 110
1,3-Dichlorobenzene	10.0	9.97		ug/L		100	80 - 110
1,4-Dichlorobenzene	10.0	9.76		ug/L		98	82 - 110
Trichlorofluoromethane	10.0	18.2	*	ug/L		182	49 - 157
Dibromochloromethane	10.0	9.44		ug/L		94	64 - 119
Methylcyclohexane	10.0	8.24		ug/L		82	56 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*63 - 129*
4-Bromofluorobenzene (Surr)	*92*		*66 - 117*
Toluene-d8 (Surr)	*88*		*74 - 115*
Dibromofluoromethane (Surr)	*81*		*75 - 121*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-81347/6
Matrix: Water
Analysis Batch: 81347

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/10/13 15:11	1
Benzene	0.295	J	1.0	0.13	ug/L			04/10/13 15:11	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/10/13 15:11	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/10/13 15:11	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/10/13 15:11	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/10/13 15:11	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/10/13 15:11	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/10/13 15:11	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/10/13 15:11	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/10/13 15:11	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/10/13 15:11	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/10/13 15:11	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/10/13 15:11	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/10/13 15:11	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/10/13 15:11	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/10/13 15:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/10/13 15:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/10/13 15:11	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/10/13 15:11	1
2-Hexanone	10	U	10	0.41	ug/L			04/10/13 15:11	1
Methylene Chloride	1.45	J	5.0	0.33	ug/L			04/10/13 15:11	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/10/13 15:11	1
Styrene	1.0	U	1.0	0.11	ug/L			04/10/13 15:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/10/13 15:11	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/10/13 15:11	1
Toluene	1.0	U	1.0	0.13	ug/L			04/10/13 15:11	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/10/13 15:11	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/10/13 15:11	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/10/13 15:11	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/10/13 15:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/10/13 15:11	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/10/13 15:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/10/13 15:11	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/10/13 15:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/10/13 15:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/10/13 15:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/10/13 15:11	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/10/13 15:11	1
Methyl acetate	10	U	10	0.38	ug/L			04/10/13 15:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/10/13 15:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/10/13 15:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/10/13 15:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/10/13 15:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/10/13 15:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/10/13 15:11	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/10/13 15:11	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/10/13 15:11	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/10/13 15:11	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-81347/6
Matrix: Water
Analysis Batch: 81347

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*88*		*63 - 129*		*04/10/13 15:11*	*1*
4-Bromofluorobenzene (Surr)	*79*		*66 - 117*		*04/10/13 15:11*	*1*
Toluene-d8 (Surr)	*86*		*74 - 115*		*04/10/13 15:11*	*1*
Dibromofluoromethane (Surr)	*84*		*75 - 121*		*04/10/13 15:11*	*1*

Lab Sample ID: LCS 240-81347/4
Matrix: Water
Analysis Batch: 81347

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	17.6		ug/L		88	43 - 136
Benzene	10.0	10.1		ug/L		101	83 - 112
Bromodichloromethane	10.0	9.64		ug/L		96	72 - 121
Bromoform	10.0	8.69		ug/L		87	40 - 131
Bromomethane	10.0	9.39		ug/L		94	11 - 185
2-Butanone (MEK)	20.0	17.9		ug/L		90	60 - 126
Carbon disulfide	10.0	8.17		ug/L		82	62 - 142
Carbon tetrachloride	10.0	9.06		ug/L		91	66 - 128
Chlorobenzene	10.0	9.97		ug/L		100	85 - 110
Chloroethane	10.0	5.28		ug/L		53	25 - 153
Chloroform	10.0	9.44		ug/L		94	79 - 117
Chloromethane	10.0	9.32		ug/L		93	44 - 126
1,1-Dichloroethane	10.0	9.40		ug/L		94	82 - 115
1,2-Dichloroethane	10.0	9.88		ug/L		99	71 - 127
1,1-Dichloroethene	10.0	9.05		ug/L		91	78 - 131
1,2-Dichloropropane	10.0	10.1		ug/L		101	81 - 115
cis-1,3-Dichloropropene	10.0	8.77		ug/L		88	61 - 115
trans-1,3-Dichloropropene	10.0	8.58		ug/L		86	58 - 117
Ethylbenzene	10.0	9.76		ug/L		98	83 - 112
2-Hexanone	20.0	19.2		ug/L		96	55 - 133
Methylene Chloride	10.0	9.95		ug/L		99	66 - 131
4-Methyl-2-pentanone (MIBK)	20.0	18.5		ug/L		93	63 - 128
Styrene	10.0	9.00		ug/L		90	79 - 114
1,1,2,2-Tetrachloroethane	10.0	8.57		ug/L		86	68 - 118
Tetrachloroethene	10.0	10.0		ug/L		100	79 - 114
Toluene	10.0	9.59		ug/L		96	84 - 111
Trichloroethene	10.0	9.88		ug/L		99	76 - 117
Vinyl chloride	10.0	9.11		ug/L		91	53 - 127
Xylenes, Total	30.0	29.9		ug/L		100	83 - 112
1,1,1-Trichloroethane	10.0	8.54		ug/L		85	74 - 118
1,1,2-Trichloroethane	10.0	9.97		ug/L		100	80 - 112
Cyclohexane	10.0	8.16		ug/L		82	54 - 121
1,2-Dibromo-3-Chloropropane	10.0	8.28		ug/L		83	42 - 136
1,2-Dibromoethane	10.0	9.57		ug/L		96	79 - 113
Dichlorodifluoromethane	10.0	10.4		ug/L		104	19 - 129
cis-1,2-Dichloroethene	10.0	9.40		ug/L		94	80 - 113
trans-1,2-Dichloroethene	10.0	9.12		ug/L		91	83 - 117
Isopropylbenzene	10.0	9.49		ug/L		95	75 - 114

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-81347/4
Matrix: Water
Analysis Batch: 81347

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	10.0	9.68	J	ug/L		97	58 - 131
Methyl tert-butyl ether	10.0	8.18		ug/L		82	52 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	12.1		ug/L		121	74 - 151
1,2,4-Trichlorobenzene	10.0	9.68		ug/L		97	48 - 135
1,2-Dichlorobenzene	10.0	9.95		ug/L		100	81 - 110
1,3-Dichlorobenzene	10.0	9.56		ug/L		96	80 - 110
1,4-Dichlorobenzene	10.0	9.61		ug/L		96	82 - 110
Trichlorofluoromethane	10.0	17.9	*	ug/L		179	49 - 157
Dibromochloromethane	10.0	9.22		ug/L		92	64 - 119
Methylcyclohexane	10.0	7.66		ug/L		77	56 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*63 - 129*
4-Bromofluorobenzene (Surr)	*90*		*66 - 117*
Toluene-d8 (Surr)	*92*		*74 - 115*
Dibromofluoromethane (Surr)	*87*		*75 - 121*

Lab Sample ID: 240-22773-1 MS
Matrix: Water
Analysis Batch: 81347

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	3.1	J	50.0	41.0		ug/L		76	33 - 145
Benzene	2.5	U	25.0	25.4		ug/L		102	72 - 121
Bromodichloromethane	2.5	U	25.0	23.5		ug/L		94	67 - 120
Bromoform	2.5	U	25.0	19.9		ug/L		80	32 - 128
Bromomethane	2.5	U	25.0	28.1		ug/L		112	10 - 186
2-Butanone (MEK)	25	U	50.0	40.4		ug/L		81	54 - 129
Carbon disulfide	13	U	25.0	20.9		ug/L		84	57 - 147
Carbon tetrachloride	2.5	U	25.0	22.7		ug/L		91	59 - 129
Chlorobenzene	2.5	U	25.0	24.6		ug/L		98	80 - 110
Chloroethane	2.5	U	25.0	16.4		ug/L		66	21 - 165
Chloroform	2.5	U	25.0	24.2		ug/L		97	76 - 118
Chloromethane	2.5	U	25.0	23.9		ug/L		96	33 - 132
1,1-Dichloroethane	2.5	U	25.0	23.9		ug/L		96	79 - 116
1,2-Dichloroethane	2.5	U	25.0	24.7		ug/L		99	68 - 129
1,1-Dichloroethene	2.5	U	25.0	23.5		ug/L		94	74 - 135
1,2-Dichloropropane	2.5	U	25.0	24.9		ug/L		100	78 - 115
cis-1,3-Dichloropropene	2.5	U	25.0	19.7		ug/L		79	51 - 110
trans-1,3-Dichloropropene	2.5	U	25.0	19.7		ug/L		79	46 - 116
Ethylbenzene	2.5	U	25.0	24.2		ug/L		97	75 - 116
2-Hexanone	25	U	50.0	43.0		ug/L		86	47 - 139
Methylene Chloride	1.2	J B	25.0	23.3		ug/L		89	63 - 128
4-Methyl-2-pentanone (MIBK)	25	U	50.0	41.6		ug/L		83	56 - 131
Styrene	2.5	U	25.0	22.3		ug/L		89	71 - 117
1,1,2,2-Tetrachloroethane	2.5	U	25.0	21.4		ug/L		85	63 - 122
Tetrachloroethene	2.5	U	25.0	24.9		ug/L		99	70 - 117

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-22773-1 MS
Matrix: Water
Analysis Batch: 81347

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	2.5	U	25.0	24.2		ug/L		97	78 - 114
Trichloroethene	7.6		25.0	32.5		ug/L		99	66 - 120
Vinyl chloride	65		25.0	88.8		ug/L		96	49 - 130
Xylenes, Total	5.0	U	75.0	75.2		ug/L		100	76 - 116
1,1,1-Trichloroethane	2.5	U	25.0	21.7		ug/L		87	68 - 121
1,1,2-Trichloroethane	2.5	U	25.0	24.9		ug/L		100	75 - 115
Cyclohexane	2.5	U	25.0	21.3		ug/L		85	49 - 123
1,2-Dibromo-3-Chloropropane	2.5	U	25.0	18.3		ug/L		73	32 - 139
1,2-Dibromoethane	2.5	U	25.0	23.0		ug/L		92	74 - 113
Dichlorodifluoromethane	2.5	U	25.0	28.1		ug/L		112	17 - 128
cis-1,2-Dichloroethene	58		25.0	82.5		ug/L		97	70 - 120
trans-1,2-Dichloroethene	3.2		25.0	26.7		ug/L		94	80 - 119
Isopropylbenzene	2.5	U	25.0	23.4		ug/L		94	68 - 116
Methyl acetate	25	U	25.0	22.7	J	ug/L		91	47 - 130
Methyl tert-butyl ether	2.5	U	25.0	19.2		ug/L		77	46 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	25.0	32.7		ug/L		131	70 - 152
1,2,4-Trichlorobenzene	2.5	U	25.0	22.0		ug/L		88	38 - 138
1,2-Dichlorobenzene	2.5	U	25.0	24.9		ug/L		100	75 - 111
1,3-Dichlorobenzene	2.5	U	25.0	23.9		ug/L		96	73 - 110
1,4-Dichlorobenzene	2.5	U	25.0	24.1		ug/L		96	75 - 110
Trichlorofluoromethane	2.5	U *	25.0	46.4	F	ug/L		186	46 - 157
Dibromochloromethane	2.5	U	25.0	22.0		ug/L		88	56 - 118
Methylcyclohexane	2.5	U	25.0	20.5		ug/L		82	49 - 127

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*63 - 129*
4-Bromofluorobenzene (Surr)	*91*		*66 - 117*
Toluene-d8 (Surr)	*92*		*74 - 115*
Dibromofluoromethane (Surr)	*88*		*75 - 121*

Lab Sample ID: 240-22773-1 MSD
Matrix: Water
Analysis Batch: 81347

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	3.1	J	50.0	42.5		ug/L		79	33 - 145	4	30
Benzene	2.5	U	25.0	26.1		ug/L		104	72 - 121	3	30
Bromodichloromethane	2.5	U	25.0	24.1		ug/L		97	67 - 120	3	30
Bromoform	2.5	U	25.0	20.5		ug/L		82	32 - 128	3	30
Bromomethane	2.5	U	25.0	32.4		ug/L		130	10 - 186	14	30
2-Butanone (MEK)	25	U	50.0	42.0		ug/L		84	54 - 129	4	30
Carbon disulfide	13	U	25.0	21.7		ug/L		87	57 - 147	4	30
Carbon tetrachloride	2.5	U	25.0	23.8		ug/L		95	59 - 129	5	30
Chlorobenzene	2.5	U	25.0	25.3		ug/L		101	80 - 110	3	30
Chloroethane	2.5	U	25.0	18.7		ug/L		75	21 - 165	13	30
Chloroform	2.5	U	25.0	25.3		ug/L		101	76 - 118	4	30
Chloromethane	2.5	U	25.0	25.5		ug/L		102	33 - 132	6	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-22773-1 MSD
Matrix: Water
Analysis Batch: 81347

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	2.5	U	25.0	24.8		ug/L		99	79 - 116	4	30
1,2-Dichloroethane	2.5	U	25.0	24.8		ug/L		99	68 - 129	1	30
1,1-Dichloroethene	2.5	U	25.0	24.0		ug/L		96	74 - 135	2	30
1,2-Dichloropropane	2.5	U	25.0	25.8		ug/L		103	78 - 115	4	30
cis-1,3-Dichloropropene	2.5	U	25.0	20.1		ug/L		81	51 - 110	2	30
trans-1,3-Dichloropropene	2.5	U	25.0	20.0		ug/L		80	46 - 116	2	30
Ethylbenzene	2.5	U	25.0	24.6		ug/L		99	75 - 116	2	30
2-Hexanone	25	U	50.0	43.7		ug/L		87	47 - 139	2	30
Methylene Chloride	1.2	J B	25.0	24.2		ug/L		92	63 - 128	4	30
4-Methyl-2-pentanone (MIBK)	25	U	50.0	41.6		ug/L		83	56 - 131	0	30
Styrene	2.5	U	25.0	21.9		ug/L		88	71 - 117	2	30
1,1,2,2-Tetrachloroethane	2.5	U	25.0	21.0		ug/L		84	63 - 122	2	30
Tetrachloroethene	2.5	U	25.0	24.4		ug/L		97	70 - 117	2	30
Toluene	2.5	U	25.0	24.3		ug/L		97	78 - 114	1	30
Trichloroethene	7.6		25.0	32.8		ug/L		101	66 - 120	1	30
Vinyl chloride	65		25.0	90.2		ug/L		102	49 - 130	2	30
Xylenes, Total	5.0	U	75.0	75.5		ug/L		101	76 - 116	0	30
1,1,1-Trichloroethane	2.5	U	25.0	22.6		ug/L		90	68 - 121	4	30
1,1,2-Trichloroethane	2.5	U	25.0	24.9		ug/L		99	75 - 115	0	30
Cyclohexane	2.5	U	25.0	20.9		ug/L		83	49 - 123	2	30
1,2-Dibromo-3-Chloropropane	2.5	U	25.0	19.7		ug/L		79	32 - 139	7	30
1,2-Dibromoethane	2.5	U	25.0	22.7		ug/L		91	74 - 113	1	30
Dichlorodifluoromethane	2.5	U	25.0	27.6		ug/L		110	17 - 128	2	30
cis-1,2-Dichloroethene	58		25.0	83.0		ug/L		100	70 - 120	1	30
trans-1,2-Dichloroethene	3.2		25.0	27.3		ug/L		97	80 - 119	2	30
Isopropylbenzene	2.5	U	25.0	23.7		ug/L		95	68 - 116	1	30
Methyl acetate	25	U	25.0	23.2	J	ug/L		93	47 - 130	2	30
Methyl tert-butyl ether	2.5	U	25.0	20.1		ug/L		80	46 - 144	5	30
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	25.0	31.9		ug/L		128	70 - 152	2	30
1,2,4-Trichlorobenzene	2.5	U	25.0	23.4		ug/L		94	38 - 138	6	30
1,2-Dichlorobenzene	2.5	U	25.0	25.0		ug/L		100	75 - 111	0	30
1,3-Dichlorobenzene	2.5	U	25.0	24.1		ug/L		97	73 - 110	1	30
1,4-Dichlorobenzene	2.5	U	25.0	23.8		ug/L		95	75 - 110	1	30
Trichlorofluoromethane	2.5	U *	25.0	45.6	F	ug/L		182	46 - 157	2	30
Dibromochloromethane	2.5	U	25.0	22.5		ug/L		90	56 - 118	2	30
Methylcyclohexane	2.5	U	25.0	19.3		ug/L		77	49 - 127	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*63 - 129*
4-Bromofluorobenzene (Surr)	*89*		*66 - 117*
Toluene-d8 (Surr)	*90*		*74 - 115*
Dibromofluoromethane (Surr)	*87*		*75 - 121*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Lab Sample ID: MB 240-80859/18-A
Matrix: Water
Analysis Batch: 81078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80859

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/06/13 09:54	04/09/13 08:11	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/06/13 09:54	04/09/13 08:11	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/06/13 09:54	04/09/13 08:11	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/06/13 09:54	04/09/13 08:11	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/06/13 09:54	04/09/13 08:11	1
2-Methylnaphthalene	5.0	U	5.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
2-Nitroaniline	20	U	20	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/06/13 09:54	04/09/13 08:11	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/06/13 09:54	04/09/13 08:11	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/06/13 09:54	04/09/13 08:11	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/06/13 09:54	04/09/13 08:11	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
4-Chloroaniline	10	U	10	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/06/13 09:54	04/09/13 08:11	1
4-Nitroaniline	20	U	20	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/06/13 09:54	04/09/13 08:11	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/06/13 09:54	04/09/13 08:11	1
Anthracene	5.0	U	5.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/06/13 09:54	04/09/13 08:11	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/06/13 09:54	04/09/13 08:11	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/06/13 09:54	04/09/13 08:11	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Bis(2-ethylhexyl) phthalate	4.18	J	5.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
Caprolactam	10	U	10	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
Carbazole	10	U	10	0.28	ug/L		04/06/13 09:54	04/09/13 08:11	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		04/06/13 09:54	04/09/13 08:11	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/06/13 09:54	04/09/13 08:11	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		04/06/13 09:54	04/09/13 08:11	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-80859/18-A
Matrix: Water
Analysis Batch: 81078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80859

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Fluorene	5.0	U	5.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/06/13 09:54	04/09/13 08:11	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
Hexachloroethane	5.0	U	5.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/06/13 09:54	04/09/13 08:11	1
Naphthalene	5.0	U	5.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/06/13 09:54	04/09/13 08:11	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		04/06/13 09:54	04/09/13 08:11	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/06/13 09:54	04/09/13 08:11	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/06/13 09:54	04/09/13 08:11	1
Phenol	5.0	U	5.0	0.60	ug/L		04/06/13 09:54	04/09/13 08:11	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
Pyrene	5.0	U	5.0	0.10	ug/L		04/06/13 09:54	04/09/13 08:11	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		04/06/13 09:54	04/09/13 08:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*20 - 110*	*04/06/13 09:54*	*04/09/13 08:11*	*1*
2-Fluorophenol (Surr)	*65*		*10 - 110*	*04/06/13 09:54*	*04/09/13 08:11*	*1*
2,4,6-Tribromophenol (Surr)	*67*		*21 - 110*	*04/06/13 09:54*	*04/09/13 08:11*	*1*
Nitrobenzene-d5 (Surr)	*65*		*21 - 110*	*04/06/13 09:54*	*04/09/13 08:11*	*1*
Phenol-d5 (Surr)	*66*		*21 - 110*	*04/06/13 09:54*	*04/09/13 08:11*	*1*
Terphenyl-d14 (Surr)	*55*		*24 - 110*	*04/06/13 09:54*	*04/09/13 08:11*	*1*

Lab Sample ID: LCS 240-80859/19-A
Matrix: Water
Analysis Batch: 81078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80859

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	20.0	14.2		ug/L		71	43 - 110
2,2'-oxybis[1-chloropropane]	20.0	15.0		ug/L		75	37 - 110
2,4,5-Trichlorophenol	20.0	16.5		ug/L		82	48 - 110
2,4,6-Trichlorophenol	20.0	16.3		ug/L		82	45 - 110
2,4-Dichlorophenol	20.0	15.7		ug/L		79	41 - 110
2,4-Dimethylphenol	20.0	8.77		ug/L		44	32 - 110
2,4-Dinitrophenol	20.0	13.8	J	ug/L		69	10 - 110
2,4-Dinitrotoluene	20.0	16.9		ug/L		85	53 - 110
2,6-Dinitrotoluene	20.0	16.1		ug/L		80	54 - 110
2-Chloronaphthalene	20.0	14.6		ug/L		73	43 - 110
2-Chlorophenol	20.0	16.0		ug/L		80	29 - 110
2-Methylnaphthalene	20.0	14.8		ug/L		74	45 - 110
2-Methylphenol	20.0	14.5		ug/L		73	42 - 110
2-Nitroaniline	20.0	15.9	J	ug/L		80	54 - 110
2-Nitrophenol	20.0	16.3		ug/L		82	40 - 110
3,3'-Dichlorobenzidine	20.0	10.3		ug/L		51	22 - 110
3-Nitroaniline	20.0	15.3	J	ug/L		77	53 - 110

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-80859/19-A
Matrix: Water
Analysis Batch: 81078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80859

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	20.0	12.3	J	ug/L		61	31 - 110
4-Bromophenyl phenyl ether	20.0	15.5		ug/L		77	45 - 110
4-Chloro-3-methylphenol	20.0	15.5		ug/L		78	52 - 110
4-Chloroaniline	20.0	13.6		ug/L		68	44 - 110
4-Chlorophenyl phenyl ether	20.0	15.5		ug/L		78	47 - 110
4-Nitroaniline	20.0	16.8	J	ug/L		84	54 - 110
4-Nitrophenol	20.0	15.1	J	ug/L		76	33 - 112
Acenaphthene	20.0	14.9		ug/L		75	47 - 110
Acenaphthylene	20.0	15.3		ug/L		76	49 - 110
Acetophenone	20.0	15.3		ug/L		76	46 - 110
Anthracene	20.0	15.4		ug/L		77	52 - 110
Atrazine	20.0	16.5		ug/L		83	66 - 126
Benzaldehyde	20.0	14.9		ug/L		75	38 - 110
Benzo[a]anthracene	20.0	15.7		ug/L		78	52 - 110
Benzo[a]pyrene	20.0	13.5		ug/L		68	44 - 110
Benzo[b]fluoranthene	20.0	15.6		ug/L		78	48 - 110
Benzo[g,h,i]perylene	20.0	16.5		ug/L		83	50 - 110
Benzo[k]fluoranthene	20.0	15.5		ug/L		78	49 - 110
Bis(2-chloroethoxy)methane	20.0	14.9		ug/L		75	43 - 110
Bis(2-chloroethyl)ether	20.0	15.1		ug/L		75	40 - 110
Bis(2-ethylhexyl) phthalate	20.0	18.1		ug/L		90	39 - 116
Butyl benzyl phthalate	20.0	16.1		ug/L		81	55 - 110
Caprolactam	20.0	18.0		ug/L		90	45 - 111
Carbazole	20.0	15.6		ug/L		78	55 - 110
Chrysene	20.0	16.5		ug/L		83	55 - 110
Dibenz(a,h)anthracene	20.0	14.8		ug/L		74	49 - 110
Dibenzofuran	20.0	14.8		ug/L		74	51 - 110
Diethyl phthalate	20.0	16.5		ug/L		83	58 - 110
Dimethyl phthalate	20.0	15.9		ug/L		80	57 - 110
Di-n-butyl phthalate	20.0	16.9		ug/L		84	57 - 110
Di-n-octyl phthalate	20.0	15.3		ug/L		77	40 - 110
Fluoranthene	20.0	16.1		ug/L		81	54 - 110
Fluorene	20.0	15.5		ug/L		78	52 - 110
Hexachlorobenzene	20.0	15.1		ug/L		75	50 - 110
Hexachlorobutadiene	20.0	13.7		ug/L		68	33 - 110
Hexachlorocyclopentadiene	20.0	1.51	J *	ug/L		8	10 - 110
Hexachloroethane	20.0	14.4		ug/L		72	35 - 110
Indeno[1,2,3-cd]pyrene	20.0	14.0		ug/L		70	50 - 110
Isophorone	20.0	15.1		ug/L		75	49 - 110
Naphthalene	20.0	14.8		ug/L		74	44 - 110
Nitrobenzene	20.0	14.8		ug/L		74	42 - 110
N-Nitrosodi-n-propylamine	20.0	14.3		ug/L		72	47 - 110
N-Nitrosodiphenylamine	20.0	14.8		ug/L		74	50 - 110
Pentachlorophenol	20.0	14.6		ug/L		73	18 - 110
Phenol	20.0	15.1		ug/L		75	33 - 110
Phenanthrene	20.0	15.1		ug/L		75	53 - 110
Pyrene	20.0	15.9		ug/L		79	52 - 110
3 & 4 Methylphenol	40.0	29.5		ug/L		74	44 - 110

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-80859/19-A
Matrix: Water
Analysis Batch: 81078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80859

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*60*		*20 - 110*
2-Fluorophenol (Surr)	*68*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*72*		*21 - 110*
Nitrobenzene-d5 (Surr)	*67*		*21 - 110*
Phenol-d5 (Surr)	*67*		*21 - 110*
Terphenyl-d14 (Surr)	*55*		*24 - 110*

Lab Sample ID: MB 240-80935/22-A
Matrix: Water
Analysis Batch: 81249

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80935

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/08/13 09:07	04/10/13 07:53	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/08/13 09:07	04/10/13 07:53	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/08/13 09:07	04/10/13 07:53	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/08/13 09:07	04/10/13 07:53	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/08/13 09:07	04/10/13 07:53	1
2-Methylnaphthalene	5.0	U	5.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
2-Nitroaniline	20	U	20	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/08/13 09:07	04/10/13 07:53	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/08/13 09:07	04/10/13 07:53	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/08/13 09:07	04/10/13 07:53	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/08/13 09:07	04/10/13 07:53	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
4-Chloroaniline	10	U	10	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/08/13 09:07	04/10/13 07:53	1
4-Nitroaniline	20	U	20	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/08/13 09:07	04/10/13 07:53	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/08/13 09:07	04/10/13 07:53	1
Anthracene	5.0	U	5.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/08/13 09:07	04/10/13 07:53	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/08/13 09:07	04/10/13 07:53	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/08/13 09:07	04/10/13 07:53	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-80935/22-A
Matrix: Water
Analysis Batch: 81249

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80935

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Bis(2-ethylhexyl) phthalate	1.60	J	5.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
Caprolactam	10	U	10	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
Carbazole	10	U	10	0.28	ug/L		04/08/13 09:07	04/10/13 07:53	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		04/08/13 09:07	04/10/13 07:53	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/08/13 09:07	04/10/13 07:53	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		04/08/13 09:07	04/10/13 07:53	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Fluorene	5.0	U	5.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/08/13 09:07	04/10/13 07:53	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
Hexachloroethane	5.0	U	5.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/08/13 09:07	04/10/13 07:53	1
Naphthalene	5.0	U	5.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/08/13 09:07	04/10/13 07:53	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		04/08/13 09:07	04/10/13 07:53	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/08/13 09:07	04/10/13 07:53	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/08/13 09:07	04/10/13 07:53	1
Phenol	5.0	U	5.0	0.60	ug/L		04/08/13 09:07	04/10/13 07:53	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
Pyrene	5.0	U	5.0	0.10	ug/L		04/08/13 09:07	04/10/13 07:53	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		04/08/13 09:07	04/10/13 07:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*60*		*20 - 110*	*04/08/13 09:07*	*04/10/13 07:53*	*1*
2-Fluorophenol (Surr)	*68*		*10 - 110*	*04/08/13 09:07*	*04/10/13 07:53*	*1*
2,4,6-Tribromophenol (Surr)	*68*		*21 - 110*	*04/08/13 09:07*	*04/10/13 07:53*	*1*
Nitrobenzene-d5 (Surr)	*66*		*21 - 110*	*04/08/13 09:07*	*04/10/13 07:53*	*1*
Phenol-d5 (Surr)	*68*		*21 - 110*	*04/08/13 09:07*	*04/10/13 07:53*	*1*
Terphenyl-d14 (Surr)	*57*		*24 - 110*	*04/08/13 09:07*	*04/10/13 07:53*	*1*

Lab Sample ID: LCS 240-80935/23-A
Matrix: Water
Analysis Batch: 81249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80935

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	20.0	16.1		ug/L		81	43 - 110
2,2'-oxybis[1-chloropropane]	20.0	16.0		ug/L		80	37 - 110
2,4,5-Trichlorophenol	20.0	18.7		ug/L		93	48 - 110
2,4,6-Trichlorophenol	20.0	18.1		ug/L		90	45 - 110
2,4-Dichlorophenol	20.0	17.6		ug/L		88	41 - 110

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-80935/23-A
Matrix: Water
Analysis Batch: 81249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80935

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dimethylphenol	20.0	13.0		ug/L		65	32 - 110
2,4-Dinitrophenol	20.0	15.0	J	ug/L		75	10 - 110
2,4-Dinitrotoluene	20.0	18.8		ug/L		94	53 - 110
2,6-Dinitrotoluene	20.0	18.3		ug/L		92	54 - 110
2-Chloronaphthalene	20.0	15.7		ug/L		79	43 - 110
2-Chlorophenol	20.0	17.3		ug/L		86	29 - 110
2-Methylnaphthalene	20.0	15.7		ug/L		79	45 - 110
2-Methylphenol	20.0	17.4		ug/L		87	42 - 110
2-Nitroaniline	20.0	17.9	J	ug/L		90	54 - 110
2-Nitrophenol	20.0	19.0		ug/L		95	40 - 110
3,3'-Dichlorobenzidine	20.0	10.2		ug/L		51	22 - 110
3-Nitroaniline	20.0	17.5	J	ug/L		87	53 - 110
4,6-Dinitro-2-methylphenol	20.0	16.0	J	ug/L		80	31 - 110
4-Bromophenyl phenyl ether	20.0	17.1		ug/L		86	45 - 110
4-Chloro-3-methylphenol	20.0	17.5		ug/L		88	52 - 110
4-Chloroaniline	20.0	15.1		ug/L		76	44 - 110
4-Chlorophenyl phenyl ether	20.0	16.8		ug/L		84	47 - 110
4-Nitroaniline	20.0	18.7	J	ug/L		94	54 - 110
4-Nitrophenol	20.0	17.2	J	ug/L		86	33 - 112
Acenaphthene	20.0	16.5		ug/L		83	47 - 110
Acenaphthylene	20.0	17.0		ug/L		85	49 - 110
Acetophenone	20.0	16.5		ug/L		83	46 - 110
Anthracene	20.0	17.2		ug/L		86	52 - 110
Atrazine	20.0	17.8		ug/L		89	66 - 126
Benzaldehyde	20.0	16.4		ug/L		82	38 - 110
Benzo[a]anthracene	20.0	16.2		ug/L		81	52 - 110
Benzo[a]pyrene	20.0	12.7		ug/L		63	44 - 110
Benzo[b]fluoranthene	20.0	14.3		ug/L		71	48 - 110
Benzo[g,h,i]perylene	20.0	14.4		ug/L		72	50 - 110
Benzo[k]fluoranthene	20.0	14.6		ug/L		73	49 - 110
Bis(2-chloroethoxy)methane	20.0	16.8		ug/L		84	43 - 110
Bis(2-chloroethyl)ether	20.0	16.4		ug/L		82	40 - 110
Bis(2-ethylhexyl) phthalate	20.0	10.1		ug/L		51	39 - 116
Butyl benzyl phthalate	20.0	16.6		ug/L		83	55 - 110
Caprolactam	20.0	19.1		ug/L		96	45 - 111
Carbazole	20.0	17.6		ug/L		88	55 - 110
Chrysene	20.0	16.8		ug/L		84	55 - 110
Dibenz(a,h)anthracene	20.0	11.8		ug/L		59	49 - 110
Dibenzofuran	20.0	16.6		ug/L		83	51 - 110
Diethyl phthalate	20.0	17.6		ug/L		88	58 - 110
Dimethyl phthalate	20.0	17.6		ug/L		88	57 - 110
Di-n-butyl phthalate	20.0	18.0		ug/L		90	57 - 110
Di-n-octyl phthalate	20.0	9.31		ug/L		47	40 - 110
Fluoranthene	20.0	17.5		ug/L		87	54 - 110
Fluorene	20.0	16.9		ug/L		85	52 - 110
Hexachlorobenzene	20.0	16.2		ug/L		81	50 - 110
Hexachlorobutadiene	20.0	14.2		ug/L		71	33 - 110
Hexachlorocyclopentadiene	20.0	2.92	J	ug/L		15	10 - 110

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-80935/23-A
Matrix: Water
Analysis Batch: 81249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80935

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hexachloroethane			20.0	13.7		ug/L		68	35 - 110		
Indeno[1,2,3-cd]pyrene			20.0	11.7		ug/L		58	50 - 110		
Isophorone			20.0	16.9		ug/L		84	49 - 110		
Naphthalene			20.0	15.8		ug/L		79	44 - 110		
Nitrobenzene			20.0	16.9		ug/L		84	42 - 110		
N-Nitrosodi-n-propylamine			20.0	15.8		ug/L		79	47 - 110		
N-Nitrosodiphenylamine			20.0	16.7		ug/L		84	50 - 110		
Pentachlorophenol			20.0	16.0		ug/L		80	18 - 110		
Phenol			20.0	16.6		ug/L		83	33 - 110		
Phenanthrene			20.0	16.9		ug/L		85	53 - 110		
Pyrene			20.0	17.9		ug/L		89	52 - 110		
3 & 4 Methylphenol			40.0	33.6		ug/L		84	44 - 110		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*71*		*20 - 110*
2-Fluorophenol (Surr)	*77*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*84*		*21 - 110*
Nitrobenzene-d5 (Surr)	*77*		*21 - 110*
Phenol-d5 (Surr)	*77*		*21 - 110*
Terphenyl-d14 (Surr)	*57*		*24 - 110*

Lab Sample ID: MB 240-81130/22-A
Matrix: Water
Analysis Batch: 81678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 81130

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/09/13 10:13	04/12/13 11:10	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/09/13 10:13	04/12/13 11:10	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/09/13 10:13	04/12/13 11:10	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/09/13 10:13	04/12/13 11:10	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/09/13 10:13	04/12/13 11:10	1
2-Methylnaphthalene	5.0	U	5.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
2-Nitroaniline	20	U	20	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/09/13 10:13	04/12/13 11:10	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/09/13 10:13	04/12/13 11:10	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/09/13 10:13	04/12/13 11:10	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/09/13 10:13	04/12/13 11:10	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
4-Chloroaniline	10	U	10	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/09/13 10:13	04/12/13 11:10	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-81130/22-A
Matrix: Water
Analysis Batch: 81678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 81130

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitroaniline	20	U	20	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/09/13 10:13	04/12/13 11:10	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/09/13 10:13	04/12/13 11:10	1
Anthracene	5.0	U	5.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/09/13 10:13	04/12/13 11:10	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/09/13 10:13	04/12/13 11:10	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/09/13 10:13	04/12/13 11:10	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Bis(2-ethylhexyl) phthalate	0.953	J	5.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
Caprolactam	10	U	10	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
Carbazole	10	U	10	0.28	ug/L		04/09/13 10:13	04/12/13 11:10	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		04/09/13 10:13	04/12/13 11:10	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/09/13 10:13	04/12/13 11:10	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		04/09/13 10:13	04/12/13 11:10	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Fluorene	5.0	U	5.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/09/13 10:13	04/12/13 11:10	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
Hexachloroethane	5.0	U	5.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/09/13 10:13	04/12/13 11:10	1
Naphthalene	5.0	U	5.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/09/13 10:13	04/12/13 11:10	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		04/09/13 10:13	04/12/13 11:10	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/09/13 10:13	04/12/13 11:10	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/09/13 10:13	04/12/13 11:10	1
Phenol	5.0	U	5.0	0.60	ug/L		04/09/13 10:13	04/12/13 11:10	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
Pyrene	5.0	U	5.0	0.10	ug/L		04/09/13 10:13	04/12/13 11:10	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		04/09/13 10:13	04/12/13 11:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*20 - 110*	*04/09/13 10:13*	*04/12/13 11:10*	*1*
2-Fluorophenol (Surr)	*54*		*10 - 110*	*04/09/13 10:13*	*04/12/13 11:10*	*1*
2,4,6-Tribromophenol (Surr)	*46*		*21 - 110*	*04/09/13 10:13*	*04/12/13 11:10*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-81130/22-A
Matrix: Water
Analysis Batch: 81678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 81130

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5 (Surr)	68		21 - 110	04/09/13 10:13	04/12/13 11:10	1
Phenol-d5 (Surr)	54		21 - 110	04/09/13 10:13	04/12/13 11:10	1
Terphenyl-d14 (Surr)	71		24 - 110	04/09/13 10:13	04/12/13 11:10	1

Lab Sample ID: LCS 240-81130/23-A
Matrix: Water
Analysis Batch: 81678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 81130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	20.0	15.5		ug/L		78	43 - 110
2,2'-oxybis[1-chloropropane]	20.0	18.7		ug/L		94	37 - 110
2,4,5-Trichlorophenol	20.0	13.0		ug/L		65	48 - 110
2,4,6-Trichlorophenol	20.0	13.2		ug/L		66	45 - 110
2,4-Dichlorophenol	20.0	12.5		ug/L		62	41 - 110
2,4-Dimethylphenol	20.0	10.3		ug/L		51	32 - 110
2,4-Dinitrophenol	20.0	13.4	J	ug/L		67	10 - 110
2,4-Dinitrotoluene	20.0	16.2		ug/L		81	53 - 110
2,6-Dinitrotoluene	20.0	16.6		ug/L		83	54 - 110
2-Chloronaphthalene	20.0	14.1		ug/L		70	43 - 110
2-Chlorophenol	20.0	12.9		ug/L		65	29 - 110
2-Methylnaphthalene	20.0	15.0		ug/L		75	45 - 110
2-Methylphenol	20.0	12.9		ug/L		64	42 - 110
2-Nitroaniline	20.0	16.3	J	ug/L		81	54 - 110
2-Nitrophenol	20.0	12.3		ug/L		61	40 - 110
3,3'-Dichlorobenzidine	20.0	9.10		ug/L		45	22 - 110
3-Nitroaniline	20.0	14.3	J	ug/L		71	53 - 110
4,6-Dinitro-2-methylphenol	20.0	12.0	J	ug/L		60	31 - 110
4-Bromophenyl phenyl ether	20.0	15.0		ug/L		75	45 - 110
4-Chloro-3-methylphenol	20.0	13.5		ug/L		68	52 - 110
4-Chloroaniline	20.0	12.6		ug/L		63	44 - 110
4-Chlorophenyl phenyl ether	20.0	15.4		ug/L		77	47 - 110
4-Nitroaniline	20.0	14.5	J	ug/L		72	54 - 110
4-Nitrophenol	20.0	12.2	J	ug/L		61	33 - 112
Acenaphthene	20.0	15.8		ug/L		79	47 - 110
Acenaphthylene	20.0	16.6		ug/L		83	49 - 110
Acetophenone	20.0	16.9		ug/L		85	46 - 110
Anthracene	20.0	17.7		ug/L		88	52 - 110
Atrazine	20.0	26.9	*	ug/L		134	66 - 126
Benzaldehyde	20.0	19.3		ug/L		96	38 - 110
Benzo[a]anthracene	20.0	15.7		ug/L		79	52 - 110
Benzo[a]pyrene	20.0	11.2		ug/L		56	44 - 110
Benzo[b]fluoranthene	20.0	14.9		ug/L		74	48 - 110
Benzo[g,h,i]perylene	20.0	13.1		ug/L		66	50 - 110
Benzo[k]fluoranthene	20.0	14.3		ug/L		72	49 - 110
Bis(2-chloroethoxy)methane	20.0	15.6		ug/L		78	43 - 110
Bis(2-chloroethyl)ether	20.0	16.7		ug/L		83	40 - 110
Bis(2-ethylhexyl) phthalate	20.0	12.5		ug/L		62	39 - 116
Butyl benzyl phthalate	20.0	17.1		ug/L		86	55 - 110

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-81130/23-A
Matrix: Water
Analysis Batch: 81678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 81130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Caprolactam	20.0	19.7		ug/L		98	45 - 111
Carbazole	20.0	17.8		ug/L		89	55 - 110
Chrysene	20.0	16.4		ug/L		82	55 - 110
Dibenz(a,h)anthracene	20.0	13.8		ug/L		69	49 - 110
Dibenzofuran	20.0	15.9		ug/L		79	51 - 110
Diethyl phthalate	20.0	17.4		ug/L		87	58 - 110
Dimethyl phthalate	20.0	17.0		ug/L		85	57 - 110
Di-n-butyl phthalate	20.0	17.6		ug/L		88	57 - 110
Di-n-octyl phthalate	20.0	13.2		ug/L		66	40 - 110
Fluoranthene	20.0	17.7		ug/L		88	54 - 110
Fluorene	20.0	16.6		ug/L		83	52 - 110
Hexachlorobenzene	20.0	13.9		ug/L		69	50 - 110
Hexachlorobutadiene	20.0	11.2		ug/L		56	33 - 110
Hexachlorocyclopentadiene	20.0	2.83	J	ug/L		14	10 - 110
Hexachloroethane	20.0	12.9		ug/L		65	35 - 110
Indeno[1,2,3-cd]pyrene	20.0	12.6		ug/L		63	50 - 110
Isophorone	20.0	17.6		ug/L		88	49 - 110
Naphthalene	20.0	14.8		ug/L		74	44 - 110
Nitrobenzene	20.0	17.1		ug/L		85	42 - 110
N-Nitrosodi-n-propylamine	20.0	16.5		ug/L		83	47 - 110
N-Nitrosodiphenylamine	20.0	15.5		ug/L		77	50 - 110
Pentachlorophenol	20.0	11.8		ug/L		59	18 - 110
Phenol	20.0	13.3		ug/L		67	33 - 110
Phenanthrene	20.0	16.8		ug/L		84	53 - 110
Pyrene	20.0	17.5		ug/L		88	52 - 110
3 & 4 Methylphenol	40.0	25.7		ug/L		64	44 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*70*		*20 - 110*
2-Fluorophenol (Surr)	*65*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*56*		*21 - 110*
Nitrobenzene-d5 (Surr)	*84*		*21 - 110*
Phenol-d5 (Surr)	*66*		*21 - 110*
Terphenyl-d14 (Surr)	*66*		*24 - 110*

Lab Sample ID: 240-22773-1 MS
Matrix: Water
Analysis Batch: 81678

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total/NA
Prep Batch: 81130

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	4.8	U	21.7	14.4		ug/L		66	34 - 110
2,2'-oxybis[1-chloropropane]	4.8	U	21.7	17.2		ug/L		79	10 - 145
2,4,5-Trichlorophenol	4.8	U	21.7	12.3		ug/L		56	36 - 110
2,4,6-Trichlorophenol	3.8	U	21.7	12.5		ug/L		58	33 - 110
2,4-Dichlorophenol	9.5	U	21.7	12.1		ug/L		56	28 - 110
2,4-Dimethylphenol	4.8	U	21.7	7.43		ug/L		34	15 - 110
2,4-Dinitrophenol	19	U	21.7	17.7	J	ug/L		81	10 - 124
2,4-Dinitrotoluene	4.8	U	21.7	15.6		ug/L		72	37 - 110

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: 240-22773-1 MS | **Client Sample ID: GW-17358-040313-CT-015**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 81678 | **Prep Batch: 81130**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,6-Dinitrotoluene	4.8	U	21.7	15.6		ug/L		72	38 - 110
2-Chloronaphthalene	4.8	U	21.7	13.3		ug/L		61	28 - 110
2-Chlorophenol	4.8	U	21.7	11.7		ug/L		54	20 - 110
2-Methylnaphthalene	4.8	U	21.7	14.1		ug/L		65	32 - 110
2-Methylphenol	4.8	U	21.7	11.6		ug/L		53	27 - 110
2-Nitroaniline	19	U	21.7	15.3	J	ug/L		70	38 - 110
2-Nitrophenol	4.8	U	21.7	11.4		ug/L		53	26 - 110
3,3'-Dichlorobenzidine	0.95	U	21.7	1.1	U F	ug/L		0	10 - 110
3-Nitroaniline	19	U	21.7	8.13	J	ug/L		37	22 - 110
4,6-Dinitro-2-methylphenol	19	U	21.7	13.4	J	ug/L		62	10 - 110
4-Bromophenyl phenyl ether	4.8	U	21.7	14.1		ug/L		65	26 - 110
4-Chloro-3-methylphenol	4.8	U	21.7	12.9		ug/L		59	38 - 110
4-Chloroaniline	9.5	U	21.7	8.87	J	ug/L		41	15 - 110
4-Chlorophenyl phenyl ether	4.8	U	21.7	13.9		ug/L		64	30 - 110
4-Nitroaniline	19	U	21.7	10.1	J	ug/L		47	18 - 110
4-Nitrophenol	19	U	21.7	12.4	J	ug/L		57	16 - 111
Acenaphthene	4.8	U	21.7	14.6		ug/L		67	35 - 110
Acenaphthylene	4.8	U	21.7	15.2		ug/L		70	33 - 110
Acetophenone	4.8	U	21.7	15.5		ug/L		72	10 - 155
Anthracene	4.8	U	21.7	14.3		ug/L		66	26 - 110
Atrazine	2.9	U *	21.7	23.4		ug/L		107	40 - 124
Benzaldehyde	4.8	U	21.7	17.4		ug/L		80	24 - 110
Benzo[a]anthracene	0.95	U	21.7	12.2		ug/L		56	16 - 110
Benzo[a]pyrene	0.95	U	21.7	7.08		ug/L		33	10 - 110
Benzo[b]fluoranthene	0.95	U	21.7	10.5		ug/L		48	10 - 110
Benzo[g,h,i]perylene	0.95	U	21.7	8.93		ug/L		41	10 - 110
Benzo[k]fluoranthene	0.95	U	21.7	9.46		ug/L		44	10 - 110
Bis(2-chloroethoxy)methane	4.8	U	21.7	14.3		ug/L		66	27 - 110
Bis(2-chloroethyl)ether	0.95	U	21.7	15.4		ug/L		71	24 - 110
Bis(2-ethylhexyl) phthalate	1.0	J B	21.7	8.48		ug/L		34	10 - 112
Butyl benzyl phthalate	4.8	U	21.7	14.7		ug/L		68	31 - 110
Caprolactam	9.5	U	21.7	20.5		ug/L		94	10 - 199
Carbazole	9.5	U	21.7	17.2		ug/L		79	28 - 110
Chrysene	0.95	U	21.7	12.4		ug/L		57	17 - 110
Dibenz(a,h)anthracene	1.9	U	21.7	9.28		ug/L		43	10 - 111
Dibenzofuran	3.8	U	21.7	14.9		ug/L		68	36 - 110
Diethyl phthalate	4.8	U	21.7	16.3		ug/L		75	42 - 110
Dimethyl phthalate	4.8	U	21.7	16.0		ug/L		73	42 - 110
Di-n-butyl phthalate	4.8	U	21.7	14.9		ug/L		68	35 - 110
Di-n-octyl phthalate	4.8	U	21.7	9.10		ug/L		42	10 - 118
Fluoranthene	0.95	U	21.7	16.1		ug/L		74	31 - 110
Fluorene	4.8	U	21.7	15.3		ug/L		70	36 - 110
Hexachlorobenzene	0.19	U	21.7	12.3		ug/L		56	23 - 110
Hexachlorobutadiene	0.95	U	21.7	9.80		ug/L		45	15 - 110
Hexachlorocyclopentadiene	4.8	U	21.7	4.25	J	ug/L		20	10 - 110
Hexachloroethane	4.8	U	21.7	11.7		ug/L		54	10 - 122
Indeno[1,2,3-cd]pyrene	1.9	U	21.7	8.64		ug/L		40	10 - 110
Isophorone	4.8	U	21.7	16.1		ug/L		74	33 - 110

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: 240-22773-1 MS
Matrix: Water
Analysis Batch: 81678

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total/NA
Prep Batch: 81130

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	4.8	U	21.7	13.6		ug/L		63	28 - 110
Nitrobenzene	2.9	U	21.7	19.4		ug/L		89	15 - 110
N-Nitrosodi-n-propylamine	4.8	U	21.7	15.2		ug/L		70	32 - 110
N-Nitrosodiphenylamine	4.8	U	21.7	9.60		ug/L		44	10 - 110
Pentachlorophenol	4.8	U	21.7	13.7		ug/L		63	10 - 123
Phenol	4.8	U	21.7	12.9		ug/L		59	25 - 110
Phenanthrene	1.9	U	21.7	15.6		ug/L		72	34 - 110
Pyrene	4.8	U	21.7	15.8		ug/L		73	32 - 110
3 & 4 Methylphenol	4.8	U	43.5	23.1		ug/L		53	31 - 110

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*60*		*20 - 110*
2-Fluorophenol (Surr)	*54*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*48*		*21 - 110*
Nitrobenzene-d5 (Surr)	*71*		*21 - 110*
Phenol-d5 (Surr)	*55*		*21 - 110*
Terphenyl-d14 (Surr)	*44*		*24 - 110*

Lab Sample ID: 240-22773-1 MSD
Matrix: Water
Analysis Batch: 81678

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total/NA
Prep Batch: 81130

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	4.8	U	19.4	14.3		ug/L		74	34 - 110	1	31
2,2'-oxybis[1-chloropropane]	4.8	U	19.4	15.7		ug/L		81	10 - 145	9	43
2,4,5-Trichlorophenol	4.8	U	19.4	12.0		ug/L		62	36 - 110	2	60
2,4,6-Trichlorophenol	3.8	U	19.4	12.3		ug/L		64	33 - 110	2	63
2,4-Dichlorophenol	9.5	U	19.4	11.7		ug/L		60	28 - 110	4	69
2,4-Dimethylphenol	4.8	U	19.4	7.34		ug/L		38	15 - 110	1	36
2,4-Dinitrophenol	19	U	19.4	17.3	J	ug/L		89	10 - 124	2	70
2,4-Dinitrotoluene	4.8	U	19.4	15.3		ug/L		79	37 - 110	2	56
2,6-Dinitrotoluene	4.8	U	19.4	15.5		ug/L		80	38 - 110	1	54
2-Chloronaphthalene	4.8	U	19.4	13.5		ug/L		70	28 - 110	2	37
2-Chlorophenol	4.8	U	19.4	10.9		ug/L		56	20 - 110	7	70
2-Methylnaphthalene	4.8	U	19.4	13.8		ug/L		71	32 - 110	2	33
2-Methylphenol	4.8	U	19.4	11.0		ug/L		57	27 - 110	6	42
2-Nitroaniline	19	U	19.4	15.1	J	ug/L		78	38 - 110	1	32
2-Nitrophenol	4.8	U	19.4	11.5		ug/L		59	26 - 110	1	64
3,3'-Dichlorobenzidine	0.95	U	19.4	0.97	U F	ug/L		0	10 - 110	NC	99
3-Nitroaniline	19	U	19.4	7.82	J	ug/L		40	22 - 110	4	69
4,6-Dinitro-2-methylphenol	19	U	19.4	13.3	J	ug/L		69	10 - 110	1	93
4-Bromophenyl phenyl ether	4.8	U	19.4	13.7		ug/L		71	26 - 110	3	35
4-Chloro-3-methylphenol	4.8	U	19.4	12.7		ug/L		65	38 - 110	2	35
4-Chloroaniline	9.5	U	19.4	8.40	J	ug/L		43	15 - 110	5	73
4-Chlorophenyl phenyl ether	4.8	U	19.4	13.5		ug/L		70	30 - 110	2	36
4-Nitroaniline	19	U	19.4	9.54	J	ug/L		49	18 - 110	6	60
4-Nitrophenol	19	U	19.4	12.4	J	ug/L		64	16 - 111	0	65
Acenaphthene	4.8	U	19.4	14.6		ug/L		75	35 - 110	0	30

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: 240-22773-1 MSD
Matrix: Water
Analysis Batch: 81678

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total/NA
Prep Batch: 81130

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthylene	4.8	U	19.4	15.3		ug/L		79	33 - 110	1	30
Acetophenone	4.8	U	19.4	14.5		ug/L		75	10 - 155	7	31
Anthracene	4.8	U	19.4	13.9		ug/L		72	26 - 110	3	37
Atrazine	2.9	U *	19.4	22.2		ug/L		114	40 - 124	5	30
Benzaldehyde	4.8	U	19.4	16.2		ug/L		84	24 - 110	7	34
Benzo[a]anthracene	0.95	U	19.4	10.2		ug/L		53	16 - 110	17	30
Benzo[a]pyrene	0.95	U	19.4	4.48		ug/L		23	10 - 110	45	60
Benzo[b]fluoranthene	0.95	U	19.4	6.94		ug/L		36	10 - 110	41	45
Benzo[g,h,i]perylene	0.95	U	19.4	4.60	F	ug/L		24	10 - 110	64	60
Benzo[k]fluoranthene	0.95	U	19.4	5.59	F	ug/L		29	10 - 110	52	48
Bis(2-chloroethoxy)methane	4.8	U	19.4	14.0		ug/L		72	27 - 110	3	33
Bis(2-chloroethyl)ether	0.95	U	19.4	14.2		ug/L		73	24 - 110	8	42
Bis(2-ethylhexyl) phthalate	1.0	J B	19.4	4.38	J	ug/L		17	10 - 112	64	71
Butyl benzyl phthalate	4.8	U	19.4	13.7		ug/L		71	31 - 110	7	37
Caprolactam	9.5	U	19.4	18.7		ug/L		96	10 - 199	9	99
Carbazole	9.5	U	19.4	16.7		ug/L		86	28 - 110	3	30
Chrysene	0.95	U	19.4	10.2		ug/L		53	17 - 110	19	30
Dibenz(a,h)anthracene	1.9	U	19.4	4.19	F	ug/L		22	10 - 111	76	63
Dibenzofuran	3.8	U	19.4	14.4		ug/L		74	36 - 110	3	30
Diethyl phthalate	4.8	U	19.4	15.8		ug/L		81	42 - 110	3	30
Dimethyl phthalate	4.8	U	19.4	15.6		ug/L		80	42 - 110	3	30
Di-n-butyl phthalate	4.8	U	19.4	13.8		ug/L		71	35 - 110	8	37
Di-n-octyl phthalate	4.8	U	19.4	4.91		ug/L		25	10 - 118	60	92
Fluoranthene	0.95	U	19.4	15.2		ug/L		78	31 - 110	6	30
Fluorene	4.8	U	19.4	15.0		ug/L		77	36 - 110	2	30
Hexachlorobenzene	0.19	U	19.4	11.0		ug/L		57	23 - 110	11	30
Hexachlorobutadiene	0.95	U	19.4	9.62		ug/L		50	15 - 110	2	49
Hexachlorocyclopentadiene	4.8	U	19.4	4.32	J	ug/L		22	10 - 110	2	99
Hexachloroethane	4.8	U	19.4	11.2		ug/L		58	10 - 122	4	44
Indeno[1,2,3-cd]pyrene	1.9	U	19.4	4.35	F	ug/L		22	10 - 110	66	58
Isophorone	4.8	U	19.4	16.1		ug/L		83	33 - 110	1	31
Naphthalene	4.8	U	19.4	13.4		ug/L		69	28 - 110	1	80
Nitrobenzene	2.9	U	19.4	19.0		ug/L		98	15 - 110	2	34
N-Nitrosodi-n-propylamine	4.8	U	19.4	14.6		ug/L		75	32 - 110	4	32
N-Nitrosodiphenylamine	4.8	U	19.4	11.2		ug/L		58	10 - 110	16	38
Pentachlorophenol	4.8	U	19.4	13.8		ug/L		71	10 - 123	1	76
Phenol	4.8	U	19.4	12.0		ug/L		62	25 - 110	8	74
Phenanthrene	1.9	U	19.4	15.1		ug/L		78	34 - 110	3	30
Pyrene	4.8	U	19.4	15.4		ug/L		79	32 - 110	3	30
3 & 4 Methylphenol	4.8	U	38.8	22.5		ug/L		58	31 - 110	3	42

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*65*		*20 - 110*
2-Fluorophenol (Surr)	*57*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*53*		*21 - 110*
Nitrobenzene-d5 (Surr)	*77*		*21 - 110*
Phenol-d5 (Surr)	*58*		*21 - 110*
Terphenyl-d14 (Surr)	*36*		*24 - 110*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-80858/21-A
Matrix: Water
Analysis Batch: 81041

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80858

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/06/13 09:50	04/08/13 20:54	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/06/13 09:50	04/08/13 20:54	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		04/06/13 09:50	04/08/13 20:54	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		04/06/13 09:50	04/08/13 20:54	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		04/06/13 09:50	04/08/13 20:54	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/06/13 09:50	04/08/13 20:54	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/06/13 09:50	04/08/13 20:54	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/06/13 09:50	04/08/13 20:54	1
Aroclor-1268	0.10	U	0.10	0.055	ug/L		04/06/13 09:50	04/08/13 20:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*57*		*23 - 136*	*04/06/13 09:50*	*04/08/13 20:54*	*1*
DCB Decachlorobiphenyl	*78*		*10 - 130*	*04/06/13 09:50*	*04/08/13 20:54*	*1*

Lab Sample ID: LCS 240-80858/22-A
Matrix: Water
Analysis Batch: 81041

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80858

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			2.50	2.19		ug/L		87	66 - 120		
Aroclor-1260			2.50	2.28		ug/L		91	55 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*55*		*23 - 136*
DCB Decachlorobiphenyl	*75*		*10 - 130*

Lab Sample ID: 240-22773-1 MS
Matrix: Water
Analysis Batch: 81041

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total/NA
Prep Batch: 80858

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	0.095	U	2.55	2.05		ug/L		80	67 - 120		
Aroclor-1260	0.095	U	2.55	2.14		ug/L		84	31 - 120		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*63*		*23 - 136*
DCB Decachlorobiphenyl	*50*		*10 - 130*

Lab Sample ID: 240-22773-1 MSD
Matrix: Water
Analysis Batch: 81041

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total/NA
Prep Batch: 80858

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	0.095	U	2.60	2.19		ug/L		84	67 - 120	7	30
Aroclor-1260	0.095	U	2.60	2.10		ug/L		81	31 - 120	2	30

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 240-22773-1 MSD
Matrix: Water
Analysis Batch: 81041

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total/NA
Prep Batch: 80858

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*62*		*23 - 136*
DCB Decachlorobiphenyl	*49*		*10 - 130*

Lab Sample ID: MB 240-81283/16-A
Matrix: Water
Analysis Batch: 81580

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 81283

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/10/13 09:19	04/11/13 20:01	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/10/13 09:19	04/11/13 20:01	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		04/10/13 09:19	04/11/13 20:01	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		04/10/13 09:19	04/11/13 20:01	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		04/10/13 09:19	04/11/13 20:01	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/10/13 09:19	04/11/13 20:01	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/10/13 09:19	04/11/13 20:01	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/10/13 09:19	04/11/13 20:01	1
Aroclor-1268	0.10	U	0.10	0.055	ug/L		04/10/13 09:19	04/11/13 20:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*23 - 136*	*04/10/13 09:19*	*04/11/13 20:01*	*1*
DCB Decachlorobiphenyl	*73*		*10 - 130*	*04/10/13 09:19*	*04/11/13 20:01*	*1*

Lab Sample ID: LCS 240-81283/17-A
Matrix: Water
Analysis Batch: 81580

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 81283

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			2.50	2.37		ug/L		95	66 - 120		
Aroclor-1260			2.50	2.32		ug/L		93	55 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*80*		*23 - 136*
DCB Decachlorobiphenyl	*71*		*10 - 130*

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-81908/1-A
Matrix: Water
Analysis Batch: 82269

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 81908

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/15/13 09:30	04/16/13 11:27	1
Antimony	1.31	J	2.0	0.13	ug/L		04/15/13 09:30	04/16/13 11:27	1
Arsenic	5.0	U	5.0	0.40	ug/L		04/15/13 09:30	04/16/13 11:27	1
Barium	0.924	J	100	0.19	ug/L		04/15/13 09:30	04/16/13 11:27	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/15/13 09:30	04/16/13 11:27	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/15/13 09:30	04/16/13 11:27	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-81908/1-A
Matrix: Water
Analysis Batch: 82269

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 81908

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	20	U	20	0.058	ug/L		04/15/13 09:30	04/16/13 11:27	1
Chromium	10	U	10	0.71	ug/L		04/15/13 09:30	04/16/13 11:27	1
Copper	0.305	J	4.0	0.29	ug/L		04/15/13 09:30	04/16/13 11:27	1
Iron	200	U	200	26	ug/L		04/15/13 09:30	04/16/13 11:27	1
Manganese	1.66	J	50	0.83	ug/L		04/15/13 09:30	04/16/13 11:27	1
Nickel	20	U	20	0.20	ug/L		04/15/13 09:30	04/16/13 11:27	1
Lead	3.0	U	3.0	0.18	ug/L		04/15/13 09:30	04/16/13 11:27	1
Selenium	5.0	U	5.0	0.57	ug/L		04/15/13 09:30	04/16/13 11:27	1
Thallium	2.0	U	2.0	0.14	ug/L		04/15/13 09:30	04/16/13 11:27	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/15/13 09:30	04/16/13 11:27	1
Zinc	47.3	J	50	2.3	ug/L		04/15/13 09:30	04/16/13 11:27	1
Silver	0.20	U	0.20	0.080	ug/L		04/15/13 09:30	04/16/13 11:27	1

Lab Sample ID: LCS 240-81908/2-A
Matrix: Water
Analysis Batch: 82269

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 81908

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9870		ug/L		99	80 - 120
Antimony	100	96.4		ug/L		96	80 - 120
Arsenic	1000	998		ug/L		100	80 - 120
Barium	1000	954		ug/L		95	80 - 120
Beryllium	1000	933		ug/L		93	80 - 120
Cadmium	1000	1010		ug/L		101	80 - 120
Cobalt	1000	963		ug/L		96	80 - 120
Chromium	1000	947		ug/L		95	80 - 120
Copper	1000	1030		ug/L		103	80 - 120
Iron	10000	9380		ug/L		94	80 - 120
Manganese	1000	1020		ug/L		102	80 - 120
Nickel	1000	999		ug/L		100	80 - 120
Lead	1000	985		ug/L		99	80 - 120
Selenium	1000	1000		ug/L		100	80 - 120
Thallium	250	241		ug/L		96	80 - 120
Vanadium	1000	925		ug/L		92	80 - 120
Zinc	1000	1070		ug/L		107	80 - 120
Silver	100	105		ug/L		105	80 - 120

Lab Sample ID: 240-22773-1 MS
Matrix: Water
Analysis Batch: 82269

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total Recoverable
Prep Batch: 81908

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	21	J	10000	9160		ug/L		91	63 - 128
Antimony	0.79	J B	100	90.1		ug/L		89	44 - 153
Arsenic	4.5	J	1000	935		ug/L		93	82 - 123
Barium	280	B	1000	1230		ug/L		94	45 - 144
Beryllium	1.0	U	1000	863		ug/L		86	77 - 124
Cadmium	1.0	U	1000	867		ug/L		87	78 - 117
Cobalt	0.47	J	1000	895		ug/L		89	67 - 114

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-22773-1 MS
Matrix: Water
Analysis Batch: 82269

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total Recoverable
Prep Batch: 81908

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	10	U	1000	913		ug/L		91	72 - 110
Copper	4.0	U	1000	879		ug/L		88	60 - 123
Iron	1500		10000	10000		ug/L		85	22 - 169
Manganese	260	B	1000	1170		ug/L		92	10 - 172
Nickel	3.9	J	1000	874		ug/L		87	72 - 111
Lead	3.0	U	1000	848		ug/L		85	73 - 115
Selenium	5.0	U	1000	859		ug/L		86	72 - 148
Thallium	0.80	J	250	219		ug/L		87	69 - 117
Vanadium	4.0	U	1000	923		ug/L		92	70 - 112
Zinc	6.6	J B	1000	846		ug/L		84	49 - 156
Silver	0.20	U	100	88.5		ug/L		89	10 - 139

Lab Sample ID: 240-22773-1 MSD
Matrix: Water
Analysis Batch: 82269

Client Sample ID: GW-17358-040313-CT-015
Prep Type: Total Recoverable
Prep Batch: 81908

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	21	J	10000	9780		ug/L		98	63 - 128	7	20
Antimony	0.79	J B	100	96.4		ug/L		96	44 - 153	7	20
Arsenic	4.5	J	1000	982		ug/L		98	82 - 123	5	20
Barium	280	B	1000	1300		ug/L		101	45 - 144	6	20
Beryllium	1.0	U	1000	908		ug/L		91	77 - 124	5	20
Cadmium	1.0	U	1000	921		ug/L		92	78 - 117	6	20
Cobalt	0.47	J	1000	948		ug/L		95	67 - 114	6	20
Chromium	10	U	1000	975		ug/L		98	72 - 110	7	20
Copper	4.0	U	1000	925		ug/L		93	60 - 123	5	20
Iron	1500		10000	10500		ug/L		90	22 - 169	5	20
Manganese	260	B	1000	1230		ug/L		98	10 - 172	5	20
Nickel	3.9	J	1000	927		ug/L		92	72 - 111	6	20
Lead	3.0	U	1000	909		ug/L		91	73 - 115	7	20
Selenium	5.0	U	1000	898		ug/L		90	72 - 148	4	20
Thallium	0.80	J	250	235		ug/L		94	69 - 117	7	20
Vanadium	4.0	U	1000	987		ug/L		99	70 - 112	7	20
Zinc	6.6	J B	1000	877		ug/L		87	49 - 156	4	20
Silver	0.20	U	100	94.0		ug/L		94	10 - 139	6	20

Lab Sample ID: MB 240-81911/1-A
Matrix: Water
Analysis Batch: 82269

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 81911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/15/13 09:40	04/16/13 16:26	1
Antimony	1.00	J	2.0	0.13	ug/L		04/15/13 09:40	04/16/13 16:26	1
Arsenic	5.0	U	5.0	0.40	ug/L		04/15/13 09:40	04/16/13 16:26	1
Barium	0.956	J	100	0.19	ug/L		04/15/13 09:40	04/16/13 16:26	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/15/13 09:40	04/16/13 16:26	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/15/13 09:40	04/16/13 16:26	1
Cobalt	20	U	20	0.058	ug/L		04/15/13 09:40	04/16/13 16:26	1
Chromium	10	U	10	0.71	ug/L		04/15/13 09:40	04/16/13 16:26	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-81911/1-A
Matrix: Water
Analysis Batch: 82269

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 81911

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	0.418	J	4.0	0.29	ug/L		04/15/13 09:40	04/16/13 16:26	1
Iron	47.9	J	200	26	ug/L		04/15/13 09:40	04/16/13 16:26	1
Manganese	2.01	J	50	0.83	ug/L		04/15/13 09:40	04/16/13 16:26	1
Nickel	0.477	J	20	0.20	ug/L		04/15/13 09:40	04/16/13 16:26	1
Lead	1.85	J	3.0	0.18	ug/L		04/15/13 09:40	04/16/13 16:26	1
Selenium	5.0	U	5.0	0.57	ug/L		04/15/13 09:40	04/16/13 16:26	1
Thallium	2.0	U	2.0	0.14	ug/L		04/15/13 09:40	04/16/13 16:26	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/15/13 09:40	04/16/13 16:26	1
Zinc	57.2		50	2.3	ug/L		04/15/13 09:40	04/16/13 16:26	1
Silver	0.20	U	0.20	0.080	ug/L		04/15/13 09:40	04/16/13 16:26	1

Lab Sample ID: LCS 240-81911/2-A
Matrix: Water
Analysis Batch: 82269

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 81911

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	10300		ug/L		103	80 - 120
Antimony	100	96.7		ug/L		97	80 - 120
Arsenic	1000	1020		ug/L		102	80 - 120
Barium	1000	965		ug/L		97	80 - 120
Beryllium	1000	937		ug/L		94	80 - 120
Cadmium	1000	1020		ug/L		102	80 - 120
Cobalt	1000	969		ug/L		97	80 - 120
Chromium	1000	955		ug/L		96	80 - 120
Copper	1000	1030		ug/L		103	80 - 120
Iron	10000	9560		ug/L		96	80 - 120
Manganese	1000	1000		ug/L		100	80 - 120
Nickel	1000	1000		ug/L		100	80 - 120
Lead	1000	1020		ug/L		102	80 - 120
Selenium	1000	1030		ug/L		103	80 - 120
Thallium	250	243		ug/L		97	80 - 120
Vanadium	1000	936		ug/L		94	80 - 120
Zinc	1000	1120		ug/L		112	80 - 120
Silver	100	105		ug/L		105	80 - 120

Lab Sample ID: MB 240-82065/1-A
Matrix: Water
Analysis Batch: 82444

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 82065

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	19	ug/L		04/16/13 08:13	04/17/13 17:06	1
Antimony	0.696	J	2.0	0.13	ug/L		04/16/13 08:13	04/17/13 17:06	1
Arsenic	5.0	U	5.0	0.40	ug/L		04/16/13 08:13	04/17/13 17:06	1
Barium	3.80	J	100	0.19	ug/L		04/16/13 08:13	04/17/13 17:06	1
Beryllium	1.0	U	1.0	0.20	ug/L		04/16/13 08:13	04/17/13 17:06	1
Cadmium	1.0	U	1.0	0.13	ug/L		04/16/13 08:13	04/17/13 17:06	1
Cobalt	20	U	20	0.058	ug/L		04/16/13 08:13	04/17/13 17:06	1
Chromium	0.802	J	10	0.71	ug/L		04/16/13 08:13	04/17/13 17:06	1
Copper	4.0	U	4.0	0.29	ug/L		04/16/13 08:13	04/17/13 17:06	1

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-82065/1-A
Matrix: Water
Analysis Batch: 82444

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 82065

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	37.1	J	200	26	ug/L		04/16/13 08:13	04/17/13 17:06	1
Nickel	0.230	J	20	0.20	ug/L		04/16/13 08:13	04/17/13 17:06	1
Lead	3.0	U	3.0	0.18	ug/L		04/16/13 08:13	04/17/13 17:06	1
Selenium	5.0	U	5.0	0.57	ug/L		04/16/13 08:13	04/17/13 17:06	1
Thallium	2.0	U	2.0	0.14	ug/L		04/16/13 08:13	04/17/13 17:06	1
Vanadium	4.0	U	4.0	0.44	ug/L		04/16/13 08:13	04/17/13 17:06	1
Zinc	23.6	J	50	2.3	ug/L		04/16/13 08:13	04/17/13 17:06	1
Silver	0.20	U	0.20	0.080	ug/L		04/16/13 08:13	04/17/13 17:06	1

Lab Sample ID: MB 240-82065/1-A
Matrix: Water
Analysis Batch: 82904

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 82065

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.68	J	50	0.83	ug/L		04/16/13 08:13	04/19/13 14:04	1

Lab Sample ID: LCS 240-82065/2-A
Matrix: Water
Analysis Batch: 82444

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 82065

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9690		ug/L		97	80 - 120
Antimony	100	100		ug/L		100	80 - 120
Arsenic	1000	1030		ug/L		103	80 - 120
Barium	1000	1010		ug/L		101	80 - 120
Beryllium	1000	961		ug/L		96	80 - 120
Cadmium	1000	1030		ug/L		103	80 - 120
Cobalt	1000	980		ug/L		98	80 - 120
Chromium	1000	959		ug/L		96	80 - 120
Copper	1000	1030		ug/L		103	80 - 120
Iron	10000	9990		ug/L		100	80 - 120
Nickel	1000	1000		ug/L		100	80 - 120
Lead	1000	1170		ug/L		117	80 - 120
Selenium	1000	1070		ug/L		107	80 - 120
Thallium	250	273		ug/L		109	80 - 120
Vanadium	1000	943		ug/L		94	80 - 120
Zinc	1000	1070		ug/L		107	80 - 120
Silver	100	108		ug/L		108	80 - 120

Lab Sample ID: LCS 240-82065/2-A
Matrix: Water
Analysis Batch: 82904

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 82065

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Manganese	1000	1060		ug/L		106	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-81097/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 81441 — **Prep Batch: 81097**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 15:15	04/10/13 13:19	1

Lab Sample ID: LCS 240-81097/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 81441 — **Prep Batch: 81097**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.62		ug/L		92	81 - 123

Lab Sample ID: 240-22773-1 MS — **Client Sample ID: GW-17358-040313-CT-015**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 81441 — **Prep Batch: 81097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.20	U	1.00	1.00		ug/L		100	69 - 134

Lab Sample ID: 240-22773-1 MSD — **Client Sample ID: GW-17358-040313-CT-015**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 81441 — **Prep Batch: 81097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	0.967		ug/L		97	69 - 134	3	20

Lab Sample ID: MB 240-81101/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 81255 — **Prep Batch: 81101**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/09/13 12:20	04/09/13 14:57	1

Lab Sample ID: LCS 240-81101/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 81255 — **Prep Batch: 81101**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.08		ug/L		102	81 - 123

Lab Sample ID: 240-22693-2 MS — **Client Sample ID: GW-17358-040113-JY-002**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 81255 — **Prep Batch: 81101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.20	U	1.00	1.09		ug/L		109	69 - 134

Lab Sample ID: 240-22693-2 MSD — **Client Sample ID: GW-17358-040113-JY-002**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 81255 — **Prep Batch: 81101**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	1.06		ug/L		106	69 - 134	3	20

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 240-80693/10-A
Matrix: Water
Analysis Batch: 80817

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/05/13 06:13	04/05/13 13:38	1

Lab Sample ID: LCS 240-80693/11-A
Matrix: Water
Analysis Batch: 80817

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Phosphorus as P	4.48	4.47		mg/L		100	53 - 134

Lab Sample ID: MB 240-81296/10-A
Matrix: Water
Analysis Batch: 81389

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 81296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/10/13 07:13	04/10/13 14:02	1

Lab Sample ID: LCS 240-81296/11-A
Matrix: Water
Analysis Batch: 81389

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 81296

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Phosphorus as P	4.48	4.73		mg/L		106	53 - 134

Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(63-129)	(66-117)	(74-115)	(75-121)
240-22693-1	GW-17358-040113-JY-001	97	91	89	89
240-22693-2	GW-17358-040113-JY-002	97	90	90	90
240-22693-3	GW-17358-040113-CT-003	99	95	89	90
240-22693-4	GW-17358-040113-CT-004	100	91	90	91
240-22693-5	GW-17358-040113-CT-005	100	90	91	91
240-22693-6	GW-17358-040113-DR-006	96	87	84	90
240-22693-7	GW-17358-040113-DR-007	100	85	86	87
240-22693-8	GW-17358-040213-CT-008	101	81	84	90
240-22693-9	GW-17358-040213-CT-009	99	82	84	92
240-22693-10	GW-17358-040213-CT-010	108	92	87	93
240-22693-11	GW-17358-040213-CT-011	106	87	85	87
240-22693-12	GW-17358-040213-CT-012	102	90	85	92
240-22693-13	GW-17358-040213-CT-013	100	86	88	89
240-22693-14	GW-17358-040213-CT-014	104	85	86	93
240-22693-15	TB-17358-040213	99	85	81	94
240-22773-1	GW-17358-040313-CT-015	90	77	87	87
240-22773-1 MS	GW-17358-040313-CT-015	87	91	92	88
240-22773-1 MSD	GW-17358-040313-CT-015	85	89	90	87
240-22773-2	GW-17358-040313-CT-016	83	81	83	78
240-22773-3	GW-17358-040313-CT-017	84	82	85	82
240-22773-4	GW-17358-040313-CT-018	86	83	84	82
240-22773-5	GW-17358-040313-CT-019	84	80	84	81
240-22773-6	GW-17358-040313-CT-020	85	81	84	82
LCS 240-81031/4	Lab Control Sample	89	103	98	89
LCS 240-81156/4	Lab Control Sample	79	92	88	81
LCS 240-81347/4	Lab Control Sample	87	90	92	87
MB 240-81031/5	Method Blank	101	87	94	86
MB 240-81156/6	Method Blank	82	84	85	80
MB 240-81347/6	Method Blank	88	79	86	84

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: WQ **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(63-129)	(66-117)	(74-115)	(75-121)
240-22773-7	TB-17358-040313	86	80	84	80

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(20-110)	(10-110)	(21-110)	(21-110)	(21-110)	(24-110)
240-22693-1	GW-17358-040113-JY-001	54	56	73	59	59	48
240-22693-2	GW-17358-040113-JY-002	51	58	65	55	59	47
240-22693-3	GW-17358-040113-CT-003	54	60	67	56	60	43
240-22693-4	GW-17358-040113-CT-004	56	57	71	58	62	49
240-22693-5	GW-17358-040113-CT-005	50	53	65	51	54	44
240-22693-6	GW-17358-040113-DR-006	58	63	74	63	64	50
240-22693-7	GW-17358-040113-DR-007	49	52	63	49	54	48
240-22693-8	GW-17358-040213-CT-008	55	56	63	55	57	46
240-22693-9	GW-17358-040213-CT-009	56	58	60	59	58	47
240-22693-10	GW-17358-040213-CT-010	62	63	73	65	66	53
240-22693-11	GW-17358-040213-CT-011	55	59	63	59	60	48
240-22693-12	GW-17358-040213-CT-012	60	63	70	63	65	48
240-22693-13	GW-17358-040213-CT-013	50	50	58	51	52	42
240-22693-14	GW-17358-040213-CT-014	50	52	60	54	53	46
240-22773-1	GW-17358-040313-CT-015	60	51	48	64	52	56
240-22773-1 MS	GW-17358-040313-CT-015	60	54	48	71	55	44
240-22773-1 MSD	GW-17358-040313-CT-015	65	57	53	77	58	36
240-22773-2	GW-17358-040313-CT-016	57	48	47	66	50	55
240-22773-3	GW-17358-040313-CT-017	56	47	45	64	49	57
240-22773-4	GW-17358-040313-CT-018	60	52	48	71	54	52
240-22773-5	GW-17358-040313-CT-019	58	49	46	66	51	61
240-22773-6	GW-17358-040313-CT-020	61	53	48	72	54	56
LCS 240-80859/19-A	Lab Control Sample	60	68	72	67	67	55
LCS 240-80935/23-A	Lab Control Sample	71	77	84	77	77	57
LCS 240-81130/23-A	Lab Control Sample	70	65	56	84	66	66
MB 240-80859/18-A	Method Blank	60	65	67	65	66	55
MB 240-80935/22-A	Method Blank	60	68	68	66	68	57
MB 240-81130/22-A	Method Blank	59	54	46	68	54	71

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(23-136)	(10-130)
240-22693-1	GW-17358-040113-JY-001	46	7 X
240-22693-2	GW-17358-040113-JY-002	61	62
240-22693-3	GW-17358-040113-CT-003	62	43
240-22693-4	GW-17358-040113-CT-004	53	34
240-22693-5	GW-17358-040113-CT-005	62	49
240-22693-6	GW-17358-040113-DR-006	39	24

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	TCX1 (23-136)	DCB1 (10-130)										
240-22693-7	GW-17358-040113-DR-007	56	57										
240-22693-8	GW-17358-040213-CT-008	56	43										
240-22693-9	GW-17358-040213-CT-009	57	41										
240-22693-10	GW-17358-040213-CT-010	64	45										
240-22693-11	GW-17358-040213-CT-011	56	52										
240-22693-12	GW-17358-040213-CT-012	51	38										
240-22693-13	GW-17358-040213-CT-013	58	44										
240-22693-14	GW-17358-040213-CT-014	58	45										
240-22773-1	GW-17358-040313-CT-015	57	46										
240-22773-1 MS	GW-17358-040313-CT-015	63	50										
240-22773-1 MSD	GW-17358-040313-CT-015	62	49										
240-22773-2	GW-17358-040313-CT-016	51	33										
240-22773-3	GW-17358-040313-CT-017	59	50										
240-22773-4	GW-17358-040313-CT-018	57	39										
LCS 240-80858/22-A	Lab Control Sample	55	75										
MB 240-80858/21-A	Method Blank	57	78										

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	TCX2 (23-136)	DCB2 (10-130)										
240-22693-1 - RE	GW-17358-040113-JY-001	61	15										
240-22773-5	GW-17358-040313-CT-019	68	37										
240-22773-6	GW-17358-040313-CT-020	77	27										
LCS 240-81283/17-A	Lab Control Sample	80	71										
MB 240-81283/16-A	Method Blank	82	73										

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Client Sample ID: GW-17358-040113-JY-001

Lab Sample ID: 240-22693-1

Date Collected: 04/01/13 14:00

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 03:43	LE	TAL CAN
Total/NA	Prep	3520C			80859	04/06/13 09:54	CC	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 09:42	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 15:55	LH	TAL CAN
Total/NA	Prep	3520C	RE		81283	04/10/13 09:19	CC	TAL CAN
Total/NA	Analysis	8082	RE	1	81580	04/11/13 16:21	LH	TAL CAN
Total/NA	Prep	7470A			81101	04/09/13 12:20	LM	TAL CAN
Total/NA	Analysis	7470A		1	81255	04/09/13 15:12	AS	TAL CAN
Total Recoverable	Prep	3005A			81911	04/15/13 09:40	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82269	04/16/13 17:48	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			80693	04/05/13 06:39	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	80817	04/05/13 13:41	TH	TAL CAN

Client Sample ID: GW-17358-040113-JY-002

Lab Sample ID: 240-22693-2

Date Collected: 04/01/13 15:05

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 04:05	LE	TAL CAN
Total/NA	Prep	3520C			80859	04/06/13 09:54	CC	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 10:04	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 16:10	LH	TAL CAN
Total/NA	Prep	7470A			81101	04/09/13 12:20	LM	TAL CAN
Total/NA	Analysis	7470A		1	81255	04/09/13 15:01	AS	TAL CAN
Total Recoverable	Prep	3005A			81911	04/15/13 09:40	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82269	04/16/13 17:55	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			80693	04/05/13 06:40	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	80817	04/05/13 13:41	TH	TAL CAN

Client Sample ID: GW-17358-040113-CT-003

Lab Sample ID: 240-22693-3

Date Collected: 04/01/13 14:20

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 04:27	LE	TAL CAN
Total/NA	Prep	3520C			80859	04/06/13 09:54	CC	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 10:26	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 16:25	LH	TAL CAN
Total/NA	Prep	7470A			81101	04/09/13 12:20	LM	TAL CAN
Total/NA	Analysis	7470A		1	81255	04/09/13 15:13	AS	TAL CAN

Client Sample ID: GW-17358-040113-CT-003

Lab Sample ID: 240-22693-3

Date Collected: 04/01/13 14:20

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			81911	04/15/13 09:40	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82269	04/16/13 18:18	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			80693	04/05/13 06:42	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	80817	04/05/13 13:41	TH	TAL CAN

Client Sample ID: GW-17358-040113-CT-004

Lab Sample ID: 240-22693-4

Date Collected: 04/01/13 14:35

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 04:49	LE	TAL CAN
Total/NA	Prep	3520C			80859	04/06/13 09:54	CC	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 10:48	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 16:40	LH	TAL CAN
Total/NA	Prep	7470A			81101	04/09/13 12:20	LM	TAL CAN
Total/NA	Analysis	7470A		1	81255	04/09/13 15:15	AS	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82444	04/17/13 18:36	NJT	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82904	04/20/13 03:01	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			80693	04/05/13 06:43	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	80817	04/05/13 13:44	TH	TAL CAN

Client Sample ID: GW-17358-040113-CT-005

Lab Sample ID: 240-22693-5

Date Collected: 04/01/13 15:00

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 05:12	LE	TAL CAN
Total/NA	Prep	3520C			80859	04/06/13 09:54	CC	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 11:12	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 16:55	LH	TAL CAN
Total/NA	Prep	7470A			81101	04/09/13 12:20	LM	TAL CAN
Total/NA	Analysis	7470A		1	81255	04/09/13 15:16	AS	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82444	04/17/13 18:43	NJT	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82904	04/20/13 03:08	NJT	TAL CAN

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Client Sample ID: GW-17358-040113-DR-006

Lab Sample ID: 240-22693-6

Date Collected: 04/01/13 14:30

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 05:34	LE	TAL CAN
Total/NA	Prep	3520C			80859	04/06/13 09:54	CC	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 11:34	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81085	04/09/13 08:42	LH	TAL CAN
Total/NA	Prep	7470A			81101	04/09/13 12:20	LM	TAL CAN
Total/NA	Analysis	7470A		1	81255	04/09/13 15:17	AS	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82444	04/17/13 18:51	NJT	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82904	04/20/13 03:16	NJT	TAL CAN

Client Sample ID: GW-17358-040113-DR-007

Lab Sample ID: 240-22693-7

Date Collected: 04/01/13 16:35

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 05:57	LE	TAL CAN
Total/NA	Prep	3520C			80859	04/06/13 09:54	CC	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 11:56	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 17:25	LH	TAL CAN
Total/NA	Prep	7470A			81101	04/09/13 12:20	LM	TAL CAN
Total/NA	Analysis	7470A		1	81255	04/09/13 15:19	AS	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82444	04/17/13 18:58	NJT	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82904	04/20/13 03:23	NJT	TAL CAN

Client Sample ID: GW-17358-040213-CT-008

Lab Sample ID: 240-22693-8

Date Collected: 04/02/13 09:40

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 06:19	LE	TAL CAN
Total/NA	Prep	3520C			80935	04/08/13 09:07	LM	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 17:25	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 17:40	LH	TAL CAN
Total/NA	Prep	7470A			81101	04/09/13 12:20	LM	TAL CAN
Total/NA	Analysis	7470A		1	81255	04/09/13 15:20	AS	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82444	04/17/13 19:06	NJT	TAL CAN

Client Sample ID: GW-17358-040213-CT-008

Lab Sample ID: 240-22693-8

Date Collected: 04/02/13 09:40

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82904	04/20/13 03:31	NJT	TAL CAN

Client Sample ID: GW-17358-040213-CT-009

Lab Sample ID: 240-22693-9

Date Collected: 04/02/13 09:50

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 06:42	LE	TAL CAN
Total/NA	Prep	3520C			80935	04/08/13 09:07	LM	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 17:46	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 17:55	LH	TAL CAN
Total/NA	Prep	7470A			81097	04/09/13 15:15	LM	TAL CAN
Total/NA	Analysis	7470A		1	81441	04/10/13 13:28	AS	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82444	04/17/13 19:28	NJT	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82626	04/18/13 23:30	NJT	TAL CAN

Client Sample ID: GW-17358-040213-CT-010

Lab Sample ID: 240-22693-10

Date Collected: 04/02/13 11:15

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 07:04	LE	TAL CAN
Total/NA	Prep	3520C			80935	04/08/13 09:07	LM	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 18:08	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 18:10	LH	TAL CAN
Total/NA	Prep	7470A			81097	04/09/13 15:15	LM	TAL CAN
Total/NA	Analysis	7470A		1	81441	04/10/13 13:33	AS	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82444	04/17/13 19:35	NJT	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82626	04/18/13 23:38	NJT	TAL CAN

Client Sample ID: GW-17358-040213-CT-011

Lab Sample ID: 240-22693-11

Date Collected: 04/02/13 11:16

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 07:26	LE	TAL CAN

Client Sample ID: GW-17358-040213-CT-011

Lab Sample ID: 240-22693-11

Date Collected: 04/02/13 11:16

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			80935	04/08/13 09:07	LM	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 18:30	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 18:25	LH	TAL CAN
Total/NA	Prep	7470A			81097	04/09/13 15:15	LM	TAL CAN
Total/NA	Analysis	7470A		1	81441	04/10/13 13:35	AS	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82444	04/17/13 19:43	NJT	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82626	04/18/13 23:45	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			80693	04/05/13 06:45	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	80817	04/05/13 13:44	TH	TAL CAN

Client Sample ID: GW-17358-040213-CT-012

Lab Sample ID: 240-22693-12

Date Collected: 04/02/13 15:15

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 07:48	LE	TAL CAN
Total/NA	Prep	3520C			80935	04/08/13 09:07	LM	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 19:14	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 18:40	LH	TAL CAN
Total/NA	Prep	7470A			81097	04/09/13 15:15	LM	TAL CAN
Total/NA	Analysis	7470A		1	81441	04/10/13 13:37	AS	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82444	04/17/13 19:50	NJT	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82626	04/18/13 23:53	NJT	TAL CAN

Client Sample ID: GW-17358-040213-CT-013

Lab Sample ID: 240-22693-13

Date Collected: 04/02/13 15:10

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 08:11	LE	TAL CAN
Total/NA	Prep	3520C			80935	04/08/13 09:07	LM	TAL CAN
Total/NA	Analysis	8270C		1	81646	04/12/13 12:22	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 18:55	LH	TAL CAN
Total/NA	Prep	7470A			81097	04/09/13 15:15	LM	TAL CAN
Total/NA	Analysis	7470A		1	81441	04/10/13 13:39	AS	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN

Client Sample ID: GW-17358-040213-CT-013

Lab Sample ID: 240-22693-13

Date Collected: 04/02/13 15:10

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020		1	82444	04/17/13 19:58	NJT	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82626	04/19/13 00:00	NJT	TAL CAN

Client Sample ID: GW-17358-040213-CT-014

Lab Sample ID: 240-22693-14

Date Collected: 04/02/13 16:20

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 08:33	LE	TAL CAN
Total/NA	Prep	3520C			80935	04/08/13 09:07	LM	TAL CAN
Total/NA	Analysis	8270C		1	81249	04/10/13 18:52	TH	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 19:10	LH	TAL CAN
Total/NA	Prep	7470A			81097	04/09/13 15:15	LM	TAL CAN
Total/NA	Analysis	7470A		1	81441	04/10/13 13:41	AS	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82444	04/17/13 20:05	NJT	TAL CAN
Total Recoverable	Prep	3005A			82065	04/16/13 08:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82626	04/19/13 00:08	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			80693	04/05/13 06:46	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	80817	04/05/13 13:44	TH	TAL CAN

Client Sample ID: TB-17358-040213

Lab Sample ID: 240-22693-15

Date Collected: 04/02/13 00:00

Matrix: Water

Date Received: 04/03/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81031	04/09/13 08:55	LE	TAL CAN

Client Sample ID: GW-17358-040313-CT-015

Lab Sample ID: 240-22773-1

Date Collected: 04/03/13 10:00

Matrix: Water

Date Received: 04/04/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	81347	04/10/13 15:56	LW	TAL CAN
Total/NA	Prep	3520C			81130	04/09/13 10:13	SE	TAL CAN
Total/NA	Analysis	8270C		1	81678	04/12/13 12:47	JG	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 19:25	LH	TAL CAN
Total/NA	Prep	7470A			81097	04/09/13 15:15	LM	TAL CAN
Total/NA	Analysis	7470A		1	81441	04/10/13 13:22	AS	TAL CAN
Total Recoverable	Prep	3005A			81908	04/15/13 09:30	LM	TAL CAN

Client Sample ID: GW-17358-040313-CT-015

Lab Sample ID: 240-22773-1

Date Collected: 04/03/13 10:00

Matrix: Water

Date Received: 04/04/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020		1	82269	04/16/13 11:42	NJT	TAL CAN

Client Sample ID: GW-17358-040313-CT-016

Lab Sample ID: 240-22773-2

Date Collected: 04/03/13 10:05

Matrix: Water

Date Received: 04/04/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81156	04/09/13 15:50	LW	TAL CAN
Total/NA	Prep	3520C			81130	04/09/13 10:13	SE	TAL CAN
Total/NA	Analysis	8270C		1	81678	04/12/13 16:02	JG	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 20:09	LH	TAL CAN
Total/NA	Prep	7470A			81097	04/09/13 15:15	LM	TAL CAN
Total/NA	Analysis	7470A		1	81441	04/10/13 13:43	AS	TAL CAN
Total Recoverable	Prep	3005A			81908	04/15/13 09:30	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82269	04/16/13 12:27	NJT	TAL CAN

Client Sample ID: GW-17358-040313-CT-017

Lab Sample ID: 240-22773-3

Date Collected: 04/03/13 11:15

Matrix: Water

Date Received: 04/04/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81156	04/09/13 16:13	LW	TAL CAN
Total/NA	Prep	3520C			81130	04/09/13 10:13	SE	TAL CAN
Total/NA	Analysis	8270C		1	81678	04/12/13 16:27	JG	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN
Total/NA	Analysis	8082		1	81041	04/08/13 20:24	LH	TAL CAN
Total/NA	Prep	7470A			81097	04/09/13 15:15	LM	TAL CAN
Total/NA	Analysis	7470A		1	81441	04/10/13 13:45	AS	TAL CAN
Total Recoverable	Prep	3005A			81908	04/15/13 09:30	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82269	04/16/13 12:34	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			80693	04/05/13 06:48	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	80817	04/05/13 13:44	TH	TAL CAN

Client Sample ID: GW-17358-040313-CT-018

Lab Sample ID: 240-22773-4

Date Collected: 04/03/13 11:25

Matrix: Water

Date Received: 04/04/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81156	04/09/13 16:36	LW	TAL CAN
Total/NA	Prep	3520C			81130	04/09/13 10:13	SE	TAL CAN
Total/NA	Analysis	8270C		1	81678	04/12/13 16:51	JG	TAL CAN
Total/NA	Prep	3520C			80858	04/06/13 09:50	CC	TAL CAN

Client Sample ID: GW-17358-040313-CT-018

Lab Sample ID: 240-22773-4

Date Collected: 04/03/13 11:25

Matrix: Water

Date Received: 04/04/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8082		1	81041	04/08/13 20:39	LH	TAL CAN
Total/NA	Prep	7470A			81097	04/09/13 15:15	LM	TAL CAN
Total/NA	Analysis	7470A		1	81441	04/10/13 13:47	AS	TAL CAN
Total Recoverable	Prep	3005A			81908	04/15/13 09:30	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82269	04/16/13 12:42	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			81296	04/10/13 07:28	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	81389	04/10/13 14:06	TH	TAL CAN

Client Sample ID: GW-17358-040313-CT-019

Lab Sample ID: 240-22773-5

Date Collected: 04/03/13 15:55

Matrix: Water

Date Received: 04/04/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81156	04/09/13 16:58	LW	TAL CAN
Total/NA	Prep	3520C			81130	04/09/13 10:13	SE	TAL CAN
Total/NA	Analysis	8270C		1	81678	04/12/13 15:14	JG	TAL CAN
Total/NA	Prep	3520C			81283	04/10/13 09:19	CC	TAL CAN
Total/NA	Analysis	8082		1	81580	04/11/13 16:36	LH	TAL CAN
Total/NA	Prep	7470A			81097	04/09/13 15:15	LM	TAL CAN
Total/NA	Analysis	7470A		1	81441	04/10/13 13:49	AS	TAL CAN
Total Recoverable	Prep	3005A			81908	04/15/13 09:30	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82269	04/16/13 12:49	NJT	TAL CAN
Total/NA	Analysis	9012A		1	83443	04/11/13 14:52	LG	TAL CAN

Client Sample ID: GW-17358-040313-CT-020

Lab Sample ID: 240-22773-6

Date Collected: 04/03/13 15:30

Matrix: Water

Date Received: 04/04/13 09:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2.5	81156	04/09/13 17:21	LW	TAL CAN
Total/NA	Prep	3520C			81130	04/09/13 10:13	SE	TAL CAN
Total/NA	Analysis	8270C		1	81678	04/12/13 15:38	JG	TAL CAN
Total/NA	Prep	3520C			81283	04/10/13 09:19	CC	TAL CAN
Total/NA	Analysis	8082		1	81580	04/11/13 16:51	LH	TAL CAN
Total/NA	Prep	7470A			81097	04/09/13 15:15	LM	TAL CAN
Total/NA	Analysis	7470A		1	81441	04/10/13 13:51	AS	TAL CAN
Total Recoverable	Prep	3005A			81908	04/15/13 09:30	LM	TAL CAN
Total Recoverable	Analysis	6020		1	82269	04/16/13 12:57	NJT	TAL CAN

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Client Sample ID: TB-17358-040313
Date Collected: 04/03/13 00:00
Date Received: 04/04/13 09:15

Lab Sample ID: 240-22773-7
Matrix: WQ

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	81156	04/09/13 17:44	LW	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-22693-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-13
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-13
Georgia	State Program	4	N/A	06-30-13
Illinois	NELAP	5	200004	07-31-13
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-13
L-A-B	DoD ELAP		L2315	07-28-13
Minnesota	NELAP	5	039-999-348	12-31-13
Nevada	State Program	9	OH-000482008A	07-31-13
New Jersey	NELAP	2	OH001	06-30-13
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-13
Texas	NELAP	6		08-03-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
West Virginia DEP	State Program	3	210	12-31-13
Wisconsin	State Program	5	999518190	08-31-13

CHAIN OF CUSTODY RECORD

COC NO.: PL-10890

PAGE ___ OF ___

(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES
14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170
Phone: (734) 453-5123 Fax: (734) 453-5201

Project No/ Phase/Task Code: 017358-T01-08Y13	Laboratory Name: Test America	Lab Location: North Canton, OH	SSOW ID: 17358-T01-010
Project Name: RACER - Willow Run	Lab Contact: D. Heckler	Lab Quote No:	Cooler No:
Project Location: Ypsilanti, MI			Carrier: FEDEX
Chemistry Contact: P. Wiseman			Airbill No:
Sampler(s): D. Rivers / J. York / C. Tort			Date Shipped:

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	TCL SVOCs	PCBs	Total Site TAL Metals	Phosphorus	Anerobic C/N				MS/MSD Request	Comments/ Special Instructions:
1	GW-17358-040213-JY-001	4/1/13	1400	WG	G	4	3	1	1					9	X	X	X	X	X						
2	-JY-002		1505			4	3	1	1					9	X	X	X	X	X						
3	-CT-003		1420			4	3	1	1					9	X	X	X	X	X						
4	-CT-004		1435			4	3	1	1					9	X	X	X	X	X						
5	-T-005		1500			4	3	1						8	X	X	X	X							
6	-DR-006		1430			4	3	1						8	X	X	X	X							
7	-DR-007		1635			4	3	1						8	X	X	X	X							
8	GW-17358-040213-CT-008	4/2/13	940			4	3	1						8	X	X	X	X							
9	-CT-009		950			4	3	1						8	X	X	X	X							
10	-CT-010		1115			4	3	1						8	X	X	X	X							
11	-CT-011		1116			4	3	1	1					9	X	X	X	X	X						
12	-CT-012		1515			4	3	1						8	X	X	X	X							
13	-CT-013		1510			4	3	1						8	X	X	X	X							
14	GW-17358-040213-CT-014		1620			4	3	1	1					9	X	X	X	X	X						
15	TB-17358-040213		—	TB	—		1							1	X										

240-22693 Chain of Custody

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers: 119

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. Christopher Z. Earl	CRA	4/2/13	1700	1.	TA	4-3-13	900
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____

Client CRA Site Name _____ By: _____

Cooler Received on 4-3-13 Opened on 4-3-13 (Signature)

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box (Other) _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1 (CF 0°C) Observed Sample Temp._____°C Corrected Sample Temp._____°C

IR GUN# 4G (CF +1°C) Observed Sample Temp._____°C Corrected Sample Temp._____°C ☑ Multiple on Back

IR GUN# 5G (CF +1 °C) Observed Sample Temp._____°C Corrected Sample Temp._____°C

IR GUN# 8 (CF +1°C) Observed Sample Temp._____°C Corrected Sample Temp._____°C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity_____ Yes (No)
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No (NA)
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Did all bottles arrive in good condition (Unbroken)? (Yes) No
7. Could all bottle labels be reconciled with the COC? (Yes) No
8. Were correct bottle(s) used for the test(s) indicated? (Yes) No
9. Sufficient quantity received to perform indicated analyses? (Yes) No
10. Were sample(s) at the correct pH upon receipt? (Yes) No NA
11. Were VOAs on the COC? (Yes) No
12. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
13. Was a trip blank present in the cooler(s)? (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

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# 031512-HNO3; Sulfuric Acid Lot# 051012-H2SO4; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH.

What time was preservative added to sample(s)? _____

Client ID	pH	Date	Initials
1	≤2 ≤2 pH Strip Lot# HC256691	4-3-13	JS
2	≤2 ≤2		
3	≤2 ≤2		
4	≤2 ≤2		
5	≤2		
6	≤2		
7	≤2		
8	≤2		
9	≤2		
10	≤2		
11	≤2 ≤2		
12	≤2		
13	≤2		
14	≤2 ≤2		

Cooler #	Observed Sample Temp. °C	Corrected Sample Temp. °C	IR #	Coolant
No #	2.7	3.7	8	Ice
No #	1.6	2.6		
No #	1.4	2.4		
Client	3.1	~~3.1~~ 4.1		
Client	2.6	~~2.6~~ 3.6		
Client	4.1	5.1		
Client	1.8	2.8		

CHAIN OF CUSTODY RECORD

CONESTOGA-ROVERS & ASSOCIATES

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170
Phone: (734) 453-5123 Fax: (734) 453-5201

COC NO.: PL- 08993
PAGE ___ OF ___
(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 17358-T01-08413	Laboratory Name: Test America
Project Name: Lower Willow Run	Lab Contact: D. Heckler
Project Location: Ypsilanti, MI	Lab Location: North Canton
Chemistry Contact: Paul Wiseman	Lab Quote No:
Sampler(s): C Tort	SSOW ID: 17358-T01-04
	Cooler No:
	Carrier: Fed Ex
	Airbill No:
	Date Shipped:

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Container Quantity & Preservation: Unpreserved	HCl	HNO_3	H_2SO_4	NaOH	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	TCL SVOCs	PCBs	Total site TAL metals	Phosphorus	Ammonia	MS/MSD Request	Comments/ Special Instructions:
1	GW-17358-040313-CT-015	4/3/13	1000	WG	G	8	9	2						19	X	X	X	X			X	
2	-016		1005	WG	G	4	3	1						8	X	X	X	X				
3	-017		1115	WG	G	4	3	1	1					9	X	X	X	X	X			
4	-018		1125	WG	G	4	3	1	1					9	X	X	X	X	X			
5	-019		1555	WG	G	4	3	1						8	X	X	X	X				
6	GW-17358-040313-CT-020		1530	WG	G	4	3	1		1				9	X	X	X	X		X		
7	TB-17358-040313	↓	—	TB	—		1							1	X							
8																						
9																						
10																						
11																						
12																						
13																						
14																						
15																						

240-22773 Chain of Custody

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers: 63
All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. Christyna Tort	CRA	04/03/13	1700	1.	TA	4-4-13	915
				2.			
				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

TestAmerica Canton Sample Receipt Form/Narrative Login # : 22773

Client CRA Site Name _____ By: _____

Cooler Received on 4-4-13 Opened on 4-4-13 (Signature)

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box (Other)

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF 0°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C
IR GUN# 4G	(CF +1°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C
IR GUN# 5G	(CF +1 °C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C
IR GUN# 8	(CF +1°C)	Observed Sample Temp._____°C	Corrected Sample Temp._____°C

☐ Multiple on Back

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes	(No)
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes No	(NA)
-Were custody seals on the bottle(s)?	Yes	(No)
3. Shippers' packing slip attached to the cooler(s)?	(Yes)	No
4. Did custody papers accompany the sample(s)?	(Yes)	No
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes)	No
6. Did all bottles arrive in good condition (Unbroken)?	(Yes)	No
7. Could all bottle labels be reconciled with the COC?	(Yes)	No
8. Were correct bottle(s) used for the test(s) indicated?	(Yes)	No
9. Sufficient quantity received to perform indicated analyses?	(Yes)	No
10. Were sample(s) at the correct pH upon receipt?	(Yes)	No NA
11. Were VOAs on the COC?	(Yes)	No
12. Were air bubbles >6 mm in any VOA vials?	Yes	(No) NA
13. Was a trip blank present in the cooler(s)?	(Yes)	No

Contacted PM DDH Date 4/4/13 by TB (via Verbal) Voice Mail Other

Concerning #14

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Am CN X'ed for ID CT-20, Am CN rec'd for ID CT-19 - will log Am CN for CT-19

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# 031512-HNO3; Sulfuric Acid Lot# 051012-H2SO4; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH.

What time was preserved added to sample(s)? _____

Client ID	pH	Date	Initials
	pH Strip Lot# HC256691		
15	≥12 ≥12	4-4-13	LC
16	≥12	"	"
17	≥12 ≥12	"	"
18	≥12 ≥12	"	"
19	≥12 ≥12	"	"
20	≥12	"	"

Cooler #	Observed Sample Temp. °C	Corrected Sample Temp. °C	IR #	Coolant
Not 1	3.1	4.1	8	Ice
Not	2.6	3.6	"	"
Client	2.1	3.1	"	"

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-23245-1
Client Project/Site: 17358-T01-10, RACER Willow Run

For:
Conestoga-Rovers & Associates, Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Mr. Paul Wiseman

Denise D Heckler

Authorized for release by:
4/28/2013 1:37:38 PM

Denise Heckler
Project Manager II
denise.heckler@testamericainc.com

LINKS

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Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Definitions/Glossary 6
Sample Summary 7
Detection Summary 8
Method Summary 17
Client Sample Results 18
QC Association Summary 123
QC Sample Results 128
Surrogate Summary 150
Lab Chronicle 152
Certification Summary 158
Chain of Custody 159

Job ID: 240-23245-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 17358-T01-10, RACER Willow Run

Report Number: 240-23245-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica 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 application 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 04/17/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 7 coolers at receipt time were 1.4º C, 1.7º C, 1.9º C, 2.3º C, 2.5º C, 2.8º C and 3.1º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GW-17358-041513-DR-102 (240-23245-1), GW-17358-041513-DR-103 (240-23245-2), GW-17358-041513-DR-104 (240-23245-3), GW-17358-041513-DR-105 (240-23245-4), GW-17358-041513-DR-106 (240-23245-5), GW-17358-041513-DR-107 (240-23245-6), GW-17358-041613-DR-108 (240-23245-7), GW-17358-041613-DR-109 (240-23245-8), GW-17358-041613-DR-110 (240-23245-9), GW-17358-041613-DR-111 (240-23245-10), GW-17358-041613-DR-112 (240-23245-11), GW-17358-041613-DR-113 (240-23245-12), GW-17358-041613-DR-114 (240-23245-13), GW-17358-041613-DR-115 (240-23245-14) and TB-17358-041613 (240-23245-15) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/19/2013 and 04/20/2013.

1,2,4-Trichlorobenzene and Methylene Chloride were detected in method blank MB 240-82693/5 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged.

Sample GW-17358-041613-DR-110 (240-23245-9)[25X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Job ID: 240-23245-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

No other difficulties were encountered during the VOCs analyses.

All other quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GW-17358-041513-DR-102 (240-23245-1), GW-17358-041513-DR-103 (240-23245-2), GW-17358-041513-DR-104 (240-23245-3), GW-17358-041513-DR-105 (240-23245-4), GW-17358-041513-DR-106 (240-23245-5), GW-17358-041513-DR-107 (240-23245-6), GW-17358-041613-DR-108 (240-23245-7), GW-17358-041613-DR-109 (240-23245-8), GW-17358-041613-DR-110 (240-23245-9), GW-17358-041613-DR-111 (240-23245-10), GW-17358-041613-DR-112 (240-23245-11), GW-17358-041613-DR-113 (240-23245-12), GW-17358-041613-DR-114 (240-23245-13) and GW-17358-041613-DR-115 (240-23245-14) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 04/20/2013 and 04/22/2013 and analyzed on 04/23/2013 and 04/24/2013.

The laboratory control sample (LCS) for batch 82908, exceeded control limits for hexachlorocyclopentadiene. This analyte has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. The results have been reported and flagged accordingly.

Several analytes failed the recovery criteria low for the MS/MSD of sample GW-17358-041613-DR-108 (240-23245-7) in batch 240-83273.

No other difficulties were encountered during the SVOCs analyses.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples GW-17358-041513-DR-102 (240-23245-1), GW-17358-041513-DR-103 (240-23245-2), GW-17358-041513-DR-104 (240-23245-3), GW-17358-041513-DR-105 (240-23245-4), GW-17358-041513-DR-106 (240-23245-5), GW-17358-041513-DR-107 (240-23245-6), GW-17358-041613-DR-108 (240-23245-7), GW-17358-041613-DR-109 (240-23245-8), GW-17358-041613-DR-110 (240-23245-9), GW-17358-041613-DR-111 (240-23245-10), GW-17358-041613-DR-112 (240-23245-11), GW-17358-041613-DR-113 (240-23245-12), GW-17358-041613-DR-114 (240-23245-13) and GW-17358-041613-DR-115 (240-23245-14) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared on 04/20/2013 and 04/22/2013 and analyzed on 04/23/2013.

Aroclor-1260 failed the recovery criteria low for the MSD of sample GW-17358-041613-DR-108MSD (240-23245-7) in batch 240-83043.

No other difficulties were encountered during the PCBs analyses.

All other quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICPMS)

Samples GW-17358-041513-DR-102 (240-23245-1), GW-17358-041513-DR-103 (240-23245-2), GW-17358-041513-DR-104 (240-23245-3), GW-17358-041513-DR-105 (240-23245-4), GW-17358-041513-DR-106 (240-23245-5), GW-17358-041513-DR-107 (240-23245-6), GW-17358-041613-DR-108 (240-23245-7), GW-17358-041613-DR-109 (240-23245-8), GW-17358-041613-DR-110 (240-23245-9), GW-17358-041613-DR-111 (240-23245-10), GW-17358-041613-DR-112 (240-23245-11), GW-17358-041613-DR-113 (240-23245-12), GW-17358-041613-DR-114 (240-23245-13) and GW-17358-041613-DR-115 (240-23245-14) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 04/22/2013 and analyzed on 04/23/2013.

Several analytes were detected in method blank MB 240-82905/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged.

The continuing calibration verification (CCV) for Aluminum and Copper associated with batch 82905 recovered above the upper control limit. The samples associated with this CCV were non-detects or J values for the affected analytes; therefore, the data has been reported.

No other difficulties were encountered during the metals analyses.

Job ID: 240-23245-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

All other quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples GW-17358-041513-DR-102 (240-23245-1), GW-17358-041513-DR-103 (240-23245-2), GW-17358-041513-DR-104 (240-23245-3), GW-17358-041513-DR-105 (240-23245-4), GW-17358-041513-DR-106 (240-23245-5), GW-17358-041513-DR-107 (240-23245-6), GW-17358-041613-DR-108 (240-23245-7), GW-17358-041613-DR-109 (240-23245-8), GW-17358-041613-DR-110 (240-23245-9), GW-17358-041613-DR-111 (240-23245-10), GW-17358-041613-DR-112 (240-23245-11), GW-17358-041613-DR-113 (240-23245-12), GW-17358-041613-DR-114 (240-23245-13) and GW-17358-041613-DR-115 (240-23245-14) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 04/18/2013.

Mercury was detected in method blank MB 240-82480/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged.

No other difficulties were encountered during the mercury analyses.

All other quality control parameters were within the acceptance limits.

TOTAL PHOSPHORUS

Samples GW-17358-041513-DR-102 (240-23245-1), GW-17358-041513-DR-106 (240-23245-5), GW-17358-041613-DR-111 (240-23245-10), GW-17358-041613-DR-113 (240-23245-12) and GW-17358-041613-DR-114 (240-23245-13) were analyzed for total phosphorus in accordance with SM 4500 P E. The samples were prepared and analyzed on 04/23/2013.

No difficulties were encountered during the total phosphorus analyses.

All quality control parameters were within the acceptance limits.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD exceeds the control limits
F	MS or MSD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
F	MS or MSD exceeds the control limits

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-23245-1	GW-17358-041513-DR-102	Water	04/15/13 08:05	04/17/13 09:20
240-23245-2	GW-17358-041513-DR-103	Water	04/15/13 09:30	04/17/13 09:20
240-23245-3	GW-17358-041513-DR-104	Water	04/15/13 09:45	04/17/13 09:20
240-23245-4	GW-17358-041513-DR-105	Water	04/15/13 10:10	04/17/13 09:20
240-23245-5	GW-17358-041513-DR-106	Water	04/15/13 11:30	04/17/13 09:20
240-23245-6	GW-17358-041513-DR-107	Water	04/15/13 13:10	04/17/13 09:20
240-23245-7	GW-17358-041613-DR-108	Water	04/16/13 09:30	04/17/13 09:20
240-23245-8	GW-17358-041613-DR-109	Water	04/16/13 09:05	04/17/13 09:20
240-23245-9	GW-17358-041613-DR-110	Water	04/16/13 09:25	04/17/13 09:20
240-23245-10	GW-17358-041613-DR-111	Water	04/16/13 10:55	04/17/13 09:20
240-23245-11	GW-17358-041613-DR-112	Water	04/16/13 11:10	04/17/13 09:20
240-23245-12	GW-17358-041613-DR-113	Water	04/16/13 13:30	04/17/13 09:20
240-23245-13	GW-17358-041613-DR-114	Water	04/16/13 13:50	04/17/13 09:20
240-23245-14	GW-17358-041613-DR-115	Water	04/16/13 14:45	04/17/13 09:20
240-23245-15	TB-17358-041613	Water	04/16/13 00:00	04/17/13 09:20

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Client Sample ID: GW-17358-041513-DR-102 — Lab Sample ID: 240-23245-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Caprolactam	2.2	J	10	0.81	ug/L	1		8270C	Total/NA
Aluminum	130		50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.30	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	15		5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	460	B	100	0.32	ug/L	1		6020	Total Recoverable
Cobalt	0.43	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	0.55	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	1.0	J B	4.0	0.24	ug/L	1		6020	Total Recoverable
Iron	900	B	200	12	ug/L	1		6020	Total Recoverable
Manganese	89	B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	1.7	J B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.41	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Vanadium	0.53	J	4.0	0.15	ug/L	1		6020	Total Recoverable
Zinc	15	J B	50	2.1	ug/L	1		6020	Total Recoverable
Total Phosphorus as P	0.037	J	0.10	0.033	mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: GW-17358-041513-DR-103 — Lab Sample ID: 240-23245-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	9.9	J ^	50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.30	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	0.36	J	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	160	B	100	0.32	ug/L	1		6020	Total Recoverable
Cadmium	0.12	J	1.0	0.026	ug/L	1		6020	Total Recoverable
Cobalt	0.41	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	1.0	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	1.4	J B ^	4.0	0.24	ug/L	1		6020	Total Recoverable
Manganese	110	B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	1.3	J B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.15	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Selenium	0.61	J	5.0	0.18	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-041513-DR-103 (Continued) — Lab Sample ID: 240-23245-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	0.35	J	4.0	0.15	ug/L	1		6020	Total Recoverable
Zinc	10	J B	50	2.1	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041513-DR-104 — Lab Sample ID: 240-23245-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	11	J ^	50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.29	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	0.42	J	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	170	B	100	0.32	ug/L	1		6020	Total Recoverable
Cadmium	0.11	J	1.0	0.026	ug/L	1		6020	Total Recoverable
Cobalt	0.46	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	1.1	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	1.4	J B ^	4.0	0.24	ug/L	1		6020	Total Recoverable
Manganese	120	B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	1.3	J B	20	0.087	ug/L	1		6020	Total Recoverable
Selenium	0.60	J	5.0	0.18	ug/L	1		6020	Total Recoverable
Vanadium	0.34	J	4.0	0.15	ug/L	1		6020	Total Recoverable
Zinc	8.5	J B	50	2.1	ug/L	1		6020	Total Recoverable
Silver	0.010	J	0.20	0.0083	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041513-DR-105 — Lab Sample ID: 240-23245-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Caprolactam	0.96	J	10	0.83	ug/L	1		8270C	Total/NA
Aluminum	36	J ^	50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.18	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	5.7		5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	66	J B	100	0.32	ug/L	1		6020	Total Recoverable
Cobalt	0.051	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	0.40	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	1.2	J B ^	4.0	0.24	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-041513-DR-105 (Continued) — Lab Sample ID: 240-23245-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	460	B	200	12	ug/L	1		6020	Total Recoverable
Manganese	84	B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	0.57	J B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.32	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	8.9	J B	50	2.1	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041513-DR-106 — Lab Sample ID: 240-23245-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	21	J ^	50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.73	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	0.35	J	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	260	B	100	0.32	ug/L	1		6020	Total Recoverable
Cadmium	0.042	J	1.0	0.026	ug/L	1		6020	Total Recoverable
Cobalt	0.078	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	3.3	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	1.6	J B	4.0	0.24	ug/L	1		6020	Total Recoverable
Manganese	5.6	J B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	1.1	J B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.37	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Selenium	0.74	J	5.0	0.18	ug/L	1		6020	Total Recoverable
Zinc	19	J B	50	2.1	ug/L	1		6020	Total Recoverable
Silver	0.023	J	0.20	0.0083	ug/L	1		6020	Total Recoverable
Total Phosphorus as P	0.037	J	0.10	0.033	mg/L	1		SM 4500 P E	Total/NA

Client Sample ID: GW-17358-041513-DR-107 — Lab Sample ID: 240-23245-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.4	J	10	1.1	ug/L	1		8260B	Total/NA
Aluminum	110		50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.26	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	0.62	J	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	24	J B	100	0.32	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-041513-DR-107 (Continued)

Lab Sample ID: 240-23245-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.10	J	1.0	0.026	ug/L	1		6020	Total Recoverable
Cobalt	0.17	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	1.9	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	1.3	J B	4.0	0.24	ug/L	1		6020	Total Recoverable
Iron	230	B	200	12	ug/L	1		6020	Total Recoverable
Manganese	6.7	J B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	0.87	J B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.35	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Selenium	1.2	J	5.0	0.18	ug/L	1		6020	Total Recoverable
Vanadium	0.50	J	4.0	0.15	ug/L	1		6020	Total Recoverable
Zinc	23	J B	50	2.1	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041613-DR-108

Lab Sample ID: 240-23245-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.3	J	10	1.1	ug/L	1		8260B	Total/NA
Toluene	0.68	J	1.0	0.13	ug/L	1		8260B	Total/NA
Vinyl chloride	3.5		1.0	0.22	ug/L	1		8260B	Total/NA
2-Methylnaphthalene	0.22	J	4.8	0.095	ug/L	1		8270C	Total/NA
Fluorene	0.69	J	4.8	0.095	ug/L	1		8270C	Total/NA
Naphthalene	0.28	J	4.8	0.095	ug/L	1		8270C	Total/NA
Phenanthrene	1.9		1.9	0.095	ug/L	1		8270C	Total/NA
Aluminum	7.7	J ^	50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.17	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	27		5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	180	B	100	0.32	ug/L	1		6020	Total Recoverable
Beryllium	0.16	J	1.0	0.031	ug/L	1		6020	Total Recoverable
Cadmium	0.14	J	1.0	0.026	ug/L	1		6020	Total Recoverable
Cobalt	1.5	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	0.52	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	0.60	J B ^	4.0	0.24	ug/L	1		6020	Total Recoverable
Iron	14000	B	200	12	ug/L	1		6020	Total Recoverable
Manganese	140	B	50	0.36	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-041613-DR-108 (Continued) — Lab Sample ID: 240-23245-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	27	B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.34	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Selenium	0.47	J	5.0	0.18	ug/L	1		6020	Total Recoverable
Thallium	1.1	J	2.0	0.40	ug/L	1		6020	Total Recoverable
Vanadium	1.1	J	4.0	0.15	ug/L	1		6020	Total Recoverable
Zinc	6.9	J B	50	2.1	ug/L	1		6020	Total Recoverable
Silver	0.013	J	0.20	0.0083	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041613-DR-109 — Lab Sample ID: 240-23245-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.42	J	1.0	0.19	ug/L	1		8260B	Total/NA
Trichloroethene	18		1.0	0.17	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.76	J	1.0	0.17	ug/L	1		8260B	Total/NA
Aluminum	8.8	J ^	50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.30	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	1.2	J	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	53	J B	100	0.32	ug/L	1		6020	Total Recoverable
Cadmium	0.33	J	1.0	0.026	ug/L	1		6020	Total Recoverable
Cobalt	1.7	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	1.0	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	3.3	J B	4.0	0.24	ug/L	1		6020	Total Recoverable
Manganese	1400	B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	12	J B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.26	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Selenium	0.24	J	5.0	0.18	ug/L	1		6020	Total Recoverable
Vanadium	0.21	J	4.0	0.15	ug/L	1		6020	Total Recoverable
Zinc	19	J B	50	2.1	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041613-DR-110 — Lab Sample ID: 240-23245-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	12	J B	130	8.3	ug/L	25		8260B	Total/NA
Vinyl chloride	320		25	5.5	ug/L	25		8260B	Total/NA
cis-1,2-Dichloroethene	610		25	4.3	ug/L	25		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-041613-DR-110 (Continued)

Lab Sample ID: 240-23245-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
trans-1,2-Dichloroethene	260		25	4.8	ug/L	25		8260B	Total/NA
Antimony	0.21	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	15		5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	160	B	100	0.32	ug/L	1		6020	Total Recoverable
Cobalt	0.56	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	0.32	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	0.56	J B	4.0	0.24	ug/L	1		6020	Total Recoverable
Iron	6000	B	200	12	ug/L	1		6020	Total Recoverable
Manganese	560	B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	4.5	J B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.17	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Zinc	11	J B	50	2.1	ug/L	1		6020	Total Recoverable
Silver	0.0090	J	0.20	0.0083	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041613-DR-111

Lab Sample ID: 240-23245-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	24	J ^	50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.29	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	1.2	J	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	77	J B	100	0.32	ug/L	1		6020	Total Recoverable
Cobalt	0.30	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	0.36	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	1.2	J B	4.0	0.24	ug/L	1		6020	Total Recoverable
Iron	240	B	200	12	ug/L	1		6020	Total Recoverable
Manganese	110	B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	1.3	J B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.20	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Selenium	0.99	J	5.0	0.18	ug/L	1		6020	Total Recoverable
Zinc	8.4	J B	50	2.1	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Client Sample ID: GW-17358-041613-DR-112 — Lab Sample ID: 240-23245-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	140		50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.23	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	1.7	J	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	160	B	100	0.32	ug/L	1		6020	Total Recoverable
Cobalt	1.2	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	0.59	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	1.2	J B	4.0	0.24	ug/L	1		6020	Total Recoverable
Iron	960	B	200	12	ug/L	1		6020	Total Recoverable
Manganese	280	B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	2.1	J B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.34	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Vanadium	0.50	J	4.0	0.15	ug/L	1		6020	Total Recoverable
Zinc	15	J B	50	2.1	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041613-DR-113 — Lab Sample ID: 240-23245-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.3	J	10	1.1	ug/L	1		8260B	Total/NA
Aluminum	240		50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.30	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	0.52	J	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	55	J B	100	0.32	ug/L	1		6020	Total Recoverable
Cadmium	0.055	J	1.0	0.026	ug/L	1		6020	Total Recoverable
Cobalt	0.81	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	0.90	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	3.3	J B	4.0	0.24	ug/L	1		6020	Total Recoverable
Iron	390	B	200	12	ug/L	1		6020	Total Recoverable
Manganese	110	B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	2.5	J B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.59	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Selenium	4.3	J	5.0	0.18	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-041613-DR-113 (Continued) — Lab Sample ID: 240-23245-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	1.3	J	4.0	0.15	ug/L	1		6020	Total Recoverable
Zinc	21	J B	50	2.1	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041613-DR-114 — Lab Sample ID: 240-23245-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7.8	J ^	50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.35	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	0.86	J	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	67	J B	100	0.32	ug/L	1		6020	Total Recoverable
Cobalt	0.29	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	0.31	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	1.1	J B	4.0	0.24	ug/L	1		6020	Total Recoverable
Iron	180	J B	200	12	ug/L	1		6020	Total Recoverable
Manganese	110	B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	1.4	J B	20	0.087	ug/L	1		6020	Total Recoverable
Selenium	0.61	J	5.0	0.18	ug/L	1		6020	Total Recoverable
Vanadium	0.15	J	4.0	0.15	ug/L	1		6020	Total Recoverable
Zinc	14	J B	50	2.1	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041613-DR-115 — Lab Sample ID: 240-23245-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	27	J ^	50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.28	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	0.48	J	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	43	J B	100	0.32	ug/L	1		6020	Total Recoverable
Cobalt	0.22	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	0.45	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	0.93	J B	4.0	0.24	ug/L	1		6020	Total Recoverable
Iron	59	J B	200	12	ug/L	1		6020	Total Recoverable
Manganese	61	B	50	0.36	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: GW-17358-041613-DR-115 (Continued)

Lab Sample ID: 240-23245-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	1.4	J B	20	0.087	ug/L	1		6020	Total Recoverable
Selenium	0.39	J	5.0	0.18	ug/L	1		6020	Total Recoverable
Zinc	26	J B	50	2.1	ug/L	1		6020	Total Recoverable

Client Sample ID: TB-17358-041613

Lab Sample ID: 240-23245-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	1.3	J	10	1.1	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	TCL Semivolatile Compounds (OLMO4.2)	SW846	TAL CAN
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6020	Metals (ICP/MS)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
SM 4500 P E	Phosphorus	SM	TAL CAN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041513-DR-102
Date Collected: 04/15/13 08:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/19/13 17:12	1
Benzene	1.0	U	1.0	0.13	ug/L			04/19/13 17:12	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/19/13 17:12	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/19/13 17:12	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/19/13 17:12	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/19/13 17:12	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/19/13 17:12	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/19/13 17:12	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 17:12	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/19/13 17:12	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/19/13 17:12	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/19/13 17:12	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/19/13 17:12	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 17:12	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 17:12	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/19/13 17:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/19/13 17:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/19/13 17:12	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/19/13 17:12	1
2-Hexanone	10	U	10	0.41	ug/L			04/19/13 17:12	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/19/13 17:12	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/19/13 17:12	1
Styrene	1.0	U	1.0	0.11	ug/L			04/19/13 17:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/19/13 17:12	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/19/13 17:12	1
Toluene	1.0	U	1.0	0.13	ug/L			04/19/13 17:12	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 17:12	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/19/13 17:12	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/19/13 17:12	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 17:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/19/13 17:12	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/19/13 17:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/19/13 17:12	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/19/13 17:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/19/13 17:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 17:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 17:12	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/19/13 17:12	1
Methyl acetate	10	U	10	0.38	ug/L			04/19/13 17:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/19/13 17:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/19/13 17:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 17:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 17:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/19/13 17:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 17:12	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/19/13 17:12	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/19/13 17:12	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/19/13 17:12	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129		04/19/13 17:12	1
4-Bromofluorobenzene (Surr)	89		66 - 117		04/19/13 17:12	1
Toluene-d8 (Surr)	84		74 - 115		04/19/13 17:12	1
Dibromofluoromethane (Surr)	91		75 - 121		04/19/13 17:12	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041513-DR-103
Date Collected: 04/15/13 09:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/19/13 17:35	1
Benzene	1.0	U	1.0	0.13	ug/L			04/19/13 17:35	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/19/13 17:35	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/19/13 17:35	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/19/13 17:35	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/19/13 17:35	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/19/13 17:35	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/19/13 17:35	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 17:35	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/19/13 17:35	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/19/13 17:35	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/19/13 17:35	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/19/13 17:35	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 17:35	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 17:35	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/19/13 17:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/19/13 17:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/19/13 17:35	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/19/13 17:35	1
2-Hexanone	10	U	10	0.41	ug/L			04/19/13 17:35	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/19/13 17:35	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/19/13 17:35	1
Styrene	1.0	U	1.0	0.11	ug/L			04/19/13 17:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/19/13 17:35	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/19/13 17:35	1
Toluene	1.0	U	1.0	0.13	ug/L			04/19/13 17:35	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 17:35	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/19/13 17:35	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/19/13 17:35	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 17:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/19/13 17:35	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/19/13 17:35	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/19/13 17:35	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/19/13 17:35	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/19/13 17:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 17:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 17:35	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/19/13 17:35	1
Methyl acetate	10	U	10	0.38	ug/L			04/19/13 17:35	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/19/13 17:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/19/13 17:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 17:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 17:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/19/13 17:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 17:35	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/19/13 17:35	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/19/13 17:35	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/19/13 17:35	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129		04/19/13 17:35	1
4-Bromofluorobenzene (Surr)	94		66 - 117		04/19/13 17:35	1
Toluene-d8 (Surr)	84		74 - 115		04/19/13 17:35	1
Dibromofluoromethane (Surr)	91		75 - 121		04/19/13 17:35	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041513-DR-104
Date Collected: 04/15/13 09:45
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/19/13 17:57	1
Benzene	1.0	U	1.0	0.13	ug/L			04/19/13 17:57	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/19/13 17:57	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/19/13 17:57	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/19/13 17:57	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/19/13 17:57	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/19/13 17:57	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/19/13 17:57	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 17:57	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/19/13 17:57	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/19/13 17:57	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/19/13 17:57	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/19/13 17:57	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 17:57	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 17:57	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/19/13 17:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/19/13 17:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/19/13 17:57	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/19/13 17:57	1
2-Hexanone	10	U	10	0.41	ug/L			04/19/13 17:57	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/19/13 17:57	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/19/13 17:57	1
Styrene	1.0	U	1.0	0.11	ug/L			04/19/13 17:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/19/13 17:57	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/19/13 17:57	1
Toluene	1.0	U	1.0	0.13	ug/L			04/19/13 17:57	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 17:57	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/19/13 17:57	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/19/13 17:57	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 17:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/19/13 17:57	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/19/13 17:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/19/13 17:57	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/19/13 17:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/19/13 17:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 17:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 17:57	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/19/13 17:57	1
Methyl acetate	10	U	10	0.38	ug/L			04/19/13 17:57	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/19/13 17:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/19/13 17:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 17:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 17:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/19/13 17:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 17:57	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/19/13 17:57	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/19/13 17:57	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/19/13 17:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		63 - 129		04/19/13 17:57	1
4-Bromofluorobenzene (Surr)	97		66 - 117		04/19/13 17:57	1
Toluene-d8 (Surr)	86		74 - 115		04/19/13 17:57	1
Dibromofluoromethane (Surr)	91		75 - 121		04/19/13 17:57	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041513-DR-105
Date Collected: 04/15/13 10:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/19/13 18:20	1
Benzene	1.0	U	1.0	0.13	ug/L			04/19/13 18:20	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/19/13 18:20	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/19/13 18:20	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/19/13 18:20	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/19/13 18:20	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/19/13 18:20	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/19/13 18:20	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 18:20	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/19/13 18:20	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/19/13 18:20	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/19/13 18:20	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/19/13 18:20	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 18:20	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 18:20	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/19/13 18:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/19/13 18:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/19/13 18:20	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/19/13 18:20	1
2-Hexanone	10	U	10	0.41	ug/L			04/19/13 18:20	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/19/13 18:20	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/19/13 18:20	1
Styrene	1.0	U	1.0	0.11	ug/L			04/19/13 18:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/19/13 18:20	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/19/13 18:20	1
Toluene	1.0	U	1.0	0.13	ug/L			04/19/13 18:20	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 18:20	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/19/13 18:20	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/19/13 18:20	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 18:20	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/19/13 18:20	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/19/13 18:20	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/19/13 18:20	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/19/13 18:20	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/19/13 18:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 18:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 18:20	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/19/13 18:20	1
Methyl acetate	10	U	10	0.38	ug/L			04/19/13 18:20	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/19/13 18:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/19/13 18:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 18:20	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 18:20	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/19/13 18:20	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 18:20	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/19/13 18:20	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/19/13 18:20	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/19/13 18:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		63 - 129		04/19/13 18:20	1
4-Bromofluorobenzene (Surr)	89		66 - 117		04/19/13 18:20	1
Toluene-d8 (Surr)	85		74 - 115		04/19/13 18:20	1
Dibromofluoromethane (Surr)	93		75 - 121		04/19/13 18:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041513-DR-106
Date Collected: 04/15/13 11:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/19/13 18:43	1
Benzene	1.0	U	1.0	0.13	ug/L			04/19/13 18:43	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/19/13 18:43	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/19/13 18:43	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/19/13 18:43	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/19/13 18:43	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/19/13 18:43	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/19/13 18:43	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 18:43	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/19/13 18:43	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/19/13 18:43	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/19/13 18:43	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/19/13 18:43	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 18:43	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 18:43	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/19/13 18:43	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/19/13 18:43	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/19/13 18:43	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/19/13 18:43	1
2-Hexanone	10	U	10	0.41	ug/L			04/19/13 18:43	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/19/13 18:43	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/19/13 18:43	1
Styrene	1.0	U	1.0	0.11	ug/L			04/19/13 18:43	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/19/13 18:43	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/19/13 18:43	1
Toluene	1.0	U	1.0	0.13	ug/L			04/19/13 18:43	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 18:43	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/19/13 18:43	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/19/13 18:43	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 18:43	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/19/13 18:43	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/19/13 18:43	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/19/13 18:43	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/19/13 18:43	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/19/13 18:43	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 18:43	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 18:43	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/19/13 18:43	1
Methyl acetate	10	U	10	0.38	ug/L			04/19/13 18:43	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/19/13 18:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/19/13 18:43	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 18:43	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 18:43	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/19/13 18:43	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 18:43	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/19/13 18:43	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/19/13 18:43	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/19/13 18:43	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129		04/19/13 18:43	1
4-Bromofluorobenzene (Surr)	89		66 - 117		04/19/13 18:43	1
Toluene-d8 (Surr)	85		74 - 115		04/19/13 18:43	1
Dibromofluoromethane (Surr)	92		75 - 121		04/19/13 18:43	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041513-DR-107
Date Collected: 04/15/13 13:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.4**	**J**	10	1.1	ug/L			04/19/13 19:06	1
Benzene	1.0	U	1.0	0.13	ug/L			04/19/13 19:06	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/19/13 19:06	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/19/13 19:06	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/19/13 19:06	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/19/13 19:06	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/19/13 19:06	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/19/13 19:06	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 19:06	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/19/13 19:06	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/19/13 19:06	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/19/13 19:06	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/19/13 19:06	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 19:06	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 19:06	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/19/13 19:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/19/13 19:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/19/13 19:06	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/19/13 19:06	1
2-Hexanone	10	U	10	0.41	ug/L			04/19/13 19:06	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/19/13 19:06	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/19/13 19:06	1
Styrene	1.0	U	1.0	0.11	ug/L			04/19/13 19:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/19/13 19:06	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/19/13 19:06	1
Toluene	1.0	U	1.0	0.13	ug/L			04/19/13 19:06	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 19:06	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/19/13 19:06	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/19/13 19:06	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 19:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/19/13 19:06	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/19/13 19:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/19/13 19:06	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/19/13 19:06	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/19/13 19:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 19:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 19:06	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/19/13 19:06	1
Methyl acetate	10	U	10	0.38	ug/L			04/19/13 19:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/19/13 19:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/19/13 19:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 19:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 19:06	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/19/13 19:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 19:06	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/19/13 19:06	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/19/13 19:06	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/19/13 19:06	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		63 - 129		04/19/13 19:06	1
4-Bromofluorobenzene (Surr)	91		66 - 117		04/19/13 19:06	1
Toluene-d8 (Surr)	87		74 - 115		04/19/13 19:06	1
Dibromofluoromethane (Surr)	93		75 - 121		04/19/13 19:06	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041613-DR-108
Date Collected: 04/16/13 09:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**3.3**	**J**	10	1.1	ug/L			04/19/13 13:47	1
Benzene	1.0	U	1.0	0.13	ug/L			04/19/13 13:47	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/19/13 13:47	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/19/13 13:47	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/19/13 13:47	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/19/13 13:47	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/19/13 13:47	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/19/13 13:47	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 13:47	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/19/13 13:47	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/19/13 13:47	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/19/13 13:47	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/19/13 13:47	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 13:47	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 13:47	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/19/13 13:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/19/13 13:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/19/13 13:47	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/19/13 13:47	1
2-Hexanone	10	U	10	0.41	ug/L			04/19/13 13:47	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/19/13 13:47	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/19/13 13:47	1
Styrene	1.0	U	1.0	0.11	ug/L			04/19/13 13:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/19/13 13:47	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/19/13 13:47	1
Toluene	**0.68**	**J**	1.0	0.13	ug/L			04/19/13 13:47	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 13:47	1
Vinyl chloride	**3.5**		1.0	0.22	ug/L			04/19/13 13:47	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/19/13 13:47	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 13:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/19/13 13:47	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/19/13 13:47	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/19/13 13:47	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/19/13 13:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/19/13 13:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 13:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 13:47	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/19/13 13:47	1
Methyl acetate	10	U	10	0.38	ug/L			04/19/13 13:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/19/13 13:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/19/13 13:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 13:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 13:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/19/13 13:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 13:47	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/19/13 13:47	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/19/13 13:47	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/19/13 13:47	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129		04/19/13 13:47	1
4-Bromofluorobenzene (Surr)	97		66 - 117		04/19/13 13:47	1
Toluene-d8 (Surr)	84		74 - 115		04/19/13 13:47	1
Dibromofluoromethane (Surr)	91		75 - 121		04/19/13 13:47	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041613-DR-109
Date Collected: 04/16/13 09:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/19/13 19:28	1
Benzene	1.0	U	1.0	0.13	ug/L			04/19/13 19:28	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/19/13 19:28	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/19/13 19:28	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/19/13 19:28	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/19/13 19:28	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/19/13 19:28	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/19/13 19:28	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 19:28	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/19/13 19:28	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/19/13 19:28	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/19/13 19:28	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/19/13 19:28	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 19:28	1
1,1-Dichloroethene	**0.42**	**J**	1.0	0.19	ug/L			04/19/13 19:28	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/19/13 19:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/19/13 19:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/19/13 19:28	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/19/13 19:28	1
2-Hexanone	10	U	10	0.41	ug/L			04/19/13 19:28	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/19/13 19:28	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/19/13 19:28	1
Styrene	1.0	U	1.0	0.11	ug/L			04/19/13 19:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/19/13 19:28	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/19/13 19:28	1
Toluene	1.0	U	1.0	0.13	ug/L			04/19/13 19:28	1
Trichloroethene	**18**		1.0	0.17	ug/L			04/19/13 19:28	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/19/13 19:28	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/19/13 19:28	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 19:28	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/19/13 19:28	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/19/13 19:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/19/13 19:28	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/19/13 19:28	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/19/13 19:28	1
cis-1,2-Dichloroethene	**0.76**	**J**	1.0	0.17	ug/L			04/19/13 19:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 19:28	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/19/13 19:28	1
Methyl acetate	10	U	10	0.38	ug/L			04/19/13 19:28	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/19/13 19:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/19/13 19:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 19:28	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 19:28	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/19/13 19:28	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 19:28	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/19/13 19:28	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/19/13 19:28	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/19/13 19:28	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129		04/19/13 19:28	1
4-Bromofluorobenzene (Surr)	90		66 - 117		04/19/13 19:28	1
Toluene-d8 (Surr)	84		74 - 115		04/19/13 19:28	1
Dibromofluoromethane (Surr)	92		75 - 121		04/19/13 19:28	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041613-DR-110
Date Collected: 04/16/13 09:25
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	250	U	250	28	ug/L			04/19/13 14:10	25
Benzene	25	U	25	3.3	ug/L			04/19/13 14:10	25
Bromodichloromethane	25	U	25	3.8	ug/L			04/19/13 14:10	25
Bromoform	25	U	25	16	ug/L			04/19/13 14:10	25
Bromomethane	25	U	25	10	ug/L			04/19/13 14:10	25
2-Butanone (MEK)	250	U	250	14	ug/L			04/19/13 14:10	25
Carbon disulfide	130	U	130	3.3	ug/L			04/19/13 14:10	25
Carbon tetrachloride	25	U	25	3.3	ug/L			04/19/13 14:10	25
Chlorobenzene	25	U	25	3.8	ug/L			04/19/13 14:10	25
Chloroethane	25	U	25	7.3	ug/L			04/19/13 14:10	25
Chloroform	25	U	25	4.0	ug/L			04/19/13 14:10	25
Chloromethane	25	U	25	7.5	ug/L			04/19/13 14:10	25
1,1-Dichloroethane	25	U	25	3.8	ug/L			04/19/13 14:10	25
1,2-Dichloroethane	25	U	25	5.5	ug/L			04/19/13 14:10	25
1,1-Dichloroethene	25	U	25	4.8	ug/L			04/19/13 14:10	25
1,2-Dichloropropane	25	U	25	4.5	ug/L			04/19/13 14:10	25
cis-1,3-Dichloropropene	25	U	25	3.5	ug/L			04/19/13 14:10	25
trans-1,3-Dichloropropene	25	U	25	4.8	ug/L			04/19/13 14:10	25
Ethylbenzene	25	U	25	4.3	ug/L			04/19/13 14:10	25
2-Hexanone	250	U	250	10	ug/L			04/19/13 14:10	25
Methylene Chloride	**12**	**J B**	130	8.3	ug/L			04/19/13 14:10	25
4-Methyl-2-pentanone (MIBK)	250	U	250	8.0	ug/L			04/19/13 14:10	25
Styrene	25	U	25	2.8	ug/L			04/19/13 14:10	25
1,1,2,2-Tetrachloroethane	25	U	25	4.5	ug/L			04/19/13 14:10	25
Tetrachloroethene	25	U	25	7.3	ug/L			04/19/13 14:10	25
Toluene	25	U	25	3.3	ug/L			04/19/13 14:10	25
Trichloroethene	25	U	25	4.3	ug/L			04/19/13 14:10	25
Vinyl chloride	**320**		25	5.5	ug/L			04/19/13 14:10	25
Xylenes, Total	50	U	50	7.0	ug/L			04/19/13 14:10	25
1,1,1-Trichloroethane	25	U	25	5.5	ug/L			04/19/13 14:10	25
1,1,2-Trichloroethane	25	U	25	6.8	ug/L			04/19/13 14:10	25
Cyclohexane	25	U	25	3.0	ug/L			04/19/13 14:10	25
1,2-Dibromo-3-Chloropropane	25	U	25	17	ug/L			04/19/13 14:10	25
1,2-Dibromoethane	25	U	25	6.0	ug/L			04/19/13 14:10	25
Dichlorodifluoromethane	25	U	25	7.8	ug/L			04/19/13 14:10	25
cis-1,2-Dichloroethene	**610**		25	4.3	ug/L			04/19/13 14:10	25
trans-1,2-Dichloroethene	**260**		25	4.8	ug/L			04/19/13 14:10	25
Isopropylbenzene	25	U	25	3.3	ug/L			04/19/13 14:10	25
Methyl acetate	250	U	250	9.5	ug/L			04/19/13 14:10	25
Methyl tert-butyl ether	25	U	25	4.3	ug/L			04/19/13 14:10	25
1,1,2-Trichloro-1,2,2-trifluoroethane	25	U	25	7.0	ug/L			04/19/13 14:10	25
1,2,4-Trichlorobenzene	25	U	25	3.8	ug/L			04/19/13 14:10	25
1,2-Dichlorobenzene	25	U	25	3.3	ug/L			04/19/13 14:10	25
1,3-Dichlorobenzene	25	U	25	3.5	ug/L			04/19/13 14:10	25
1,4-Dichlorobenzene	25	U	25	3.3	ug/L			04/19/13 14:10	25
Trichlorofluoromethane	25	U	25	5.3	ug/L			04/19/13 14:10	25
Dibromochloromethane	25	U	25	4.5	ug/L			04/19/13 14:10	25
Methylcyclohexane	25	U	25	3.3	ug/L			04/19/13 14:10	25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		63 - 129		04/19/13 14:10	25
4-Bromofluorobenzene (Surr)	96		66 - 117		04/19/13 14:10	25
Toluene-d8 (Surr)	88		74 - 115		04/19/13 14:10	25
Dibromofluoromethane (Surr)	91		75 - 121		04/19/13 14:10	25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041613-DR-111
Date Collected: 04/16/13 10:55
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/20/13 13:20	1
Benzene	1.0	U	1.0	0.13	ug/L			04/20/13 13:20	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/20/13 13:20	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/20/13 13:20	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/20/13 13:20	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/20/13 13:20	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/20/13 13:20	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/20/13 13:20	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 13:20	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/20/13 13:20	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/20/13 13:20	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/20/13 13:20	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/20/13 13:20	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 13:20	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 13:20	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/20/13 13:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/20/13 13:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/20/13 13:20	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/20/13 13:20	1
2-Hexanone	10	U	10	0.41	ug/L			04/20/13 13:20	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/20/13 13:20	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/20/13 13:20	1
Styrene	1.0	U	1.0	0.11	ug/L			04/20/13 13:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/20/13 13:20	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/20/13 13:20	1
Toluene	1.0	U	1.0	0.13	ug/L			04/20/13 13:20	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 13:20	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/20/13 13:20	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/20/13 13:20	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 13:20	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/20/13 13:20	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/20/13 13:20	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/20/13 13:20	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/20/13 13:20	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/20/13 13:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 13:20	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 13:20	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/20/13 13:20	1
Methyl acetate	10	U	10	0.38	ug/L			04/20/13 13:20	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/20/13 13:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/20/13 13:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 13:20	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 13:20	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/20/13 13:20	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 13:20	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/20/13 13:20	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/20/13 13:20	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/20/13 13:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129		04/20/13 13:20	1
4-Bromofluorobenzene (Surr)	96		66 - 117		04/20/13 13:20	1
Toluene-d8 (Surr)	89		74 - 115		04/20/13 13:20	1
Dibromofluoromethane (Surr)	92		75 - 121		04/20/13 13:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041613-DR-112
Date Collected: 04/16/13 11:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/20/13 13:42	1
Benzene	1.0	U	1.0	0.13	ug/L			04/20/13 13:42	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/20/13 13:42	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/20/13 13:42	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/20/13 13:42	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/20/13 13:42	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/20/13 13:42	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/20/13 13:42	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 13:42	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/20/13 13:42	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/20/13 13:42	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/20/13 13:42	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/20/13 13:42	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 13:42	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 13:42	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/20/13 13:42	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/20/13 13:42	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/20/13 13:42	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/20/13 13:42	1
2-Hexanone	10	U	10	0.41	ug/L			04/20/13 13:42	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/20/13 13:42	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/20/13 13:42	1
Styrene	1.0	U	1.0	0.11	ug/L			04/20/13 13:42	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/20/13 13:42	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/20/13 13:42	1
Toluene	1.0	U	1.0	0.13	ug/L			04/20/13 13:42	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 13:42	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/20/13 13:42	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/20/13 13:42	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 13:42	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/20/13 13:42	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/20/13 13:42	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/20/13 13:42	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/20/13 13:42	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/20/13 13:42	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 13:42	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 13:42	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/20/13 13:42	1
Methyl acetate	10	U	10	0.38	ug/L			04/20/13 13:42	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/20/13 13:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/20/13 13:42	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 13:42	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 13:42	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/20/13 13:42	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 13:42	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/20/13 13:42	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/20/13 13:42	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/20/13 13:42	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		63 - 129		04/20/13 13:42	1
4-Bromofluorobenzene (Surr)	93		66 - 117		04/20/13 13:42	1
Toluene-d8 (Surr)	86		74 - 115		04/20/13 13:42	1
Dibromofluoromethane (Surr)	91		75 - 121		04/20/13 13:42	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041613-DR-113
Date Collected: 04/16/13 13:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**1.3**	**J**	10	1.1	ug/L			04/20/13 14:05	1
Benzene	1.0	U	1.0	0.13	ug/L			04/20/13 14:05	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/20/13 14:05	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/20/13 14:05	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/20/13 14:05	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/20/13 14:05	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/20/13 14:05	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/20/13 14:05	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 14:05	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/20/13 14:05	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/20/13 14:05	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/20/13 14:05	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/20/13 14:05	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 14:05	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 14:05	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/20/13 14:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/20/13 14:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/20/13 14:05	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/20/13 14:05	1
2-Hexanone	10	U	10	0.41	ug/L			04/20/13 14:05	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/20/13 14:05	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/20/13 14:05	1
Styrene	1.0	U	1.0	0.11	ug/L			04/20/13 14:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/20/13 14:05	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/20/13 14:05	1
Toluene	1.0	U	1.0	0.13	ug/L			04/20/13 14:05	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 14:05	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/20/13 14:05	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/20/13 14:05	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 14:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/20/13 14:05	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/20/13 14:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/20/13 14:05	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/20/13 14:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/20/13 14:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 14:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 14:05	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/20/13 14:05	1
Methyl acetate	10	U	10	0.38	ug/L			04/20/13 14:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/20/13 14:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/20/13 14:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 14:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 14:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/20/13 14:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 14:05	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/20/13 14:05	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/20/13 14:05	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/20/13 14:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		63 - 129		04/20/13 14:05	1
4-Bromofluorobenzene (Surr)	91		66 - 117		04/20/13 14:05	1
Toluene-d8 (Surr)	85		74 - 115		04/20/13 14:05	1
Dibromofluoromethane (Surr)	90		75 - 121		04/20/13 14:05	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041613-DR-114
Date Collected: 04/16/13 13:50
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/20/13 14:28	1
Benzene	1.0	U	1.0	0.13	ug/L			04/20/13 14:28	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/20/13 14:28	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/20/13 14:28	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/20/13 14:28	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/20/13 14:28	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/20/13 14:28	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/20/13 14:28	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 14:28	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/20/13 14:28	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/20/13 14:28	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/20/13 14:28	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/20/13 14:28	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 14:28	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 14:28	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/20/13 14:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/20/13 14:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/20/13 14:28	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/20/13 14:28	1
2-Hexanone	10	U	10	0.41	ug/L			04/20/13 14:28	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/20/13 14:28	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/20/13 14:28	1
Styrene	1.0	U	1.0	0.11	ug/L			04/20/13 14:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/20/13 14:28	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/20/13 14:28	1
Toluene	1.0	U	1.0	0.13	ug/L			04/20/13 14:28	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 14:28	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/20/13 14:28	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/20/13 14:28	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 14:28	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/20/13 14:28	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/20/13 14:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/20/13 14:28	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/20/13 14:28	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/20/13 14:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 14:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 14:28	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/20/13 14:28	1
Methyl acetate	10	U	10	0.38	ug/L			04/20/13 14:28	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/20/13 14:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/20/13 14:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 14:28	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 14:28	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/20/13 14:28	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 14:28	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/20/13 14:28	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/20/13 14:28	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/20/13 14:28	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		63 - 129		04/20/13 14:28	1
4-Bromofluorobenzene (Surr)	87		66 - 117		04/20/13 14:28	1
Toluene-d8 (Surr)	84		74 - 115		04/20/13 14:28	1
Dibromofluoromethane (Surr)	88		75 - 121		04/20/13 14:28	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041613-DR-115
Date Collected: 04/16/13 14:45
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/20/13 14:50	1
Benzene	1.0	U	1.0	0.13	ug/L			04/20/13 14:50	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/20/13 14:50	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/20/13 14:50	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/20/13 14:50	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/20/13 14:50	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/20/13 14:50	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/20/13 14:50	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 14:50	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/20/13 14:50	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/20/13 14:50	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/20/13 14:50	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/20/13 14:50	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 14:50	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 14:50	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/20/13 14:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/20/13 14:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/20/13 14:50	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/20/13 14:50	1
2-Hexanone	10	U	10	0.41	ug/L			04/20/13 14:50	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/20/13 14:50	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/20/13 14:50	1
Styrene	1.0	U	1.0	0.11	ug/L			04/20/13 14:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/20/13 14:50	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/20/13 14:50	1
Toluene	1.0	U	1.0	0.13	ug/L			04/20/13 14:50	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 14:50	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/20/13 14:50	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/20/13 14:50	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 14:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/20/13 14:50	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/20/13 14:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/20/13 14:50	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/20/13 14:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/20/13 14:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 14:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 14:50	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/20/13 14:50	1
Methyl acetate	10	U	10	0.38	ug/L			04/20/13 14:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/20/13 14:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/20/13 14:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 14:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 14:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/20/13 14:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 14:50	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/20/13 14:50	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/20/13 14:50	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/20/13 14:50	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		63 - 129		04/20/13 14:50	1
4-Bromofluorobenzene (Surr)	88		66 - 117		04/20/13 14:50	1
Toluene-d8 (Surr)	85		74 - 115		04/20/13 14:50	1
Dibromofluoromethane (Surr)	91		75 - 121		04/20/13 14:50	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17358-041613
Date Collected: 04/16/13 00:00
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-15
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	1.3	J	10	1.1	ug/L			04/20/13 15:12	1
Benzene	1.0	U	1.0	0.13	ug/L			04/20/13 15:12	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/20/13 15:12	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/20/13 15:12	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/20/13 15:12	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/20/13 15:12	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/20/13 15:12	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/20/13 15:12	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 15:12	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/20/13 15:12	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/20/13 15:12	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/20/13 15:12	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/20/13 15:12	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 15:12	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 15:12	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/20/13 15:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/20/13 15:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/20/13 15:12	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/20/13 15:12	1
2-Hexanone	10	U	10	0.41	ug/L			04/20/13 15:12	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/20/13 15:12	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/20/13 15:12	1
Styrene	1.0	U	1.0	0.11	ug/L			04/20/13 15:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/20/13 15:12	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/20/13 15:12	1
Toluene	1.0	U	1.0	0.13	ug/L			04/20/13 15:12	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 15:12	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/20/13 15:12	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/20/13 15:12	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 15:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/20/13 15:12	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/20/13 15:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/20/13 15:12	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/20/13 15:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/20/13 15:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 15:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 15:12	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/20/13 15:12	1
Methyl acetate	10	U	10	0.38	ug/L			04/20/13 15:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/20/13 15:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/20/13 15:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 15:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 15:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/20/13 15:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 15:12	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/20/13 15:12	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/20/13 15:12	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/20/13 15:12	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		63 - 129		04/20/13 15:12	1
4-Bromofluorobenzene (Surr)	93		66 - 117		04/20/13 15:12	1
Toluene-d8 (Surr)	90		74 - 115		04/20/13 15:12	1
Dibromofluoromethane (Surr)	90		75 - 121		04/20/13 15:12	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041513-DR-102
Date Collected: 04/15/13 08:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.40	ug/L		04/20/13 12:00	04/23/13 17:08	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.30	ug/L		04/20/13 12:00	04/23/13 17:08	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
2,4-Dichlorophenol	10	U	10	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
2,4-Dimethylphenol	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/13 12:00	04/23/13 17:08	1
2,4-Dinitrotoluene	5.1	U	5.1	0.27	ug/L		04/20/13 12:00	04/23/13 17:08	1
2,6-Dinitrotoluene	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
2-Chlorophenol	5.1	U	5.1	0.29	ug/L		04/20/13 12:00	04/23/13 17:08	1
2-Methylnaphthalene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
2-Methylphenol	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
2-Nitroaniline	20	U	20	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
2-Nitrophenol	5.1	U	5.1	0.28	ug/L		04/20/13 12:00	04/23/13 17:08	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/20/13 12:00	04/23/13 17:08	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/20/13 12:00	04/23/13 17:08	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/13 12:00	04/23/13 17:08	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
4-Chloroaniline	10	U	10	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.30	ug/L		04/20/13 12:00	04/23/13 17:08	1
4-Nitroaniline	20	U	20	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/13 12:00	04/23/13 17:08	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Acetophenone	5.1	U	5.1	0.34	ug/L		04/20/13 12:00	04/23/13 17:08	1
Anthracene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/20/13 12:00	04/23/13 17:08	1
Benzaldehyde	5.1	U	5.1	0.39	ug/L		04/20/13 12:00	04/23/13 17:08	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.32	ug/L		04/20/13 12:00	04/23/13 17:08	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
Butyl benzyl phthalate	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
Caprolactam	**2.2**	**J**	10	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
Carbazole	10	U	10	0.28	ug/L		04/20/13 12:00	04/23/13 17:08	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		04/20/13 12:00	04/23/13 17:08	1
Dimethyl phthalate	5.1	U	5.1	0.29	ug/L		04/20/13 12:00	04/23/13 17:08	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		04/20/13 12:00	04/23/13 17:08	1
Di-n-octyl phthalate	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041513-DR-102
Date Collected: 04/15/13 08:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/20/13 12:00	04/23/13 17:08	1
Hexachlorocyclopentadiene	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
Hexachloroethane	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Isophorone	5.1	U	5.1	0.27	ug/L		04/20/13 12:00	04/23/13 17:08	1
Naphthalene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/20/13 12:00	04/23/13 17:08	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:08	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.31	ug/L		04/20/13 12:00	04/23/13 17:08	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		04/20/13 12:00	04/23/13 17:08	1
Phenol	5.1	U	5.1	0.61	ug/L		04/20/13 12:00	04/23/13 17:08	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
Pyrene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:08	1
3 & 4 Methylphenol	5.1	U	5.1	0.76	ug/L		04/20/13 12:00	04/23/13 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*20 - 110*	*04/20/13 12:00*	*04/23/13 17:08*	*1*
2-Fluorophenol (Surr)	*57*		*10 - 110*	*04/20/13 12:00*	*04/23/13 17:08*	*1*
2,4,6-Tribromophenol (Surr)	*28*		*21 - 110*	*04/20/13 12:00*	*04/23/13 17:08*	*1*
Nitrobenzene-d5 (Surr)	*56*		*21 - 110*	*04/20/13 12:00*	*04/23/13 17:08*	*1*
Phenol-d5 (Surr)	*58*		*21 - 110*	*04/20/13 12:00*	*04/23/13 17:08*	*1*
Terphenyl-d14 (Surr)	*53*		*24 - 110*	*04/20/13 12:00*	*04/23/13 17:08*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041513-DR-103
Date Collected: 04/15/13 09:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/20/13 12:00	04/23/13 17:30	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/20/13 12:00	04/23/13 17:30	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
2,4-Dichlorophenol	9.6	U	9.6	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
2,4-Dimethylphenol	4.8	U	4.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/20/13 12:00	04/23/13 17:30	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/20/13 12:00	04/23/13 17:30	1
2,6-Dinitrotoluene	4.8	U	4.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
2-Chloronaphthalene	4.8	U	4.8	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/20/13 12:00	04/23/13 17:30	1
2-Methylnaphthalene	4.8	U	4.8	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
2-Methylphenol	4.8	U	4.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
2-Nitroaniline	19	U	19	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/20/13 12:00	04/23/13 17:30	1
3,3'-Dichlorobenzidine	0.96	U	0.96	0.36	ug/L		04/20/13 12:00	04/23/13 17:30	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/20/13 12:00	04/23/13 17:30	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/20/13 12:00	04/23/13 17:30	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
4-Chloroaniline	9.6	U	9.6	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/20/13 12:00	04/23/13 17:30	1
4-Nitroaniline	19	U	19	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/20/13 12:00	04/23/13 17:30	1
Acenaphthene	4.8	U	4.8	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Acenaphthylene	4.8	U	4.8	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Acetophenone	4.8	U	4.8	0.33	ug/L		04/20/13 12:00	04/23/13 17:30	1
Anthracene	4.8	U	4.8	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Atrazine	2.9	U	2.9	0.33	ug/L		04/20/13 12:00	04/23/13 17:30	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/20/13 12:00	04/23/13 17:30	1
Benzo[a]anthracene	0.96	U	0.96	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Benzo[a]pyrene	0.96	U	0.96	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Benzo[b]fluoranthene	0.96	U	0.96	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Benzo[g,h,i]perylene	0.96	U	0.96	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Benzo[k]fluoranthene	0.96	U	0.96	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.31	ug/L		04/20/13 12:00	04/23/13 17:30	1
Bis(2-chloroethyl)ether	0.96	U	0.96	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
Butyl benzyl phthalate	4.8	U	4.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
Caprolactam	9.6	U	9.6	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
Carbazole	9.6	U	9.6	0.27	ug/L		04/20/13 12:00	04/23/13 17:30	1
Chrysene	0.96	U	0.96	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Dibenzofuran	3.8	U	3.8	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Diethyl phthalate	4.8	U	4.8	0.58	ug/L		04/20/13 12:00	04/23/13 17:30	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/20/13 12:00	04/23/13 17:30	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/20/13 12:00	04/23/13 17:30	1
Di-n-octyl phthalate	4.8	U	4.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
Fluoranthene	0.96	U	0.96	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041513-DR-103
Date Collected: 04/15/13 09:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Hexachlorobenzene	0.19	U	0.19	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Hexachlorobutadiene	0.96	U	0.96	0.26	ug/L		04/20/13 12:00	04/23/13 17:30	1
Hexachlorocyclopentadiene	4.8	U	4.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
Hexachloroethane	4.8	U	4.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/20/13 12:00	04/23/13 17:30	1
Naphthalene	4.8	U	4.8	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/20/13 12:00	04/23/13 17:30	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.77	ug/L		04/20/13 12:00	04/23/13 17:30	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/20/13 12:00	04/23/13 17:30	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/20/13 12:00	04/23/13 17:30	1
Phenol	4.8	U	4.8	0.58	ug/L		04/20/13 12:00	04/23/13 17:30	1
Phenanthrene	1.9	U	1.9	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
Pyrene	4.8	U	4.8	0.096	ug/L		04/20/13 12:00	04/23/13 17:30	1
3 & 4 Methylphenol	4.8	U	4.8	0.72	ug/L		04/20/13 12:00	04/23/13 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*56*		*20 - 110*	*04/20/13 12:00*	*04/23/13 17:30*	*1*
2-Fluorophenol (Surr)	*58*		*10 - 110*	*04/20/13 12:00*	*04/23/13 17:30*	*1*
2,4,6-Tribromophenol (Surr)	*33*		*21 - 110*	*04/20/13 12:00*	*04/23/13 17:30*	*1*
Nitrobenzene-d5 (Surr)	*53*		*21 - 110*	*04/20/13 12:00*	*04/23/13 17:30*	*1*
Phenol-d5 (Surr)	*58*		*21 - 110*	*04/20/13 12:00*	*04/23/13 17:30*	*1*
Terphenyl-d14 (Surr)	*51*		*24 - 110*	*04/20/13 12:00*	*04/23/13 17:30*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041513-DR-104
Date Collected: 04/15/13 09:45
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.40	ug/L		04/20/13 12:00	04/23/13 17:52	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.30	ug/L		04/20/13 12:00	04/23/13 17:52	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
2,4-Dichlorophenol	10	U	10	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
2,4-Dimethylphenol	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/13 12:00	04/23/13 17:52	1
2,4-Dinitrotoluene	5.1	U	5.1	0.27	ug/L		04/20/13 12:00	04/23/13 17:52	1
2,6-Dinitrotoluene	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
2-Chlorophenol	5.1	U	5.1	0.29	ug/L		04/20/13 12:00	04/23/13 17:52	1
2-Methylnaphthalene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
2-Methylphenol	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
2-Nitroaniline	20	U	20	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
2-Nitrophenol	5.1	U	5.1	0.28	ug/L		04/20/13 12:00	04/23/13 17:52	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/20/13 12:00	04/23/13 17:52	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/20/13 12:00	04/23/13 17:52	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/13 12:00	04/23/13 17:52	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
4-Chloroaniline	10	U	10	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.30	ug/L		04/20/13 12:00	04/23/13 17:52	1
4-Nitroaniline	20	U	20	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/13 12:00	04/23/13 17:52	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Acetophenone	5.1	U	5.1	0.34	ug/L		04/20/13 12:00	04/23/13 17:52	1
Anthracene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/20/13 12:00	04/23/13 17:52	1
Benzaldehyde	5.1	U	5.1	0.39	ug/L		04/20/13 12:00	04/23/13 17:52	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.32	ug/L		04/20/13 12:00	04/23/13 17:52	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
Butyl benzyl phthalate	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
Caprolactam	10	U	10	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
Carbazole	10	U	10	0.28	ug/L		04/20/13 12:00	04/23/13 17:52	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		04/20/13 12:00	04/23/13 17:52	1
Dimethyl phthalate	5.1	U	5.1	0.29	ug/L		04/20/13 12:00	04/23/13 17:52	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		04/20/13 12:00	04/23/13 17:52	1
Di-n-octyl phthalate	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041513-DR-104
Date Collected: 04/15/13 09:45
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/20/13 12:00	04/23/13 17:52	1
Hexachlorocyclopentadiene	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
Hexachloroethane	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Isophorone	5.1	U	5.1	0.27	ug/L		04/20/13 12:00	04/23/13 17:52	1
Naphthalene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/20/13 12:00	04/23/13 17:52	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.81	ug/L		04/20/13 12:00	04/23/13 17:52	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.31	ug/L		04/20/13 12:00	04/23/13 17:52	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		04/20/13 12:00	04/23/13 17:52	1
Phenol	5.1	U	5.1	0.61	ug/L		04/20/13 12:00	04/23/13 17:52	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
Pyrene	5.1	U	5.1	0.10	ug/L		04/20/13 12:00	04/23/13 17:52	1
3 & 4 Methylphenol	5.1	U	5.1	0.76	ug/L		04/20/13 12:00	04/23/13 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*20 - 110*	*04/20/13 12:00*	*04/23/13 17:52*	*1*
2-Fluorophenol (Surr)	*62*		*10 - 110*	*04/20/13 12:00*	*04/23/13 17:52*	*1*
2,4,6-Tribromophenol (Surr)	*34*		*21 - 110*	*04/20/13 12:00*	*04/23/13 17:52*	*1*
Nitrobenzene-d5 (Surr)	*55*		*21 - 110*	*04/20/13 12:00*	*04/23/13 17:52*	*1*
Phenol-d5 (Surr)	*61*		*21 - 110*	*04/20/13 12:00*	*04/23/13 17:52*	*1*
Terphenyl-d14 (Surr)	*54*		*24 - 110*	*04/20/13 12:00*	*04/23/13 17:52*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041513-DR-105
Date Collected: 04/15/13 10:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.2	U	5.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
2,2'-oxybis[1-chloropropane]	5.2	U	5.2	0.42	ug/L		04/20/13 12:00	04/23/13 18:14	1
2,4,5-Trichlorophenol	5.2	U	5.2	0.31	ug/L		04/20/13 12:00	04/23/13 18:14	1
2,4,6-Trichlorophenol	4.2	U	4.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
2,4-Dichlorophenol	10	U	10	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
2,4-Dimethylphenol	5.2	U	5.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		04/20/13 12:00	04/23/13 18:14	1
2,4-Dinitrotoluene	5.2	U	5.2	0.28	ug/L		04/20/13 12:00	04/23/13 18:14	1
2,6-Dinitrotoluene	5.2	U	5.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
2-Chloronaphthalene	5.2	U	5.2	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
2-Chlorophenol	5.2	U	5.2	0.30	ug/L		04/20/13 12:00	04/23/13 18:14	1
2-Methylnaphthalene	5.2	U	5.2	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
2-Methylphenol	5.2	U	5.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
2-Nitroaniline	21	U	21	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
2-Nitrophenol	5.2	U	5.2	0.29	ug/L		04/20/13 12:00	04/23/13 18:14	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.39	ug/L		04/20/13 12:00	04/23/13 18:14	1
3-Nitroaniline	21	U	21	0.29	ug/L		04/20/13 12:00	04/23/13 18:14	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		04/20/13 12:00	04/23/13 18:14	1
4-Bromophenyl phenyl ether	5.2	U	5.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
4-Chloro-3-methylphenol	5.2	U	5.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
4-Chloroaniline	10	U	10	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
4-Chlorophenyl phenyl ether	5.2	U	5.2	0.31	ug/L		04/20/13 12:00	04/23/13 18:14	1
4-Nitroaniline	21	U	21	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
4-Nitrophenol	21	U	21	2.5	ug/L		04/20/13 12:00	04/23/13 18:14	1
Acenaphthene	5.2	U	5.2	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Acenaphthylene	5.2	U	5.2	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Acetophenone	5.2	U	5.2	0.35	ug/L		04/20/13 12:00	04/23/13 18:14	1
Anthracene	5.2	U	5.2	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Atrazine	3.1	U	3.1	0.35	ug/L		04/20/13 12:00	04/23/13 18:14	1
Benzaldehyde	5.2	U	5.2	0.41	ug/L		04/20/13 12:00	04/23/13 18:14	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Bis(2-chloroethoxy)methane	5.2	U	5.2	0.33	ug/L		04/20/13 12:00	04/23/13 18:14	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Bis(2-ethylhexyl) phthalate	5.2	U	5.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
Butyl benzyl phthalate	5.2	U	5.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
Caprolactam	**0.96**	**J**	10	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
Carbazole	10	U	10	0.29	ug/L		04/20/13 12:00	04/23/13 18:14	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Dibenzofuran	4.2	U	4.2	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Diethyl phthalate	5.2	U	5.2	0.62	ug/L		04/20/13 12:00	04/23/13 18:14	1
Dimethyl phthalate	5.2	U	5.2	0.30	ug/L		04/20/13 12:00	04/23/13 18:14	1
Di-n-butyl phthalate	5.2	U	5.2	0.70	ug/L		04/20/13 12:00	04/23/13 18:14	1
Di-n-octyl phthalate	5.2	U	5.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041513-DR-105
Date Collected: 04/15/13 10:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.2	U	5.2	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Hexachlorobenzene	0.21	U	0.21	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		04/20/13 12:00	04/23/13 18:14	1
Hexachlorocyclopentadiene	5.2	U	5.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
Hexachloroethane	5.2	U	5.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Isophorone	5.2	U	5.2	0.28	ug/L		04/20/13 12:00	04/23/13 18:14	1
Naphthalene	5.2	U	5.2	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Nitrobenzene	3.1	U	3.1	0.042	ug/L		04/20/13 12:00	04/23/13 18:14	1
N-Nitrosodi-n-propylamine	5.2	U	5.2	0.83	ug/L		04/20/13 12:00	04/23/13 18:14	1
N-Nitrosodiphenylamine	5.2	U	5.2	0.32	ug/L		04/20/13 12:00	04/23/13 18:14	1
Pentachlorophenol	5.2	U	5.2	2.5	ug/L		04/20/13 12:00	04/23/13 18:14	1
Phenol	5.2	U	5.2	0.62	ug/L		04/20/13 12:00	04/23/13 18:14	1
Phenanthrene	2.1	U	2.1	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
Pyrene	5.2	U	5.2	0.10	ug/L		04/20/13 12:00	04/23/13 18:14	1
3 & 4 Methylphenol	5.2	U	5.2	0.78	ug/L		04/20/13 12:00	04/23/13 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*53*		*20 - 110*	*04/20/13 12:00*	*04/23/13 18:14*	*1*
2-Fluorophenol (Surr)	*55*		*10 - 110*	*04/20/13 12:00*	*04/23/13 18:14*	*1*
2,4,6-Tribromophenol (Surr)	*32*		*21 - 110*	*04/20/13 12:00*	*04/23/13 18:14*	*1*
Nitrobenzene-d5 (Surr)	*51*		*21 - 110*	*04/20/13 12:00*	*04/23/13 18:14*	*1*
Phenol-d5 (Surr)	*54*		*21 - 110*	*04/20/13 12:00*	*04/23/13 18:14*	*1*
Terphenyl-d14 (Surr)	*51*		*24 - 110*	*04/20/13 12:00*	*04/23/13 18:14*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041513-DR-106
Date Collected: 04/15/13 11:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
2,2'-oxybis[1-chloropropane]	5.3	U	5.3	0.42	ug/L		04/20/13 12:00	04/23/13 18:35	1
2,4,5-Trichlorophenol	5.3	U	5.3	0.32	ug/L		04/20/13 12:00	04/23/13 18:35	1
2,4,6-Trichlorophenol	4.2	U	4.2	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
2,4-Dichlorophenol	11	U	11	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
2,4-Dimethylphenol	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		04/20/13 12:00	04/23/13 18:35	1
2,4-Dinitrotoluene	5.3	U	5.3	0.28	ug/L		04/20/13 12:00	04/23/13 18:35	1
2,6-Dinitrotoluene	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
2-Chloronaphthalene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
2-Chlorophenol	5.3	U	5.3	0.31	ug/L		04/20/13 12:00	04/23/13 18:35	1
2-Methylnaphthalene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
2-Methylphenol	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
2-Nitroaniline	21	U	21	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
2-Nitrophenol	5.3	U	5.3	0.29	ug/L		04/20/13 12:00	04/23/13 18:35	1
3,3'-Dichlorobenzidine	1.1	U	1.1	0.39	ug/L		04/20/13 12:00	04/23/13 18:35	1
3-Nitroaniline	21	U	21	0.29	ug/L		04/20/13 12:00	04/23/13 18:35	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		04/20/13 12:00	04/23/13 18:35	1
4-Bromophenyl phenyl ether	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
4-Chloro-3-methylphenol	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
4-Chloroaniline	11	U	11	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
4-Chlorophenyl phenyl ether	5.3	U	5.3	0.32	ug/L		04/20/13 12:00	04/23/13 18:35	1
4-Nitroaniline	21	U	21	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
4-Nitrophenol	21	U	21	2.5	ug/L		04/20/13 12:00	04/23/13 18:35	1
Acenaphthene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Acenaphthylene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Acetophenone	5.3	U	5.3	0.36	ug/L		04/20/13 12:00	04/23/13 18:35	1
Anthracene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Atrazine	3.2	U	3.2	0.36	ug/L		04/20/13 12:00	04/23/13 18:35	1
Benzaldehyde	5.3	U	5.3	0.41	ug/L		04/20/13 12:00	04/23/13 18:35	1
Benzo[a]anthracene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Benzo[a]pyrene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Benzo[b]fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Benzo[g,h,i]perylene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Benzo[k]fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Bis(2-chloroethoxy)methane	5.3	U	5.3	0.34	ug/L		04/20/13 12:00	04/23/13 18:35	1
Bis(2-chloroethyl)ether	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Bis(2-ethylhexyl) phthalate	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
Butyl benzyl phthalate	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
Caprolactam	11	U	11	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
Carbazole	11	U	11	0.29	ug/L		04/20/13 12:00	04/23/13 18:35	1
Chrysene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Dibenzofuran	4.2	U	4.2	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Diethyl phthalate	5.3	U	5.3	0.63	ug/L		04/20/13 12:00	04/23/13 18:35	1
Dimethyl phthalate	5.3	U	5.3	0.31	ug/L		04/20/13 12:00	04/23/13 18:35	1
Di-n-butyl phthalate	5.3	U	5.3	0.71	ug/L		04/20/13 12:00	04/23/13 18:35	1
Di-n-octyl phthalate	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
Fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041513-DR-106
Date Collected: 04/15/13 11:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Hexachlorobenzene	0.21	U	0.21	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Hexachlorobutadiene	1.1	U	1.1	0.28	ug/L		04/20/13 12:00	04/23/13 18:35	1
Hexachlorocyclopentadiene	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
Hexachloroethane	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Isophorone	5.3	U	5.3	0.28	ug/L		04/20/13 12:00	04/23/13 18:35	1
Naphthalene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Nitrobenzene	3.2	U	3.2	0.042	ug/L		04/20/13 12:00	04/23/13 18:35	1
N-Nitrosodi-n-propylamine	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:35	1
N-Nitrosodiphenylamine	5.3	U	5.3	0.33	ug/L		04/20/13 12:00	04/23/13 18:35	1
Pentachlorophenol	5.3	U	5.3	2.5	ug/L		04/20/13 12:00	04/23/13 18:35	1
Phenol	5.3	U	5.3	0.63	ug/L		04/20/13 12:00	04/23/13 18:35	1
Phenanthrene	2.1	U	2.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
Pyrene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:35	1
3 & 4 Methylphenol	5.3	U	5.3	0.79	ug/L		04/20/13 12:00	04/23/13 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*56*		*20 - 110*	*04/20/13 12:00*	*04/23/13 18:35*	*1*
2-Fluorophenol (Surr)	*59*		*10 - 110*	*04/20/13 12:00*	*04/23/13 18:35*	*1*
2,4,6-Tribromophenol (Surr)	*32*		*21 - 110*	*04/20/13 12:00*	*04/23/13 18:35*	*1*
Nitrobenzene-d5 (Surr)	*53*		*21 - 110*	*04/20/13 12:00*	*04/23/13 18:35*	*1*
Phenol-d5 (Surr)	*58*		*21 - 110*	*04/20/13 12:00*	*04/23/13 18:35*	*1*
Terphenyl-d14 (Surr)	*52*		*24 - 110*	*04/20/13 12:00*	*04/23/13 18:35*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041513-DR-107
Date Collected: 04/15/13 13:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
2,2'-oxybis[1-chloropropane]	5.3	U	5.3	0.42	ug/L		04/20/13 12:00	04/23/13 18:57	1
2,4,5-Trichlorophenol	5.3	U	5.3	0.32	ug/L		04/20/13 12:00	04/23/13 18:57	1
2,4,6-Trichlorophenol	4.2	U	4.2	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
2,4-Dichlorophenol	11	U	11	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
2,4-Dimethylphenol	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		04/20/13 12:00	04/23/13 18:57	1
2,4-Dinitrotoluene	5.3	U	5.3	0.28	ug/L		04/20/13 12:00	04/23/13 18:57	1
2,6-Dinitrotoluene	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
2-Chloronaphthalene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
2-Chlorophenol	5.3	U	5.3	0.31	ug/L		04/20/13 12:00	04/23/13 18:57	1
2-Methylnaphthalene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
2-Methylphenol	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
2-Nitroaniline	21	U	21	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
2-Nitrophenol	5.3	U	5.3	0.29	ug/L		04/20/13 12:00	04/23/13 18:57	1
3,3'-Dichlorobenzidine	1.1	U	1.1	0.39	ug/L		04/20/13 12:00	04/23/13 18:57	1
3-Nitroaniline	21	U	21	0.29	ug/L		04/20/13 12:00	04/23/13 18:57	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		04/20/13 12:00	04/23/13 18:57	1
4-Bromophenyl phenyl ether	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
4-Chloro-3-methylphenol	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
4-Chloroaniline	11	U	11	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
4-Chlorophenyl phenyl ether	5.3	U	5.3	0.32	ug/L		04/20/13 12:00	04/23/13 18:57	1
4-Nitroaniline	21	U	21	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
4-Nitrophenol	21	U	21	2.5	ug/L		04/20/13 12:00	04/23/13 18:57	1
Acenaphthene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Acenaphthylene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Acetophenone	5.3	U	5.3	0.36	ug/L		04/20/13 12:00	04/23/13 18:57	1
Anthracene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Atrazine	3.2	U	3.2	0.36	ug/L		04/20/13 12:00	04/23/13 18:57	1
Benzaldehyde	5.3	U	5.3	0.41	ug/L		04/20/13 12:00	04/23/13 18:57	1
Benzo[a]anthracene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Benzo[a]pyrene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Benzo[b]fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Benzo[g,h,i]perylene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Benzo[k]fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Bis(2-chloroethoxy)methane	5.3	U	5.3	0.34	ug/L		04/20/13 12:00	04/23/13 18:57	1
Bis(2-chloroethyl)ether	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Bis(2-ethylhexyl) phthalate	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
Butyl benzyl phthalate	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
Caprolactam	11	U	11	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
Carbazole	11	U	11	0.29	ug/L		04/20/13 12:00	04/23/13 18:57	1
Chrysene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Dibenzofuran	4.2	U	4.2	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Diethyl phthalate	5.3	U	5.3	0.63	ug/L		04/20/13 12:00	04/23/13 18:57	1
Dimethyl phthalate	5.3	U	5.3	0.31	ug/L		04/20/13 12:00	04/23/13 18:57	1
Di-n-butyl phthalate	5.3	U	5.3	0.71	ug/L		04/20/13 12:00	04/23/13 18:57	1
Di-n-octyl phthalate	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
Fluoranthene	1.1	U	1.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041513-DR-107
Date Collected: 04/15/13 13:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Hexachlorobenzene	0.21	U	0.21	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Hexachlorobutadiene	1.1	U	1.1	0.28	ug/L		04/20/13 12:00	04/23/13 18:57	1
Hexachlorocyclopentadiene	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
Hexachloroethane	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Isophorone	5.3	U	5.3	0.28	ug/L		04/20/13 12:00	04/23/13 18:57	1
Naphthalene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Nitrobenzene	3.2	U	3.2	0.042	ug/L		04/20/13 12:00	04/23/13 18:57	1
N-Nitrosodi-n-propylamine	5.3	U	5.3	0.84	ug/L		04/20/13 12:00	04/23/13 18:57	1
N-Nitrosodiphenylamine	5.3	U	5.3	0.33	ug/L		04/20/13 12:00	04/23/13 18:57	1
Pentachlorophenol	5.3	U	5.3	2.5	ug/L		04/20/13 12:00	04/23/13 18:57	1
Phenol	5.3	U	5.3	0.63	ug/L		04/20/13 12:00	04/23/13 18:57	1
Phenanthrene	2.1	U	2.1	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
Pyrene	5.3	U	5.3	0.11	ug/L		04/20/13 12:00	04/23/13 18:57	1
3 & 4 Methylphenol	5.3	U	5.3	0.79	ug/L		04/20/13 12:00	04/23/13 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*54*		*20 - 110*	*04/20/13 12:00*	*04/23/13 18:57*	*1*
2-Fluorophenol (Surr)	*53*		*10 - 110*	*04/20/13 12:00*	*04/23/13 18:57*	*1*
2,4,6-Tribromophenol (Surr)	*42*		*21 - 110*	*04/20/13 12:00*	*04/23/13 18:57*	*1*
Nitrobenzene-d5 (Surr)	*50*		*21 - 110*	*04/20/13 12:00*	*04/23/13 18:57*	*1*
Phenol-d5 (Surr)	*53*		*21 - 110*	*04/20/13 12:00*	*04/23/13 18:57*	*1*
Terphenyl-d14 (Surr)	*50*		*24 - 110*	*04/20/13 12:00*	*04/23/13 18:57*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041613-DR-108
Date Collected: 04/16/13 09:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/22/13 08:00	04/24/13 12:52	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/22/13 08:00	04/24/13 12:52	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/22/13 08:00	04/24/13 12:52	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/22/13 08:00	04/24/13 12:52	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/22/13 08:00	04/24/13 12:52	1
2-Methylnaphthalene	**0.22**	**J**	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
2-Nitroaniline	19	U	19	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/22/13 08:00	04/24/13 12:52	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		04/22/13 08:00	04/24/13 12:52	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/22/13 08:00	04/24/13 12:52	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/22/13 08:00	04/24/13 12:52	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/22/13 08:00	04/24/13 12:52	1
4-Nitroaniline	19	U	19	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/22/13 08:00	04/24/13 12:52	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Acetophenone	4.8	U	4.8	0.32	ug/L		04/22/13 08:00	04/24/13 12:52	1
Anthracene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Atrazine	2.9	U	2.9	0.32	ug/L		04/22/13 08:00	04/24/13 12:52	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/22/13 08:00	04/24/13 12:52	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		04/22/13 08:00	04/24/13 12:52	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
Caprolactam	9.5	U	9.5	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
Carbazole	9.5	U	9.5	0.27	ug/L		04/22/13 08:00	04/24/13 12:52	1
Chrysene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		04/22/13 08:00	04/24/13 12:52	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/22/13 08:00	04/24/13 12:52	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/22/13 08:00	04/24/13 12:52	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041613-DR-108
Date Collected: 04/16/13 09:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**0.69**	**J**	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		04/22/13 08:00	04/24/13 12:52	1
Hexachlorocyclopentadiene	4.8	U *	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/22/13 08:00	04/24/13 12:52	1
Naphthalene	**0.28**	**J**	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/22/13 08:00	04/24/13 12:52	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 12:52	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/22/13 08:00	04/24/13 12:52	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/22/13 08:00	04/24/13 12:52	1
Phenol	4.8	U	4.8	0.57	ug/L		04/22/13 08:00	04/24/13 12:52	1
Phenanthrene	**1.9**		1.9	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
Pyrene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 12:52	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		04/22/13 08:00	04/24/13 12:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*62*		*20 - 110*	*04/22/13 08:00*	*04/24/13 12:52*	*1*
2-Fluorophenol (Surr)	*74*		*10 - 110*	*04/22/13 08:00*	*04/24/13 12:52*	*1*
2,4,6-Tribromophenol (Surr)	*79*		*21 - 110*	*04/22/13 08:00*	*04/24/13 12:52*	*1*
Nitrobenzene-d5 (Surr)	*68*		*21 - 110*	*04/22/13 08:00*	*04/24/13 12:52*	*1*
Phenol-d5 (Surr)	*75*		*21 - 110*	*04/22/13 08:00*	*04/24/13 12:52*	*1*
Terphenyl-d14 (Surr)	*28*		*24 - 110*	*04/22/13 08:00*	*04/24/13 12:52*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041613-DR-109
Date Collected: 04/16/13 09:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.40	ug/L		04/22/13 08:00	04/24/13 16:36	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.30	ug/L		04/22/13 08:00	04/24/13 16:36	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
2,4-Dichlorophenol	10	U	10	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
2,4-Dimethylphenol	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/22/13 08:00	04/24/13 16:36	1
2,4-Dinitrotoluene	5.1	U	5.1	0.27	ug/L		04/22/13 08:00	04/24/13 16:36	1
2,6-Dinitrotoluene	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
2-Chlorophenol	5.1	U	5.1	0.29	ug/L		04/22/13 08:00	04/24/13 16:36	1
2-Methylnaphthalene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
2-Methylphenol	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
2-Nitroaniline	20	U	20	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
2-Nitrophenol	5.1	U	5.1	0.28	ug/L		04/22/13 08:00	04/24/13 16:36	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/22/13 08:00	04/24/13 16:36	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/22/13 08:00	04/24/13 16:36	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/22/13 08:00	04/24/13 16:36	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
4-Chloroaniline	10	U	10	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.30	ug/L		04/22/13 08:00	04/24/13 16:36	1
4-Nitroaniline	20	U	20	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/22/13 08:00	04/24/13 16:36	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Acetophenone	5.1	U	5.1	0.34	ug/L		04/22/13 08:00	04/24/13 16:36	1
Anthracene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/22/13 08:00	04/24/13 16:36	1
Benzaldehyde	5.1	U	5.1	0.39	ug/L		04/22/13 08:00	04/24/13 16:36	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.32	ug/L		04/22/13 08:00	04/24/13 16:36	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
Butyl benzyl phthalate	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
Caprolactam	10	U	10	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
Carbazole	10	U	10	0.28	ug/L		04/22/13 08:00	04/24/13 16:36	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		04/22/13 08:00	04/24/13 16:36	1
Dimethyl phthalate	5.1	U	5.1	0.29	ug/L		04/22/13 08:00	04/24/13 16:36	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		04/22/13 08:00	04/24/13 16:36	1
Di-n-octyl phthalate	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041613-DR-109
Date Collected: 04/16/13 09:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/22/13 08:00	04/24/13 16:36	1
Hexachlorocyclopentadiene	5.1	U *	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
Hexachloroethane	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Isophorone	5.1	U	5.1	0.27	ug/L		04/22/13 08:00	04/24/13 16:36	1
Naphthalene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/22/13 08:00	04/24/13 16:36	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:36	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.31	ug/L		04/22/13 08:00	04/24/13 16:36	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		04/22/13 08:00	04/24/13 16:36	1
Phenol	5.1	U	5.1	0.61	ug/L		04/22/13 08:00	04/24/13 16:36	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
Pyrene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:36	1
3 & 4 Methylphenol	5.1	U	5.1	0.76	ug/L		04/22/13 08:00	04/24/13 16:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*61*		*20 - 110*	*04/22/13 08:00*	*04/24/13 16:36*	*1*
2-Fluorophenol (Surr)	*65*		*10 - 110*	*04/22/13 08:00*	*04/24/13 16:36*	*1*
2,4,6-Tribromophenol (Surr)	*67*		*21 - 110*	*04/22/13 08:00*	*04/24/13 16:36*	*1*
Nitrobenzene-d5 (Surr)	*59*		*21 - 110*	*04/22/13 08:00*	*04/24/13 16:36*	*1*
Phenol-d5 (Surr)	*66*		*21 - 110*	*04/22/13 08:00*	*04/24/13 16:36*	*1*
Terphenyl-d14 (Surr)	*55*		*24 - 110*	*04/22/13 08:00*	*04/24/13 16:36*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041613-DR-110
Date Collected: 04/16/13 09:25
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.40	ug/L		04/22/13 08:00	04/24/13 16:58	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.30	ug/L		04/22/13 08:00	04/24/13 16:58	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
2,4-Dichlorophenol	10	U	10	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
2,4-Dimethylphenol	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/22/13 08:00	04/24/13 16:58	1
2,4-Dinitrotoluene	5.1	U	5.1	0.27	ug/L		04/22/13 08:00	04/24/13 16:58	1
2,6-Dinitrotoluene	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
2-Chlorophenol	5.1	U	5.1	0.29	ug/L		04/22/13 08:00	04/24/13 16:58	1
2-Methylnaphthalene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
2-Methylphenol	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
2-Nitroaniline	20	U	20	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
2-Nitrophenol	5.1	U	5.1	0.28	ug/L		04/22/13 08:00	04/24/13 16:58	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/22/13 08:00	04/24/13 16:58	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/22/13 08:00	04/24/13 16:58	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/22/13 08:00	04/24/13 16:58	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
4-Chloroaniline	10	U	10	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.30	ug/L		04/22/13 08:00	04/24/13 16:58	1
4-Nitroaniline	20	U	20	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/22/13 08:00	04/24/13 16:58	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Acetophenone	5.1	U	5.1	0.34	ug/L		04/22/13 08:00	04/24/13 16:58	1
Anthracene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/22/13 08:00	04/24/13 16:58	1
Benzaldehyde	5.1	U	5.1	0.39	ug/L		04/22/13 08:00	04/24/13 16:58	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.32	ug/L		04/22/13 08:00	04/24/13 16:58	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
Butyl benzyl phthalate	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
Caprolactam	10	U	10	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
Carbazole	10	U	10	0.28	ug/L		04/22/13 08:00	04/24/13 16:58	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		04/22/13 08:00	04/24/13 16:58	1
Dimethyl phthalate	5.1	U	5.1	0.29	ug/L		04/22/13 08:00	04/24/13 16:58	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		04/22/13 08:00	04/24/13 16:58	1
Di-n-octyl phthalate	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041613-DR-110
Date Collected: 04/16/13 09:25
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/22/13 08:00	04/24/13 16:58	1
Hexachlorocyclopentadiene	5.1	U *	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
Hexachloroethane	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Isophorone	5.1	U	5.1	0.27	ug/L		04/22/13 08:00	04/24/13 16:58	1
Naphthalene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/22/13 08:00	04/24/13 16:58	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.81	ug/L		04/22/13 08:00	04/24/13 16:58	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.31	ug/L		04/22/13 08:00	04/24/13 16:58	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		04/22/13 08:00	04/24/13 16:58	1
Phenol	5.1	U	5.1	0.61	ug/L		04/22/13 08:00	04/24/13 16:58	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
Pyrene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 16:58	1
3 & 4 Methylphenol	5.1	U	5.1	0.76	ug/L		04/22/13 08:00	04/24/13 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*55*		*20 - 110*	*04/22/13 08:00*	*04/24/13 16:58*	*1*
2-Fluorophenol (Surr)	*56*		*10 - 110*	*04/22/13 08:00*	*04/24/13 16:58*	*1*
2,4,6-Tribromophenol (Surr)	*65*		*21 - 110*	*04/22/13 08:00*	*04/24/13 16:58*	*1*
Nitrobenzene-d5 (Surr)	*52*		*21 - 110*	*04/22/13 08:00*	*04/24/13 16:58*	*1*
Phenol-d5 (Surr)	*57*		*21 - 110*	*04/22/13 08:00*	*04/24/13 16:58*	*1*
Terphenyl-d14 (Surr)	*52*		*24 - 110*	*04/22/13 08:00*	*04/24/13 16:58*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041613-DR-111
Date Collected: 04/16/13 10:55
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/22/13 08:00	04/24/13 17:20	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/22/13 08:00	04/24/13 17:20	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/22/13 08:00	04/24/13 17:20	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/22/13 08:00	04/24/13 17:20	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/22/13 08:00	04/24/13 17:20	1
2-Methylnaphthalene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
2-Nitroaniline	19	U	19	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/22/13 08:00	04/24/13 17:20	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		04/22/13 08:00	04/24/13 17:20	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/22/13 08:00	04/24/13 17:20	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/22/13 08:00	04/24/13 17:20	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/22/13 08:00	04/24/13 17:20	1
4-Nitroaniline	19	U	19	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/22/13 08:00	04/24/13 17:20	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Acetophenone	4.8	U	4.8	0.32	ug/L		04/22/13 08:00	04/24/13 17:20	1
Anthracene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Atrazine	2.9	U	2.9	0.32	ug/L		04/22/13 08:00	04/24/13 17:20	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/22/13 08:00	04/24/13 17:20	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		04/22/13 08:00	04/24/13 17:20	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
Caprolactam	9.5	U	9.5	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
Carbazole	9.5	U	9.5	0.27	ug/L		04/22/13 08:00	04/24/13 17:20	1
Chrysene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		04/22/13 08:00	04/24/13 17:20	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/22/13 08:00	04/24/13 17:20	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/22/13 08:00	04/24/13 17:20	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041613-DR-111
Date Collected: 04/16/13 10:55
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		04/22/13 08:00	04/24/13 17:20	1
Hexachlorocyclopentadiene	4.8	U *	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/22/13 08:00	04/24/13 17:20	1
Naphthalene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/22/13 08:00	04/24/13 17:20	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 17:20	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/22/13 08:00	04/24/13 17:20	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/22/13 08:00	04/24/13 17:20	1
Phenol	4.8	U	4.8	0.57	ug/L		04/22/13 08:00	04/24/13 17:20	1
Phenanthrene	1.9	U	1.9	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
Pyrene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 17:20	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		04/22/13 08:00	04/24/13 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*20 - 110*	*04/22/13 08:00*	*04/24/13 17:20*	*1*
2-Fluorophenol (Surr)	*57*		*10 - 110*	*04/22/13 08:00*	*04/24/13 17:20*	*1*
2,4,6-Tribromophenol (Surr)	*60*		*21 - 110*	*04/22/13 08:00*	*04/24/13 17:20*	*1*
Nitrobenzene-d5 (Surr)	*55*		*21 - 110*	*04/22/13 08:00*	*04/24/13 17:20*	*1*
Phenol-d5 (Surr)	*59*		*21 - 110*	*04/22/13 08:00*	*04/24/13 17:20*	*1*
Terphenyl-d14 (Surr)	*51*		*24 - 110*	*04/22/13 08:00*	*04/24/13 17:20*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041613-DR-112
Date Collected: 04/16/13 11:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.41	ug/L		04/22/13 08:00	04/24/13 17:41	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.31	ug/L		04/22/13 08:00	04/24/13 17:41	1
2,4,6-Trichlorophenol	4.1	U	4.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
2,4-Dichlorophenol	10	U	10	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
2,4-Dimethylphenol	5.1	U	5.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/22/13 08:00	04/24/13 17:41	1
2,4-Dinitrotoluene	5.1	U	5.1	0.28	ug/L		04/22/13 08:00	04/24/13 17:41	1
2,6-Dinitrotoluene	5.1	U	5.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
2-Chlorophenol	5.1	U	5.1	0.30	ug/L		04/22/13 08:00	04/24/13 17:41	1
2-Methylnaphthalene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
2-Methylphenol	5.1	U	5.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
2-Nitroaniline	20	U	20	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
2-Nitrophenol	5.1	U	5.1	0.29	ug/L		04/22/13 08:00	04/24/13 17:41	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.38	ug/L		04/22/13 08:00	04/24/13 17:41	1
3-Nitroaniline	20	U	20	0.29	ug/L		04/22/13 08:00	04/24/13 17:41	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/22/13 08:00	04/24/13 17:41	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
4-Chloroaniline	10	U	10	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.31	ug/L		04/22/13 08:00	04/24/13 17:41	1
4-Nitroaniline	20	U	20	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/22/13 08:00	04/24/13 17:41	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Acetophenone	5.1	U	5.1	0.35	ug/L		04/22/13 08:00	04/24/13 17:41	1
Anthracene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Atrazine	3.1	U	3.1	0.35	ug/L		04/22/13 08:00	04/24/13 17:41	1
Benzaldehyde	5.1	U	5.1	0.40	ug/L		04/22/13 08:00	04/24/13 17:41	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.33	ug/L		04/22/13 08:00	04/24/13 17:41	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
Butyl benzyl phthalate	5.1	U	5.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
Caprolactam	10	U	10	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
Carbazole	10	U	10	0.29	ug/L		04/22/13 08:00	04/24/13 17:41	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Dibenzofuran	4.1	U	4.1	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		04/22/13 08:00	04/24/13 17:41	1
Dimethyl phthalate	5.1	U	5.1	0.30	ug/L		04/22/13 08:00	04/24/13 17:41	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		04/22/13 08:00	04/24/13 17:41	1
Di-n-octyl phthalate	5.1	U	5.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041613-DR-112
Date Collected: 04/16/13 11:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		04/22/13 08:00	04/24/13 17:41	1
Hexachlorocyclopentadiene	5.1	U *	5.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
Hexachloroethane	5.1	U	5.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Isophorone	5.1	U	5.1	0.28	ug/L		04/22/13 08:00	04/24/13 17:41	1
Naphthalene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Nitrobenzene	3.1	U	3.1	0.041	ug/L		04/22/13 08:00	04/24/13 17:41	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.82	ug/L		04/22/13 08:00	04/24/13 17:41	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.32	ug/L		04/22/13 08:00	04/24/13 17:41	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		04/22/13 08:00	04/24/13 17:41	1
Phenol	5.1	U	5.1	0.61	ug/L		04/22/13 08:00	04/24/13 17:41	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
Pyrene	5.1	U	5.1	0.10	ug/L		04/22/13 08:00	04/24/13 17:41	1
3 & 4 Methylphenol	5.1	U	5.1	0.77	ug/L		04/22/13 08:00	04/24/13 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*20 - 110*	*04/22/13 08:00*	*04/24/13 17:41*	*1*
2-Fluorophenol (Surr)	*59*		*10 - 110*	*04/22/13 08:00*	*04/24/13 17:41*	*1*
2,4,6-Tribromophenol (Surr)	*62*		*21 - 110*	*04/22/13 08:00*	*04/24/13 17:41*	*1*
Nitrobenzene-d5 (Surr)	*55*		*21 - 110*	*04/22/13 08:00*	*04/24/13 17:41*	*1*
Phenol-d5 (Surr)	*60*		*21 - 110*	*04/22/13 08:00*	*04/24/13 17:41*	*1*
Terphenyl-d14 (Surr)	*52*		*24 - 110*	*04/22/13 08:00*	*04/24/13 17:41*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041613-DR-113
Date Collected: 04/16/13 13:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.2	U	5.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
2,2'-oxybis[1-chloropropane]	5.2	U	5.2	0.42	ug/L		04/22/13 08:00	04/24/13 18:03	1
2,4,5-Trichlorophenol	5.2	U	5.2	0.31	ug/L		04/22/13 08:00	04/24/13 18:03	1
2,4,6-Trichlorophenol	4.2	U	4.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
2,4-Dichlorophenol	10	U	10	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
2,4-Dimethylphenol	5.2	U	5.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		04/22/13 08:00	04/24/13 18:03	1
2,4-Dinitrotoluene	5.2	U	5.2	0.28	ug/L		04/22/13 08:00	04/24/13 18:03	1
2,6-Dinitrotoluene	5.2	U	5.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
2-Chloronaphthalene	5.2	U	5.2	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
2-Chlorophenol	5.2	U	5.2	0.30	ug/L		04/22/13 08:00	04/24/13 18:03	1
2-Methylnaphthalene	5.2	U	5.2	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
2-Methylphenol	5.2	U	5.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
2-Nitroaniline	21	U	21	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
2-Nitrophenol	5.2	U	5.2	0.29	ug/L		04/22/13 08:00	04/24/13 18:03	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.39	ug/L		04/22/13 08:00	04/24/13 18:03	1
3-Nitroaniline	21	U	21	0.29	ug/L		04/22/13 08:00	04/24/13 18:03	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		04/22/13 08:00	04/24/13 18:03	1
4-Bromophenyl phenyl ether	5.2	U	5.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
4-Chloro-3-methylphenol	5.2	U	5.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
4-Chloroaniline	10	U	10	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
4-Chlorophenyl phenyl ether	5.2	U	5.2	0.31	ug/L		04/22/13 08:00	04/24/13 18:03	1
4-Nitroaniline	21	U	21	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
4-Nitrophenol	21	U	21	2.5	ug/L		04/22/13 08:00	04/24/13 18:03	1
Acenaphthene	5.2	U	5.2	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Acenaphthylene	5.2	U	5.2	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Acetophenone	5.2	U	5.2	0.35	ug/L		04/22/13 08:00	04/24/13 18:03	1
Anthracene	5.2	U	5.2	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Atrazine	3.1	U	3.1	0.35	ug/L		04/22/13 08:00	04/24/13 18:03	1
Benzaldehyde	5.2	U	5.2	0.41	ug/L		04/22/13 08:00	04/24/13 18:03	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Bis(2-chloroethoxy)methane	5.2	U	5.2	0.33	ug/L		04/22/13 08:00	04/24/13 18:03	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Bis(2-ethylhexyl) phthalate	5.2	U	5.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
Butyl benzyl phthalate	5.2	U	5.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
Caprolactam	10	U	10	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
Carbazole	10	U	10	0.29	ug/L		04/22/13 08:00	04/24/13 18:03	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Dibenzofuran	4.2	U	4.2	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Diethyl phthalate	5.2	U	5.2	0.62	ug/L		04/22/13 08:00	04/24/13 18:03	1
Dimethyl phthalate	5.2	U	5.2	0.30	ug/L		04/22/13 08:00	04/24/13 18:03	1
Di-n-butyl phthalate	5.2	U	5.2	0.70	ug/L		04/22/13 08:00	04/24/13 18:03	1
Di-n-octyl phthalate	5.2	U	5.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041613-DR-113
Date Collected: 04/16/13 13:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.2	U	5.2	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Hexachlorobenzene	0.21	U	0.21	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		04/22/13 08:00	04/24/13 18:03	1
Hexachlorocyclopentadiene	5.2	U *	5.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
Hexachloroethane	5.2	U	5.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Isophorone	5.2	U	5.2	0.28	ug/L		04/22/13 08:00	04/24/13 18:03	1
Naphthalene	5.2	U	5.2	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Nitrobenzene	3.1	U	3.1	0.042	ug/L		04/22/13 08:00	04/24/13 18:03	1
N-Nitrosodi-n-propylamine	5.2	U	5.2	0.83	ug/L		04/22/13 08:00	04/24/13 18:03	1
N-Nitrosodiphenylamine	5.2	U	5.2	0.32	ug/L		04/22/13 08:00	04/24/13 18:03	1
Pentachlorophenol	5.2	U	5.2	2.5	ug/L		04/22/13 08:00	04/24/13 18:03	1
Phenol	5.2	U	5.2	0.62	ug/L		04/22/13 08:00	04/24/13 18:03	1
Phenanthrene	2.1	U	2.1	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
Pyrene	5.2	U	5.2	0.10	ug/L		04/22/13 08:00	04/24/13 18:03	1
3 & 4 Methylphenol	5.2	U	5.2	0.78	ug/L		04/22/13 08:00	04/24/13 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*59*		*20 - 110*	*04/22/13 08:00*	*04/24/13 18:03*	*1*
2-Fluorophenol (Surr)	*58*		*10 - 110*	*04/22/13 08:00*	*04/24/13 18:03*	*1*
2,4,6-Tribromophenol (Surr)	*62*		*21 - 110*	*04/22/13 08:00*	*04/24/13 18:03*	*1*
Nitrobenzene-d5 (Surr)	*56*		*21 - 110*	*04/22/13 08:00*	*04/24/13 18:03*	*1*
Phenol-d5 (Surr)	*60*		*21 - 110*	*04/22/13 08:00*	*04/24/13 18:03*	*1*
Terphenyl-d14 (Surr)	*53*		*24 - 110*	*04/22/13 08:00*	*04/24/13 18:03*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041613-DR-114
Date Collected: 04/16/13 13:50
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/22/13 08:00	04/24/13 18:25	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/22/13 08:00	04/24/13 18:25	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/22/13 08:00	04/24/13 18:25	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/22/13 08:00	04/24/13 18:25	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/22/13 08:00	04/24/13 18:25	1
2-Methylnaphthalene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
2-Nitroaniline	19	U	19	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/22/13 08:00	04/24/13 18:25	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		04/22/13 08:00	04/24/13 18:25	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/22/13 08:00	04/24/13 18:25	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/22/13 08:00	04/24/13 18:25	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/22/13 08:00	04/24/13 18:25	1
4-Nitroaniline	19	U	19	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/22/13 08:00	04/24/13 18:25	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Acetophenone	4.8	U	4.8	0.32	ug/L		04/22/13 08:00	04/24/13 18:25	1
Anthracene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Atrazine	2.9	U	2.9	0.32	ug/L		04/22/13 08:00	04/24/13 18:25	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/22/13 08:00	04/24/13 18:25	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		04/22/13 08:00	04/24/13 18:25	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
Caprolactam	9.5	U	9.5	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
Carbazole	9.5	U	9.5	0.27	ug/L		04/22/13 08:00	04/24/13 18:25	1
Chrysene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		04/22/13 08:00	04/24/13 18:25	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/22/13 08:00	04/24/13 18:25	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/22/13 08:00	04/24/13 18:25	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041613-DR-114
Date Collected: 04/16/13 13:50
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		04/22/13 08:00	04/24/13 18:25	1
Hexachlorocyclopentadiene	4.8	U *	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/22/13 08:00	04/24/13 18:25	1
Naphthalene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/22/13 08:00	04/24/13 18:25	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:25	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/22/13 08:00	04/24/13 18:25	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/22/13 08:00	04/24/13 18:25	1
Phenol	4.8	U	4.8	0.57	ug/L		04/22/13 08:00	04/24/13 18:25	1
Phenanthrene	1.9	U	1.9	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
Pyrene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:25	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		04/22/13 08:00	04/24/13 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*20 - 110*	*04/22/13 08:00*	*04/24/13 18:25*	*1*
2-Fluorophenol (Surr)	*60*		*10 - 110*	*04/22/13 08:00*	*04/24/13 18:25*	*1*
2,4,6-Tribromophenol (Surr)	*58*		*21 - 110*	*04/22/13 08:00*	*04/24/13 18:25*	*1*
Nitrobenzene-d5 (Surr)	*55*		*21 - 110*	*04/22/13 08:00*	*04/24/13 18:25*	*1*
Phenol-d5 (Surr)	*60*		*21 - 110*	*04/22/13 08:00*	*04/24/13 18:25*	*1*
Terphenyl-d14 (Surr)	*53*		*24 - 110*	*04/22/13 08:00*	*04/24/13 18:25*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041613-DR-115
Date Collected: 04/16/13 14:45
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
2,2'-oxybis[1-chloropropane]	4.8	U	4.8	0.38	ug/L		04/22/13 08:00	04/24/13 18:47	1
2,4,5-Trichlorophenol	4.8	U	4.8	0.29	ug/L		04/22/13 08:00	04/24/13 18:47	1
2,4,6-Trichlorophenol	3.8	U	3.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
2,4-Dichlorophenol	9.5	U	9.5	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
2,4-Dimethylphenol	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
2,4-Dinitrophenol	19	U	19	2.3	ug/L		04/22/13 08:00	04/24/13 18:47	1
2,4-Dinitrotoluene	4.8	U	4.8	0.26	ug/L		04/22/13 08:00	04/24/13 18:47	1
2,6-Dinitrotoluene	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
2-Chloronaphthalene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
2-Chlorophenol	4.8	U	4.8	0.28	ug/L		04/22/13 08:00	04/24/13 18:47	1
2-Methylnaphthalene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
2-Methylphenol	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
2-Nitroaniline	19	U	19	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
2-Nitrophenol	4.8	U	4.8	0.27	ug/L		04/22/13 08:00	04/24/13 18:47	1
3,3'-Dichlorobenzidine	0.95	U	0.95	0.35	ug/L		04/22/13 08:00	04/24/13 18:47	1
3-Nitroaniline	19	U	19	0.27	ug/L		04/22/13 08:00	04/24/13 18:47	1
4,6-Dinitro-2-methylphenol	19	U	19	2.3	ug/L		04/22/13 08:00	04/24/13 18:47	1
4-Bromophenyl phenyl ether	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
4-Chloro-3-methylphenol	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
4-Chloroaniline	9.5	U	9.5	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
4-Chlorophenyl phenyl ether	4.8	U	4.8	0.29	ug/L		04/22/13 08:00	04/24/13 18:47	1
4-Nitroaniline	19	U	19	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
4-Nitrophenol	19	U	19	2.3	ug/L		04/22/13 08:00	04/24/13 18:47	1
Acenaphthene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Acenaphthylene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Acetophenone	4.8	U	4.8	0.32	ug/L		04/22/13 08:00	04/24/13 18:47	1
Anthracene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Atrazine	2.9	U	2.9	0.32	ug/L		04/22/13 08:00	04/24/13 18:47	1
Benzaldehyde	4.8	U	4.8	0.37	ug/L		04/22/13 08:00	04/24/13 18:47	1
Benzo[a]anthracene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Benzo[a]pyrene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Benzo[b]fluoranthene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Benzo[g,h,i]perylene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Benzo[k]fluoranthene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Bis(2-chloroethoxy)methane	4.8	U	4.8	0.30	ug/L		04/22/13 08:00	04/24/13 18:47	1
Bis(2-chloroethyl)ether	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Bis(2-ethylhexyl) phthalate	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
Butyl benzyl phthalate	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
Caprolactam	9.5	U	9.5	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
Carbazole	9.5	U	9.5	0.27	ug/L		04/22/13 08:00	04/24/13 18:47	1
Chrysene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Dibenz(a,h)anthracene	1.9	U	1.9	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Dibenzofuran	3.8	U	3.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Diethyl phthalate	4.8	U	4.8	0.57	ug/L		04/22/13 08:00	04/24/13 18:47	1
Dimethyl phthalate	4.8	U	4.8	0.28	ug/L		04/22/13 08:00	04/24/13 18:47	1
Di-n-butyl phthalate	4.8	U	4.8	0.64	ug/L		04/22/13 08:00	04/24/13 18:47	1
Di-n-octyl phthalate	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
Fluoranthene	0.95	U	0.95	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041613-DR-115
Date Collected: 04/16/13 14:45
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Hexachlorobenzene	0.19	U	0.19	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Hexachlorobutadiene	0.95	U	0.95	0.26	ug/L		04/22/13 08:00	04/24/13 18:47	1
Hexachlorocyclopentadiene	4.8	U *	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
Hexachloroethane	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
Indeno[1,2,3-cd]pyrene	1.9	U	1.9	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Isophorone	4.8	U	4.8	0.26	ug/L		04/22/13 08:00	04/24/13 18:47	1
Naphthalene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Nitrobenzene	2.9	U	2.9	0.038	ug/L		04/22/13 08:00	04/24/13 18:47	1
N-Nitrosodi-n-propylamine	4.8	U	4.8	0.76	ug/L		04/22/13 08:00	04/24/13 18:47	1
N-Nitrosodiphenylamine	4.8	U	4.8	0.30	ug/L		04/22/13 08:00	04/24/13 18:47	1
Pentachlorophenol	4.8	U	4.8	2.3	ug/L		04/22/13 08:00	04/24/13 18:47	1
Phenol	4.8	U	4.8	0.57	ug/L		04/22/13 08:00	04/24/13 18:47	1
Phenanthrene	1.9	U	1.9	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
Pyrene	4.8	U	4.8	0.095	ug/L		04/22/13 08:00	04/24/13 18:47	1
3 & 4 Methylphenol	4.8	U	4.8	0.71	ug/L		04/22/13 08:00	04/24/13 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*58*		*20 - 110*	*04/22/13 08:00*	*04/24/13 18:47*	*1*
2-Fluorophenol (Surr)	*63*		*10 - 110*	*04/22/13 08:00*	*04/24/13 18:47*	*1*
2,4,6-Tribromophenol (Surr)	*59*		*21 - 110*	*04/22/13 08:00*	*04/24/13 18:47*	*1*
Nitrobenzene-d5 (Surr)	*58*		*21 - 110*	*04/22/13 08:00*	*04/24/13 18:47*	*1*
Phenol-d5 (Surr)	*63*		*21 - 110*	*04/22/13 08:00*	*04/24/13 18:47*	*1*
Terphenyl-d14 (Surr)	*55*		*24 - 110*	*04/22/13 08:00*	*04/24/13 18:47*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041513-DR-102
Date Collected: 04/15/13 08:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.045	ug/L		04/20/13 11:53	04/23/13 01:57	1
Aroclor-1221	0.10	U	0.10	0.046	ug/L		04/20/13 11:53	04/23/13 01:57	1
Aroclor-1232	0.10	U	0.10	0.075	ug/L		04/20/13 11:53	04/23/13 01:57	1
Aroclor-1242	0.10	U	0.10	0.062	ug/L		04/20/13 11:53	04/23/13 01:57	1
Aroclor-1248	0.10	U	0.10	0.063	ug/L		04/20/13 11:53	04/23/13 01:57	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/20/13 11:53	04/23/13 01:57	1
Aroclor-1260	0.10	U	0.10	0.039	ug/L		04/20/13 11:53	04/23/13 01:57	1
Aroclor-1262	0.10	U	0.10	0.037	ug/L		04/20/13 11:53	04/23/13 01:57	1
Aroclor-1268	0.10	U	0.10	0.057	ug/L		04/20/13 11:53	04/23/13 01:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*23 - 136*	*04/20/13 11:53*	*04/23/13 01:57*	*1*
DCB Decachlorobiphenyl	*85*		*10 - 130*	*04/20/13 11:53*	*04/23/13 01:57*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041513-DR-103
Date Collected: 04/15/13 09:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/20/13 11:53	04/23/13 02:11	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/20/13 11:53	04/23/13 02:11	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		04/20/13 11:53	04/23/13 02:11	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		04/20/13 11:53	04/23/13 02:11	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		04/20/13 11:53	04/23/13 02:11	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/20/13 11:53	04/23/13 02:11	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/20/13 11:53	04/23/13 02:11	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/20/13 11:53	04/23/13 02:11	1
Aroclor-1268	0.10	U	0.10	0.055	ug/L		04/20/13 11:53	04/23/13 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*23 - 136*	*04/20/13 11:53*	*04/23/13 02:11*	*1*
DCB Decachlorobiphenyl	*77*		*10 - 130*	*04/20/13 11:53*	*04/23/13 02:11*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041513-DR-104
Date Collected: 04/15/13 09:45
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/20/13 11:53	04/23/13 02:26	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/20/13 11:53	04/23/13 02:26	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		04/20/13 11:53	04/23/13 02:26	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		04/20/13 11:53	04/23/13 02:26	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		04/20/13 11:53	04/23/13 02:26	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/20/13 11:53	04/23/13 02:26	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/20/13 11:53	04/23/13 02:26	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/20/13 11:53	04/23/13 02:26	1
Aroclor-1268	0.10	U	0.10	0.055	ug/L		04/20/13 11:53	04/23/13 02:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*93*		*23 - 136*	*04/20/13 11:53*	*04/23/13 02:26*	*1*
DCB Decachlorobiphenyl	*66*		*10 - 130*	*04/20/13 11:53*	*04/23/13 02:26*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041513-DR-105
Date Collected: 04/15/13 10:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.099	U	0.099	0.044	ug/L		04/20/13 11:53	04/23/13 02:40	1
Aroclor-1221	0.099	U	0.099	0.045	ug/L		04/20/13 11:53	04/23/13 02:40	1
Aroclor-1232	0.099	U	0.099	0.072	ug/L		04/20/13 11:53	04/23/13 02:40	1
Aroclor-1242	0.099	U	0.099	0.059	ug/L		04/20/13 11:53	04/23/13 02:40	1
Aroclor-1248	0.099	U	0.099	0.060	ug/L		04/20/13 11:53	04/23/13 02:40	1
Aroclor-1254	0.099	U	0.099	0.032	ug/L		04/20/13 11:53	04/23/13 02:40	1
Aroclor-1260	0.099	U	0.099	0.038	ug/L		04/20/13 11:53	04/23/13 02:40	1
Aroclor-1262	0.099	U	0.099	0.036	ug/L		04/20/13 11:53	04/23/13 02:40	1
Aroclor-1268	0.099	U	0.099	0.054	ug/L		04/20/13 11:53	04/23/13 02:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*23 - 136*	*04/20/13 11:53*	*04/23/13 02:40*	*1*
DCB Decachlorobiphenyl	*53*		*10 - 130*	*04/20/13 11:53*	*04/23/13 02:40*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041513-DR-106
Date Collected: 04/15/13 11:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.045	ug/L		04/20/13 11:53	04/23/13 02:54	1
Aroclor-1221	0.10	U	0.10	0.046	ug/L		04/20/13 11:53	04/23/13 02:54	1
Aroclor-1232	0.10	U	0.10	0.075	ug/L		04/20/13 11:53	04/23/13 02:54	1
Aroclor-1242	0.10	U	0.10	0.062	ug/L		04/20/13 11:53	04/23/13 02:54	1
Aroclor-1248	0.10	U	0.10	0.063	ug/L		04/20/13 11:53	04/23/13 02:54	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/20/13 11:53	04/23/13 02:54	1
Aroclor-1260	0.10	U	0.10	0.039	ug/L		04/20/13 11:53	04/23/13 02:54	1
Aroclor-1262	0.10	U	0.10	0.037	ug/L		04/20/13 11:53	04/23/13 02:54	1
Aroclor-1268	0.10	U	0.10	0.057	ug/L		04/20/13 11:53	04/23/13 02:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*23 - 136*	*04/20/13 11:53*	*04/23/13 02:54*	*1*
DCB Decachlorobiphenyl	*75*		*10 - 130*	*04/20/13 11:53*	*04/23/13 02:54*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041513-DR-107
Date Collected: 04/15/13 13:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.11	U	0.11	0.046	ug/L		04/20/13 11:53	04/23/13 03:08	1
Aroclor-1221	0.11	U	0.11	0.047	ug/L		04/20/13 11:53	04/23/13 03:08	1
Aroclor-1232	0.11	U	0.11	0.077	ug/L		04/20/13 11:53	04/23/13 03:08	1
Aroclor-1242	0.11	U	0.11	0.063	ug/L		04/20/13 11:53	04/23/13 03:08	1
Aroclor-1248	0.11	U	0.11	0.064	ug/L		04/20/13 11:53	04/23/13 03:08	1
Aroclor-1254	0.11	U	0.11	0.034	ug/L		04/20/13 11:53	04/23/13 03:08	1
Aroclor-1260	0.11	U	0.11	0.040	ug/L		04/20/13 11:53	04/23/13 03:08	1
Aroclor-1262	0.11	U	0.11	0.038	ug/L		04/20/13 11:53	04/23/13 03:08	1
Aroclor-1268	0.11	U	0.11	0.058	ug/L		04/20/13 11:53	04/23/13 03:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*88*		*23 - 136*	*04/20/13 11:53*	*04/23/13 03:08*	*1*
DCB Decachlorobiphenyl	*69*		*10 - 130*	*04/20/13 11:53*	*04/23/13 03:08*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041613-DR-108
Date Collected: 04/16/13 09:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/20/13 11:53	04/23/13 03:22	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/20/13 11:53	04/23/13 03:22	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/20/13 11:53	04/23/13 03:22	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/20/13 11:53	04/23/13 03:22	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/20/13 11:53	04/23/13 03:22	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/20/13 11:53	04/23/13 03:22	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/20/13 11:53	04/23/13 03:22	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/20/13 11:53	04/23/13 03:22	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/20/13 11:53	04/23/13 03:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*104*		*23 - 136*	*04/20/13 11:53*	*04/23/13 03:22*	*1*
DCB Decachlorobiphenyl	*11*		*10 - 130*	*04/20/13 11:53*	*04/23/13 03:22*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041613-DR-109
Date Collected: 04/16/13 09:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.045	ug/L		04/20/13 11:53	04/23/13 04:05	1
Aroclor-1221	0.10	U	0.10	0.046	ug/L		04/20/13 11:53	04/23/13 04:05	1
Aroclor-1232	0.10	U	0.10	0.075	ug/L		04/20/13 11:53	04/23/13 04:05	1
Aroclor-1242	0.10	U	0.10	0.062	ug/L		04/20/13 11:53	04/23/13 04:05	1
Aroclor-1248	0.10	U	0.10	0.063	ug/L		04/20/13 11:53	04/23/13 04:05	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/20/13 11:53	04/23/13 04:05	1
Aroclor-1260	0.10	U	0.10	0.039	ug/L		04/20/13 11:53	04/23/13 04:05	1
Aroclor-1262	0.10	U	0.10	0.037	ug/L		04/20/13 11:53	04/23/13 04:05	1
Aroclor-1268	0.10	U	0.10	0.057	ug/L		04/20/13 11:53	04/23/13 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*82*		*23 - 136*	*04/20/13 11:53*	*04/23/13 04:05*	*1*
DCB Decachlorobiphenyl	*62*		*10 - 130*	*04/20/13 11:53*	*04/23/13 04:05*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041613-DR-110
Date Collected: 04/16/13 09:25
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/20/13 11:53	04/23/13 04:19	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/20/13 11:53	04/23/13 04:19	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		04/20/13 11:53	04/23/13 04:19	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		04/20/13 11:53	04/23/13 04:19	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		04/20/13 11:53	04/23/13 04:19	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/20/13 11:53	04/23/13 04:19	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/20/13 11:53	04/23/13 04:19	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/20/13 11:53	04/23/13 04:19	1
Aroclor-1268	0.10	U	0.10	0.055	ug/L		04/20/13 11:53	04/23/13 04:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*89*		*23 - 136*	*04/20/13 11:53*	*04/23/13 04:19*	*1*
DCB Decachlorobiphenyl	*54*		*10 - 130*	*04/20/13 11:53*	*04/23/13 04:19*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041613-DR-111
Date Collected: 04/16/13 10:55
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/22/13 08:12	04/23/13 15:53	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/22/13 08:12	04/23/13 15:53	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/22/13 08:12	04/23/13 15:53	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/22/13 08:12	04/23/13 15:53	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/22/13 08:12	04/23/13 15:53	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/22/13 08:12	04/23/13 15:53	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/22/13 08:12	04/23/13 15:53	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/22/13 08:12	04/23/13 15:53	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/22/13 08:12	04/23/13 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*23 - 136*	*04/22/13 08:12*	*04/23/13 15:53*	*1*
DCB Decachlorobiphenyl	*65*		*10 - 130*	*04/22/13 08:12*	*04/23/13 15:53*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041613-DR-112
Date Collected: 04/16/13 11:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.045	ug/L		04/22/13 08:12	04/23/13 16:07	1
Aroclor-1221	0.10	U	0.10	0.046	ug/L		04/22/13 08:12	04/23/13 16:07	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		04/22/13 08:12	04/23/13 16:07	1
Aroclor-1242	0.10	U	0.10	0.061	ug/L		04/22/13 08:12	04/23/13 16:07	1
Aroclor-1248	0.10	U	0.10	0.062	ug/L		04/22/13 08:12	04/23/13 16:07	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/22/13 08:12	04/23/13 16:07	1
Aroclor-1260	0.10	U	0.10	0.039	ug/L		04/22/13 08:12	04/23/13 16:07	1
Aroclor-1262	0.10	U	0.10	0.037	ug/L		04/22/13 08:12	04/23/13 16:07	1
Aroclor-1268	0.10	U	0.10	0.056	ug/L		04/22/13 08:12	04/23/13 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*23 - 136*	*04/22/13 08:12*	*04/23/13 16:07*	*1*
DCB Decachlorobiphenyl	*65*		*10 - 130*	*04/22/13 08:12*	*04/23/13 16:07*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041613-DR-113
Date Collected: 04/16/13 13:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.11	U	0.11	0.046	ug/L		04/22/13 08:12	04/23/13 16:21	1
Aroclor-1221	0.11	U	0.11	0.047	ug/L		04/22/13 08:12	04/23/13 16:21	1
Aroclor-1232	0.11	U	0.11	0.077	ug/L		04/22/13 08:12	04/23/13 16:21	1
Aroclor-1242	0.11	U	0.11	0.063	ug/L		04/22/13 08:12	04/23/13 16:21	1
Aroclor-1248	0.11	U	0.11	0.064	ug/L		04/22/13 08:12	04/23/13 16:21	1
Aroclor-1254	0.11	U	0.11	0.034	ug/L		04/22/13 08:12	04/23/13 16:21	1
Aroclor-1260	0.11	U	0.11	0.040	ug/L		04/22/13 08:12	04/23/13 16:21	1
Aroclor-1262	0.11	U	0.11	0.038	ug/L		04/22/13 08:12	04/23/13 16:21	1
Aroclor-1268	0.11	U	0.11	0.058	ug/L		04/22/13 08:12	04/23/13 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*92*		*23 - 136*	*04/22/13 08:12*	*04/23/13 16:21*	*1*
DCB Decachlorobiphenyl	*48*		*10 - 130*	*04/22/13 08:12*	*04/23/13 16:21*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041613-DR-114
Date Collected: 04/16/13 13:50
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/22/13 08:12	04/23/13 16:35	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/22/13 08:12	04/23/13 16:35	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/22/13 08:12	04/23/13 16:35	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/22/13 08:12	04/23/13 16:35	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/22/13 08:12	04/23/13 16:35	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/22/13 08:12	04/23/13 16:35	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/22/13 08:12	04/23/13 16:35	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/22/13 08:12	04/23/13 16:35	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/22/13 08:12	04/23/13 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*90*		*23 - 136*	*04/22/13 08:12*	*04/23/13 16:35*	*1*
DCB Decachlorobiphenyl	*92*		*10 - 130*	*04/22/13 08:12*	*04/23/13 16:35*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041613-DR-115
Date Collected: 04/16/13 14:45
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.095	U	0.095	0.042	ug/L		04/22/13 08:12	04/23/13 16:50	1
Aroclor-1221	0.095	U	0.095	0.043	ug/L		04/22/13 08:12	04/23/13 16:50	1
Aroclor-1232	0.095	U	0.095	0.070	ug/L		04/22/13 08:12	04/23/13 16:50	1
Aroclor-1242	0.095	U	0.095	0.057	ug/L		04/22/13 08:12	04/23/13 16:50	1
Aroclor-1248	0.095	U	0.095	0.058	ug/L		04/22/13 08:12	04/23/13 16:50	1
Aroclor-1254	0.095	U	0.095	0.030	ug/L		04/22/13 08:12	04/23/13 16:50	1
Aroclor-1260	0.095	U	0.095	0.036	ug/L		04/22/13 08:12	04/23/13 16:50	1
Aroclor-1262	0.095	U	0.095	0.034	ug/L		04/22/13 08:12	04/23/13 16:50	1
Aroclor-1268	0.095	U	0.095	0.052	ug/L		04/22/13 08:12	04/23/13 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*74*		*23 - 136*	*04/22/13 08:12*	*04/23/13 16:50*	*1*
DCB Decachlorobiphenyl	*83*		*10 - 130*	*04/22/13 08:12*	*04/23/13 16:50*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041513-DR-102
Date Collected: 04/15/13 08:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**130**		50	7.5	ug/L		04/22/13 07:06	04/23/13 14:13	1
Antimony	**0.30**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 02:00	1
Arsenic	**15**		5.0	0.063	ug/L		04/22/13 07:06	04/23/13 02:00	1
Barium	**460**	**B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 02:00	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 02:00	1
Cadmium	1.0	U	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 02:00	1
Cobalt	**0.43**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 02:00	1
Chromium	**0.55**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 02:00	1
Copper	**1.0**	**J B**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 14:13	1
Iron	**900**	**B**	200	12	ug/L		04/22/13 07:06	04/23/13 02:00	1
Manganese	**89**	**B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 02:00	1
Nickel	**1.7**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 02:00	1
Lead	**0.41**	**J**	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 02:00	1
Selenium	5.0	U	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 02:00	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 02:00	1
Vanadium	**0.53**	**J**	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 02:00	1
Zinc	**15**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 02:00	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 02:00	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041513-DR-103
Date Collected: 04/15/13 09:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9.9**	**J ^**	50	7.5	ug/L		04/22/13 07:06	04/23/13 02:07	1
Antimony	**0.30**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 02:07	1
Arsenic	**0.36**	**J**	5.0	0.063	ug/L		04/22/13 07:06	04/23/13 02:07	1
Barium	**160**	**B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 02:07	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 02:07	1
Cadmium	**0.12**	**J**	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 02:07	1
Cobalt	**0.41**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 02:07	1
Chromium	**1.0**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 02:07	1
Copper	**1.4**	**J B ^**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 02:07	1
Iron	200	U	200	12	ug/L		04/22/13 07:06	04/23/13 02:07	1
Manganese	**110**	**B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 02:07	1
Nickel	**1.3**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 02:07	1
Lead	**0.15**	**J**	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 02:07	1
Selenium	**0.61**	**J**	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 02:07	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 02:07	1
Vanadium	**0.35**	**J**	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 02:07	1
Zinc	**10**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 02:07	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 02:07	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041513-DR-104
Date Collected: 04/15/13 09:45
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11**	**J ^**	50	7.5	ug/L		04/22/13 07:06	04/23/13 02:15	1
Antimony	**0.29**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 02:15	1
Arsenic	**0.42**	**J**	5.0	0.063	ug/L		04/22/13 07:06	04/23/13 02:15	1
Barium	**170**	**B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 02:15	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 02:15	1
Cadmium	**0.11**	**J**	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 02:15	1
Cobalt	**0.46**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 02:15	1
Chromium	**1.1**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 02:15	1
Copper	**1.4**	**J B ^**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 02:15	1
Iron	200	U	200	12	ug/L		04/22/13 07:06	04/23/13 02:15	1
Manganese	**120**	**B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 02:15	1
Nickel	**1.3**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 02:15	1
Lead	3.0	U	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 02:15	1
Selenium	**0.60**	**J**	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 02:15	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 02:15	1
Vanadium	**0.34**	**J**	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 02:15	1
Zinc	**8.5**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 02:15	1
Silver	**0.010**	**J**	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 02:15	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041513-DR-105
Date Collected: 04/15/13 10:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**36**	**J ^**	50	7.5	ug/L		04/22/13 07:06	04/23/13 02:22	1
Antimony	**0.18**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 02:22	1
Arsenic	**5.7**		5.0	0.063	ug/L		04/22/13 07:06	04/23/13 02:22	1
Barium	**66**	**J B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 02:22	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 02:22	1
Cadmium	1.0	U	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 02:22	1
Cobalt	**0.051**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 02:22	1
Chromium	**0.40**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 02:22	1
Copper	**1.2**	**J B ^**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 02:22	1
Iron	**460**	**B**	200	12	ug/L		04/22/13 07:06	04/23/13 02:22	1
Manganese	**84**	**B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 02:22	1
Nickel	**0.57**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 02:22	1
Lead	**0.32**	**J**	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 02:22	1
Selenium	5.0	U	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 02:22	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 02:22	1
Vanadium	4.0	U	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 02:22	1
Zinc	**8.9**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 02:22	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 02:22	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041513-DR-106
Date Collected: 04/15/13 11:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**21**	**J ^**	50	7.5	ug/L		04/22/13 07:06	04/23/13 02:44	1
Antimony	**0.73**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 02:44	1
Arsenic	**0.35**	**J**	5.0	0.063	ug/L		04/22/13 07:06	04/23/13 02:44	1
Barium	**260**	**B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 02:44	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 02:44	1
Cadmium	**0.042**	**J**	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 02:44	1
Cobalt	**0.078**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 02:44	1
Chromium	**3.3**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 02:44	1
Copper	**1.6**	**J B**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 02:44	1
Iron	200	U	200	12	ug/L		04/22/13 07:06	04/23/13 02:44	1
Manganese	**5.6**	**J B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 02:44	1
Nickel	**1.1**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 02:44	1
Lead	**0.37**	**J**	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 02:44	1
Selenium	**0.74**	**J**	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 02:44	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 02:44	1
Vanadium	4.0	U	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 02:44	1
Zinc	**19**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 02:44	1
Silver	**0.023**	**J**	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 02:44	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041513-DR-107
Date Collected: 04/15/13 13:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**110**		50	7.5	ug/L		04/22/13 07:06	04/23/13 14:20	1
Antimony	**0.26**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 02:52	1
Arsenic	**0.62**	**J**	5.0	0.063	ug/L		04/22/13 07:06	04/23/13 02:52	1
Barium	**24**	**J B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 02:52	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 02:52	1
Cadmium	**0.10**	**J**	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 02:52	1
Cobalt	**0.17**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 02:52	1
Chromium	**1.9**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 02:52	1
Copper	**1.3**	**J B**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 02:52	1
Iron	**230**	**B**	200	12	ug/L		04/22/13 07:06	04/23/13 02:52	1
Manganese	**6.7**	**J B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 02:52	1
Nickel	**0.87**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 02:52	1
Lead	**0.35**	**J**	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 02:52	1
Selenium	**1.2**	**J**	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 02:52	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 02:52	1
Vanadium	**0.50**	**J**	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 02:52	1
Zinc	**23**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 02:52	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 02:52	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041613-DR-108
Date Collected: 04/16/13 09:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7.7	J ^	50	7.5	ug/L		04/22/13 07:06	04/23/13 00:52	1
Antimony	0.17	J B	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 00:52	1
Arsenic	27		5.0	0.063	ug/L		04/22/13 07:06	04/23/13 00:52	1
Barium	180	B	100	0.32	ug/L		04/22/13 07:06	04/23/13 00:52	1
Beryllium	0.16	J	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 00:52	1
Cadmium	0.14	J	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 00:52	1
Cobalt	1.5	J	20	0.020	ug/L		04/22/13 07:06	04/23/13 00:52	1
Chromium	0.52	J B	10	0.13	ug/L		04/22/13 07:06	04/23/13 00:52	1
Copper	0.60	J B ^	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 00:52	1
Iron	14000	B	200	12	ug/L		04/22/13 07:06	04/23/13 00:52	1
Manganese	140	B	50	0.36	ug/L		04/22/13 07:06	04/23/13 00:52	1
Nickel	27	B	20	0.087	ug/L		04/22/13 07:06	04/23/13 00:52	1
Lead	0.34	J	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 00:52	1
Selenium	0.47	J	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 00:52	1
Thallium	1.1	J	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 00:52	1
Vanadium	1.1	J	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 00:52	1
Zinc	6.9	J B	50	2.1	ug/L		04/22/13 07:06	04/23/13 00:52	1
Silver	0.013	J	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 00:52	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041613-DR-109
Date Collected: 04/16/13 09:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8.8**	**J ^**	50	7.5	ug/L		04/22/13 07:06	04/23/13 02:59	1
Antimony	**0.30**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 02:59	1
Arsenic	**1.2**	**J**	5.0	0.063	ug/L		04/22/13 07:06	04/23/13 02:59	1
Barium	**53**	**J B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 02:59	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 02:59	1
Cadmium	**0.33**	**J**	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 02:59	1
Cobalt	**1.7**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 02:59	1
Chromium	**1.0**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 02:59	1
Copper	**3.3**	**J B**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 02:59	1
Iron	200	U	200	12	ug/L		04/22/13 07:06	04/23/13 02:59	1
Manganese	**1400**	**B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 02:59	1
Nickel	**12**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 02:59	1
Lead	**0.26**	**J**	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 02:59	1
Selenium	**0.24**	**J**	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 02:59	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 02:59	1
Vanadium	**0.21**	**J**	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 02:59	1
Zinc	**19**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 02:59	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 02:59	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041613-DR-110
Date Collected: 04/16/13 09:25
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U ^	50	7.5	ug/L		04/22/13 07:06	04/23/13 03:07	1
Antimony	**0.21**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 03:07	1
Arsenic	**15**		5.0	0.063	ug/L		04/22/13 07:06	04/23/13 03:07	1
Barium	**160**	**B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 03:07	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 03:07	1
Cadmium	1.0	U	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 03:07	1
Cobalt	**0.56**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 03:07	1
Chromium	**0.32**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 03:07	1
Copper	**0.56**	**J B**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 03:07	1
Iron	**6000**	**B**	200	12	ug/L		04/22/13 07:06	04/23/13 03:07	1
Manganese	**560**	**B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 03:07	1
Nickel	**4.5**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 03:07	1
Lead	**0.17**	**J**	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 03:07	1
Selenium	5.0	U	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 03:07	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 03:07	1
Vanadium	4.0	U	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 03:07	1
Zinc	**11**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 03:07	1
Silver	**0.0090**	**J**	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 03:07	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041613-DR-111
Date Collected: 04/16/13 10:55
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**24**	**J ^**	50	7.5	ug/L		04/22/13 07:06	04/23/13 03:14	1
Antimony	**0.29**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 03:14	1
Arsenic	**1.2**	**J**	5.0	0.063	ug/L		04/22/13 07:06	04/23/13 03:14	1
Barium	**77**	**J B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 03:14	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 03:14	1
Cadmium	1.0	U	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 03:14	1
Cobalt	**0.30**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 03:14	1
Chromium	**0.36**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 03:14	1
Copper	**1.2**	**J B**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 03:14	1
Iron	**240**	**B**	200	12	ug/L		04/22/13 07:06	04/23/13 03:14	1
Manganese	**110**	**B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 03:14	1
Nickel	**1.3**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 03:14	1
Lead	**0.20**	**J**	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 03:14	1
Selenium	**0.99**	**J**	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 03:14	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 03:14	1
Vanadium	4.0	U	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 03:14	1
Zinc	**8.4**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 03:14	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 03:14	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041613-DR-112
Date Collected: 04/16/13 11:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**140**		50	7.5	ug/L		04/22/13 07:06	04/23/13 14:28	1
Antimony	**0.23**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 03:22	1
Arsenic	**1.7**	**J**	5.0	0.063	ug/L		04/22/13 07:06	04/23/13 03:22	1
Barium	**160**	**B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 03:22	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 03:22	1
Cadmium	1.0	U	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 03:22	1
Cobalt	**1.2**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 03:22	1
Chromium	**0.59**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 03:22	1
Copper	**1.2**	**J B**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 03:22	1
Iron	**960**	**B**	200	12	ug/L		04/22/13 07:06	04/23/13 03:22	1
Manganese	**280**	**B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 03:22	1
Nickel	**2.1**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 03:22	1
Lead	**0.34**	**J**	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 03:22	1
Selenium	5.0	U	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 03:22	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 03:22	1
Vanadium	**0.50**	**J**	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 03:22	1
Zinc	**15**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 03:22	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 03:22	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041613-DR-113
Date Collected: 04/16/13 13:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**240**		50	7.5	ug/L		04/22/13 07:06	04/23/13 14:35	1
Antimony	**0.30**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 03:29	1
Arsenic	**0.52**	**J**	5.0	0.063	ug/L		04/22/13 07:06	04/23/13 03:29	1
Barium	**55**	**J B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 03:29	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 03:29	1
Cadmium	**0.055**	**J**	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 03:29	1
Cobalt	**0.81**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 03:29	1
Chromium	**0.90**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 03:29	1
Copper	**3.3**	**J B**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 03:29	1
Iron	**390**	**B**	200	12	ug/L		04/22/13 07:06	04/23/13 03:29	1
Manganese	**110**	**B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 03:29	1
Nickel	**2.5**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 03:29	1
Lead	**0.59**	**J**	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 03:29	1
Selenium	**4.3**	**J**	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 03:29	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 03:29	1
Vanadium	**1.3**	**J**	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 03:29	1
Zinc	**21**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 03:29	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 03:29	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041613-DR-114
Date Collected: 04/16/13 13:50
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7.8**	**J ^**	50	7.5	ug/L		04/22/13 07:06	04/23/13 03:37	1
Antimony	**0.35**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 03:37	1
Arsenic	**0.86**	**J**	5.0	0.063	ug/L		04/22/13 07:06	04/23/13 03:37	1
Barium	**67**	**J B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 03:37	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 03:37	1
Cadmium	1.0	U	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 03:37	1
Cobalt	**0.29**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 03:37	1
Chromium	**0.31**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 03:37	1
Copper	**1.1**	**J B**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 03:37	1
Iron	**180**	**J B**	200	12	ug/L		04/22/13 07:06	04/23/13 03:37	1
Manganese	**110**	**B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 03:37	1
Nickel	**1.4**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 03:37	1
Lead	3.0	U	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 03:37	1
Selenium	**0.61**	**J**	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 03:37	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 03:37	1
Vanadium	**0.15**	**J**	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 03:37	1
Zinc	**14**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 03:37	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 03:37	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041613-DR-115
Date Collected: 04/16/13 14:45
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**27**	**J ^**	50	7.5	ug/L		04/22/13 07:06	04/23/13 03:45	1
Antimony	**0.28**	**J B**	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 03:45	1
Arsenic	**0.48**	**J**	5.0	0.063	ug/L		04/22/13 07:06	04/23/13 03:45	1
Barium	**43**	**J B**	100	0.32	ug/L		04/22/13 07:06	04/23/13 03:45	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 03:45	1
Cadmium	1.0	U	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 03:45	1
Cobalt	**0.22**	**J**	20	0.020	ug/L		04/22/13 07:06	04/23/13 03:45	1
Chromium	**0.45**	**J B**	10	0.13	ug/L		04/22/13 07:06	04/23/13 03:45	1
Copper	**0.93**	**J B**	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 03:45	1
Iron	**59**	**J B**	200	12	ug/L		04/22/13 07:06	04/23/13 03:45	1
Manganese	**61**	**B**	50	0.36	ug/L		04/22/13 07:06	04/23/13 03:45	1
Nickel	**1.4**	**J B**	20	0.087	ug/L		04/22/13 07:06	04/23/13 03:45	1
Lead	3.0	U	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 03:45	1
Selenium	**0.39**	**J**	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 03:45	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 03:45	1
Vanadium	4.0	U	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 03:45	1
Zinc	**26**	**J B**	50	2.1	ug/L		04/22/13 07:06	04/23/13 03:45	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 03:45	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041513-DR-102
Date Collected: 04/15/13 08:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 15:50	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041513-DR-103
Date Collected: 04/15/13 09:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 15:51	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041513-DR-104
Date Collected: 04/15/13 09:45
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 15:53	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041513-DR-105
Date Collected: 04/15/13 10:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 15:54	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041513-DR-106
Date Collected: 04/15/13 11:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 15:55	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041513-DR-107
Date Collected: 04/15/13 13:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-6
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 15:58	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041613-DR-108
Date Collected: 04/16/13 09:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-7
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 15:42	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041613-DR-109
Date Collected: 04/16/13 09:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-8
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 15:59	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041613-DR-110
Date Collected: 04/16/13 09:25
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-9
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 16:01	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041613-DR-111
Date Collected: 04/16/13 10:55
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 16:02	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041613-DR-112
Date Collected: 04/16/13 11:10
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-11
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 16:07	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041613-DR-113
Date Collected: 04/16/13 13:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 16:09	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041613-DR-114
Date Collected: 04/16/13 13:50
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 16:10	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041613-DR-115
Date Collected: 04/16/13 14:45
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-14
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 16:12	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

General Chemistry

Client Sample ID: GW-17358-041513-DR-102
Date Collected: 04/15/13 08:05
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.037	J	0.10	0.033	mg/L		04/23/13 05:24	04/23/13 12:08	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

General Chemistry

Client Sample ID: GW-17358-041513-DR-106
Date Collected: 04/15/13 11:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-5
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.037	J	0.10	0.033	mg/L		04/23/13 05:25	04/23/13 12:08	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

General Chemistry

Client Sample ID: GW-17358-041613-DR-111
Date Collected: 04/16/13 10:55
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-10
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/23/13 05:26	04/23/13 12:11	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

General Chemistry

Client Sample ID: GW-17358-041613-DR-113
Date Collected: 04/16/13 13:30
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-12
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/23/13 05:27	04/23/13 12:11	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

General Chemistry

Client Sample ID: GW-17358-041613-DR-114
Date Collected: 04/16/13 13:50
Date Received: 04/17/13 09:20

Lab Sample ID: 240-23245-13
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/23/13 05:28	04/23/13 12:11	1

GC/MS VOA

Analysis Batch: 82693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-1	GW-17358-041513-DR-102	Total/NA	Water	8260B	
240-23245-2	GW-17358-041513-DR-103	Total/NA	Water	8260B	
240-23245-3	GW-17358-041513-DR-104	Total/NA	Water	8260B	
240-23245-4	GW-17358-041513-DR-105	Total/NA	Water	8260B	
240-23245-5	GW-17358-041513-DR-106	Total/NA	Water	8260B	
240-23245-6	GW-17358-041513-DR-107	Total/NA	Water	8260B	
240-23245-7	GW-17358-041613-DR-108	Total/NA	Water	8260B	
240-23245-7 MS	GW-17358-041613-DR-108	Total/NA	Water	8260B	
240-23245-7 MSD	GW-17358-041613-DR-108	Total/NA	Water	8260B	
240-23245-8	GW-17358-041613-DR-109	Total/NA	Water	8260B	
240-23245-9	GW-17358-041613-DR-110	Total/NA	Water	8260B	
LCS 240-82693/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-82693/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 82831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-10	GW-17358-041613-DR-111	Total/NA	Water	8260B	
240-23245-11	GW-17358-041613-DR-112	Total/NA	Water	8260B	
240-23245-12	GW-17358-041613-DR-113	Total/NA	Water	8260B	
240-23245-13	GW-17358-041613-DR-114	Total/NA	Water	8260B	
240-23245-14	GW-17358-041613-DR-115	Total/NA	Water	8260B	
240-23245-15	TB-17358-041613	Total/NA	Water	8260B	
LCS 240-82831/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-82831/5	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 82851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-1	GW-17358-041513-DR-102	Total/NA	Water	3520C	
240-23245-2	GW-17358-041513-DR-103	Total/NA	Water	3520C	
240-23245-3	GW-17358-041513-DR-104	Total/NA	Water	3520C	
240-23245-4	GW-17358-041513-DR-105	Total/NA	Water	3520C	
240-23245-5	GW-17358-041513-DR-106	Total/NA	Water	3520C	
240-23245-6	GW-17358-041513-DR-107	Total/NA	Water	3520C	
LCS 240-82851/18-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-82851/17-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 82908

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-7	GW-17358-041613-DR-108	Total/NA	Water	3520C	
240-23245-7 MS	GW-17358-041613-DR-108	Total/NA	Water	3520C	
240-23245-7 MSD	GW-17358-041613-DR-108	Total/NA	Water	3520C	
240-23245-8	GW-17358-041613-DR-109	Total/NA	Water	3520C	
240-23245-9	GW-17358-041613-DR-110	Total/NA	Water	3520C	
240-23245-10	GW-17358-041613-DR-111	Total/NA	Water	3520C	
240-23245-11	GW-17358-041613-DR-112	Total/NA	Water	3520C	
240-23245-12	GW-17358-041613-DR-113	Total/NA	Water	3520C	
240-23245-13	GW-17358-041613-DR-114	Total/NA	Water	3520C	
240-23245-14	GW-17358-041613-DR-115	Total/NA	Water	3520C	

GC/MS Semi VOA (Continued)

Prep Batch: 82908 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-82908/23-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-82908/22-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 83105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-1	GW-17358-041513-DR-102	Total/NA	Water	8270C	82851
240-23245-2	GW-17358-041513-DR-103	Total/NA	Water	8270C	82851
240-23245-3	GW-17358-041513-DR-104	Total/NA	Water	8270C	82851
240-23245-4	GW-17358-041513-DR-105	Total/NA	Water	8270C	82851
240-23245-5	GW-17358-041513-DR-106	Total/NA	Water	8270C	82851
240-23245-6	GW-17358-041513-DR-107	Total/NA	Water	8270C	82851
LCS 240-82851/18-A	Lab Control Sample	Total/NA	Water	8270C	82851
MB 240-82851/17-A	Method Blank	Total/NA	Water	8270C	82851

Analysis Batch: 83273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-7	GW-17358-041613-DR-108	Total/NA	Water	8270C	82908
240-23245-7 MS	GW-17358-041613-DR-108	Total/NA	Water	8270C	82908
240-23245-7 MSD	GW-17358-041613-DR-108	Total/NA	Water	8270C	82908
240-23245-8	GW-17358-041613-DR-109	Total/NA	Water	8270C	82908
240-23245-9	GW-17358-041613-DR-110	Total/NA	Water	8270C	82908
240-23245-10	GW-17358-041613-DR-111	Total/NA	Water	8270C	82908
240-23245-11	GW-17358-041613-DR-112	Total/NA	Water	8270C	82908
240-23245-12	GW-17358-041613-DR-113	Total/NA	Water	8270C	82908
240-23245-13	GW-17358-041613-DR-114	Total/NA	Water	8270C	82908
240-23245-14	GW-17358-041613-DR-115	Total/NA	Water	8270C	82908
LCS 240-82908/23-A	Lab Control Sample	Total/NA	Water	8270C	82908
MB 240-82908/22-A	Method Blank	Total/NA	Water	8270C	82908

GC Semi VOA

Prep Batch: 82850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-1	GW-17358-041513-DR-102	Total/NA	Water	3520C	
240-23245-2	GW-17358-041513-DR-103	Total/NA	Water	3520C	
240-23245-3	GW-17358-041513-DR-104	Total/NA	Water	3520C	
240-23245-4	GW-17358-041513-DR-105	Total/NA	Water	3520C	
240-23245-5	GW-17358-041513-DR-106	Total/NA	Water	3520C	
240-23245-6	GW-17358-041513-DR-107	Total/NA	Water	3520C	
240-23245-7	GW-17358-041613-DR-108	Total/NA	Water	3520C	
240-23245-7 MS	GW-17358-041613-DR-108	Total/NA	Water	3520C	
240-23245-7 MSD	GW-17358-041613-DR-108	Total/NA	Water	3520C	
240-23245-8	GW-17358-041613-DR-109	Total/NA	Water	3520C	
240-23245-9	GW-17358-041613-DR-110	Total/NA	Water	3520C	
LCS 240-82850/13-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-82850/12-A	Method Blank	Total/NA	Water	3520C	

Prep Batch: 82913

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-10	GW-17358-041613-DR-111	Total/NA	Water	3520C	

GC Semi VOA (Continued)

Prep Batch: 82913 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-11	GW-17358-041613-DR-112	Total/NA	Water	3520C	
240-23245-12	GW-17358-041613-DR-113	Total/NA	Water	3520C	
240-23245-13	GW-17358-041613-DR-114	Total/NA	Water	3520C	
240-23245-14	GW-17358-041613-DR-115	Total/NA	Water	3520C	
LCS 240-82913/7-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-82913/6-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 83043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-1	GW-17358-041513-DR-102	Total/NA	Water	8082	82850
240-23245-2	GW-17358-041513-DR-103	Total/NA	Water	8082	82850
240-23245-3	GW-17358-041513-DR-104	Total/NA	Water	8082	82850
240-23245-4	GW-17358-041513-DR-105	Total/NA	Water	8082	82850
240-23245-5	GW-17358-041513-DR-106	Total/NA	Water	8082	82850
240-23245-6	GW-17358-041513-DR-107	Total/NA	Water	8082	82850
240-23245-7	GW-17358-041613-DR-108	Total/NA	Water	8082	82850
240-23245-7 MS	GW-17358-041613-DR-108	Total/NA	Water	8082	82850
240-23245-7 MSD	GW-17358-041613-DR-108	Total/NA	Water	8082	82850
240-23245-8	GW-17358-041613-DR-109	Total/NA	Water	8082	82850
240-23245-9	GW-17358-041613-DR-110	Total/NA	Water	8082	82850
LCS 240-82850/13-A	Lab Control Sample	Total/NA	Water	8082	82850
MB 240-82850/12-A	Method Blank	Total/NA	Water	8082	82850

Analysis Batch: 83244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-10	GW-17358-041613-DR-111	Total/NA	Water	8082	82913
240-23245-11	GW-17358-041613-DR-112	Total/NA	Water	8082	82913
240-23245-12	GW-17358-041613-DR-113	Total/NA	Water	8082	82913
240-23245-13	GW-17358-041613-DR-114	Total/NA	Water	8082	82913
240-23245-14	GW-17358-041613-DR-115	Total/NA	Water	8082	82913
LCS 240-82913/7-A	Lab Control Sample	Total/NA	Water	8082	82913
MB 240-82913/6-A	Method Blank	Total/NA	Water	8082	82913

Metals

Prep Batch: 82480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-1	GW-17358-041513-DR-102	Total/NA	Water	7470A	
240-23245-2	GW-17358-041513-DR-103	Total/NA	Water	7470A	
240-23245-3	GW-17358-041513-DR-104	Total/NA	Water	7470A	
240-23245-4	GW-17358-041513-DR-105	Total/NA	Water	7470A	
240-23245-5	GW-17358-041513-DR-106	Total/NA	Water	7470A	
240-23245-6	GW-17358-041513-DR-107	Total/NA	Water	7470A	
240-23245-7	GW-17358-041613-DR-108	Total/NA	Water	7470A	
240-23245-7 MS	GW-17358-041613-DR-108	Total/NA	Water	7470A	
240-23245-7 MSD	GW-17358-041613-DR-108	Total/NA	Water	7470A	
240-23245-8	GW-17358-041613-DR-109	Total/NA	Water	7470A	
240-23245-9	GW-17358-041613-DR-110	Total/NA	Water	7470A	
240-23245-10	GW-17358-041613-DR-111	Total/NA	Water	7470A	
240-23245-11	GW-17358-041613-DR-112	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 82480 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-12	GW-17358-041613-DR-113	Total/NA	Water	7470A	
240-23245-13	GW-17358-041613-DR-114	Total/NA	Water	7470A	
240-23245-14	GW-17358-041613-DR-115	Total/NA	Water	7470A	
LCS 240-82480/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-82480/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 82636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-1	GW-17358-041513-DR-102	Total/NA	Water	7470A	82480
240-23245-2	GW-17358-041513-DR-103	Total/NA	Water	7470A	82480
240-23245-3	GW-17358-041513-DR-104	Total/NA	Water	7470A	82480
240-23245-4	GW-17358-041513-DR-105	Total/NA	Water	7470A	82480
240-23245-5	GW-17358-041513-DR-106	Total/NA	Water	7470A	82480
240-23245-6	GW-17358-041513-DR-107	Total/NA	Water	7470A	82480
240-23245-7	GW-17358-041613-DR-108	Total/NA	Water	7470A	82480
240-23245-7 MS	GW-17358-041613-DR-108	Total/NA	Water	7470A	82480
240-23245-7 MSD	GW-17358-041613-DR-108	Total/NA	Water	7470A	82480
240-23245-8	GW-17358-041613-DR-109	Total/NA	Water	7470A	82480
240-23245-9	GW-17358-041613-DR-110	Total/NA	Water	7470A	82480
240-23245-10	GW-17358-041613-DR-111	Total/NA	Water	7470A	82480
240-23245-11	GW-17358-041613-DR-112	Total/NA	Water	7470A	82480
240-23245-12	GW-17358-041613-DR-113	Total/NA	Water	7470A	82480
240-23245-13	GW-17358-041613-DR-114	Total/NA	Water	7470A	82480
240-23245-14	GW-17358-041613-DR-115	Total/NA	Water	7470A	82480
LCS 240-82480/2-A	Lab Control Sample	Total/NA	Water	7470A	82480
MB 240-82480/1-A	Method Blank	Total/NA	Water	7470A	82480

Prep Batch: 82905

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-1	GW-17358-041513-DR-102	Total Recoverable	Water	3005A	
240-23245-2	GW-17358-041513-DR-103	Total Recoverable	Water	3005A	
240-23245-3	GW-17358-041513-DR-104	Total Recoverable	Water	3005A	
240-23245-4	GW-17358-041513-DR-105	Total Recoverable	Water	3005A	
240-23245-5	GW-17358-041513-DR-106	Total Recoverable	Water	3005A	
240-23245-6	GW-17358-041513-DR-107	Total Recoverable	Water	3005A	
240-23245-7	GW-17358-041613-DR-108	Total Recoverable	Water	3005A	
240-23245-7 MS	GW-17358-041613-DR-108	Total Recoverable	Water	3005A	
240-23245-7 MSD	GW-17358-041613-DR-108	Total Recoverable	Water	3005A	
240-23245-8	GW-17358-041613-DR-109	Total Recoverable	Water	3005A	
240-23245-9	GW-17358-041613-DR-110	Total Recoverable	Water	3005A	
240-23245-10	GW-17358-041613-DR-111	Total Recoverable	Water	3005A	
240-23245-11	GW-17358-041613-DR-112	Total Recoverable	Water	3005A	
240-23245-12	GW-17358-041613-DR-113	Total Recoverable	Water	3005A	
240-23245-13	GW-17358-041613-DR-114	Total Recoverable	Water	3005A	
240-23245-14	GW-17358-041613-DR-115	Total Recoverable	Water	3005A	
LCS 240-82905/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-82905/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 83108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-1	GW-17358-041513-DR-102	Total Recoverable	Water	6020	82905

Metals (Continued)

Analysis Batch: 83108 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-2	GW-17358-041513-DR-103	Total Recoverable	Water	6020	82905
240-23245-3	GW-17358-041513-DR-104	Total Recoverable	Water	6020	82905
240-23245-4	GW-17358-041513-DR-105	Total Recoverable	Water	6020	82905
240-23245-5	GW-17358-041513-DR-106	Total Recoverable	Water	6020	82905
240-23245-6	GW-17358-041513-DR-107	Total Recoverable	Water	6020	82905
240-23245-7	GW-17358-041613-DR-108	Total Recoverable	Water	6020	82905
240-23245-7 MS	GW-17358-041613-DR-108	Total Recoverable	Water	6020	82905
240-23245-7 MSD	GW-17358-041613-DR-108	Total Recoverable	Water	6020	82905
240-23245-8	GW-17358-041613-DR-109	Total Recoverable	Water	6020	82905
240-23245-9	GW-17358-041613-DR-110	Total Recoverable	Water	6020	82905
240-23245-10	GW-17358-041613-DR-111	Total Recoverable	Water	6020	82905
240-23245-11	GW-17358-041613-DR-112	Total Recoverable	Water	6020	82905
240-23245-12	GW-17358-041613-DR-113	Total Recoverable	Water	6020	82905
240-23245-13	GW-17358-041613-DR-114	Total Recoverable	Water	6020	82905
240-23245-14	GW-17358-041613-DR-115	Total Recoverable	Water	6020	82905
LCS 240-82905/2-A	Lab Control Sample	Total Recoverable	Water	6020	82905
MB 240-82905/1-A	Method Blank	Total Recoverable	Water	6020	82905

Analysis Batch: 83278

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-1	GW-17358-041513-DR-102	Total Recoverable	Water	6020	82905
240-23245-6	GW-17358-041513-DR-107	Total Recoverable	Water	6020	82905
240-23245-11	GW-17358-041613-DR-112	Total Recoverable	Water	6020	82905
240-23245-12	GW-17358-041613-DR-113	Total Recoverable	Water	6020	82905
LCS 240-82905/2-A	Lab Control Sample	Total Recoverable	Water	6020	82905
MB 240-82905/1-A	Method Blank	Total Recoverable	Water	6020	82905

General Chemistry

Prep Batch: 83103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-1	GW-17358-041513-DR-102	Total/NA	Water	365.2/365.3/365	
240-23245-5	GW-17358-041513-DR-106	Total/NA	Water	365.2/365.3/365	
240-23245-10	GW-17358-041613-DR-111	Total/NA	Water	365.2/365.3/365	
240-23245-12	GW-17358-041613-DR-113	Total/NA	Water	365.2/365.3/365	
240-23245-13	GW-17358-041613-DR-114	Total/NA	Water	365.2/365.3/365	
LCS 240-83103/11-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
MB 240-83103/10-A	Method Blank	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 83218

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23245-1	GW-17358-041513-DR-102	Total/NA	Water	SM 4500 P E	83103
240-23245-5	GW-17358-041513-DR-106	Total/NA	Water	SM 4500 P E	83103
240-23245-10	GW-17358-041613-DR-111	Total/NA	Water	SM 4500 P E	83103
240-23245-12	GW-17358-041613-DR-113	Total/NA	Water	SM 4500 P E	83103
240-23245-13	GW-17358-041613-DR-114	Total/NA	Water	SM 4500 P E	83103
LCS 240-83103/11-A	Lab Control Sample	Total/NA	Water	SM 4500 P E	83103
MB 240-83103/10-A	Method Blank	Total/NA	Water	SM 4500 P E	83103

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-82693/5
Matrix: Water
Analysis Batch: 82693

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/19/13 13:24	1
Benzene	1.0	U	1.0	0.13	ug/L			04/19/13 13:24	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/19/13 13:24	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/19/13 13:24	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/19/13 13:24	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/19/13 13:24	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/19/13 13:24	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/19/13 13:24	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/19/13 13:24	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/19/13 13:24	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/19/13 13:24	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/19/13 13:24	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/19/13 13:24	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 13:24	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 13:24	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/19/13 13:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/19/13 13:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/19/13 13:24	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/19/13 13:24	1
2-Hexanone	10	U	10	0.41	ug/L			04/19/13 13:24	1
Methylene Chloride	0.583	J	5.0	0.33	ug/L			04/19/13 13:24	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/19/13 13:24	1
Styrene	1.0	U	1.0	0.11	ug/L			04/19/13 13:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/19/13 13:24	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/19/13 13:24	1
Toluene	1.0	U	1.0	0.13	ug/L			04/19/13 13:24	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 13:24	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/19/13 13:24	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/19/13 13:24	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/19/13 13:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/19/13 13:24	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/19/13 13:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/19/13 13:24	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/19/13 13:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/19/13 13:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/19/13 13:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/19/13 13:24	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/19/13 13:24	1
Methyl acetate	10	U	10	0.38	ug/L			04/19/13 13:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/19/13 13:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/19/13 13:24	1
1,2,4-Trichlorobenzene	0.228	J	1.0	0.15	ug/L			04/19/13 13:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 13:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/19/13 13:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/19/13 13:24	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/19/13 13:24	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/19/13 13:24	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/19/13 13:24	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-82693/5
Matrix: Water
Analysis Batch: 82693

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*89*		*63 - 129*		*04/19/13 13:24*	*1*
4-Bromofluorobenzene (Surr)	*92*		*66 - 117*		*04/19/13 13:24*	*1*
Toluene-d8 (Surr)	*85*		*74 - 115*		*04/19/13 13:24*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 121*		*04/19/13 13:24*	*1*

Lab Sample ID: LCS 240-82693/4
Matrix: Water
Analysis Batch: 82693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	15.6		ug/L		78	43 - 136
Benzene	10.0	10.1		ug/L		101	83 - 112
Bromodichloromethane	10.0	10.1		ug/L		101	72 - 121
Bromoform	10.0	10.1		ug/L		101	40 - 131
Bromomethane	10.0	8.83		ug/L		88	11 - 185
2-Butanone (MEK)	20.0	19.2		ug/L		96	60 - 126
Carbon disulfide	10.0	10.9		ug/L		109	62 - 142
Carbon tetrachloride	10.0	9.21		ug/L		92	66 - 128
Chlorobenzene	10.0	10.0		ug/L		100	85 - 110
Chloroethane	10.0	10.9		ug/L		109	25 - 153
Chloroform	10.0	10.0		ug/L		100	79 - 117
Chloromethane	10.0	9.34		ug/L		93	44 - 126
1,1-Dichloroethane	10.0	10.1		ug/L		101	82 - 115
1,2-Dichloroethane	10.0	10.1		ug/L		101	71 - 127
1,1-Dichloroethene	10.0	10.4		ug/L		104	78 - 131
1,2-Dichloropropane	10.0	10.1		ug/L		101	81 - 115
cis-1,3-Dichloropropene	10.0	9.72		ug/L		97	61 - 115
trans-1,3-Dichloropropene	10.0	9.44		ug/L		94	58 - 117
Ethylbenzene	10.0	9.81		ug/L		98	83 - 112
2-Hexanone	20.0	19.5		ug/L		98	55 - 133
Methylene Chloride	10.0	11.5		ug/L		115	66 - 131
4-Methyl-2-pentanone (MIBK)	20.0	19.9		ug/L		100	63 - 128
Styrene	10.0	10.8		ug/L		108	79 - 114
1,1,2,2-Tetrachloroethane	10.0	9.76		ug/L		98	68 - 118
Tetrachloroethene	10.0	9.52		ug/L		95	79 - 114
Toluene	10.0	9.36		ug/L		94	84 - 111
Trichloroethene	10.0	10.2		ug/L		102	76 - 117
Vinyl chloride	10.0	9.03		ug/L		90	53 - 127
Xylenes, Total	30.0	31.0		ug/L		103	83 - 112
1,1,1-Trichloroethane	10.0	9.82		ug/L		98	74 - 118
1,1,2-Trichloroethane	10.0	9.89		ug/L		99	80 - 112
Cyclohexane	10.0	8.62		ug/L		86	54 - 121
1,2-Dibromo-3-Chloropropane	10.0	9.15		ug/L		91	42 - 136
1,2-Dibromoethane	10.0	9.80		ug/L		98	79 - 113
Dichlorodifluoromethane	10.0	6.82		ug/L		68	19 - 129
cis-1,2-Dichloroethene	10.0	10.0		ug/L		100	80 - 113
trans-1,2-Dichloroethene	10.0	9.91		ug/L		99	83 - 117
Isopropylbenzene	10.0	10.1		ug/L		101	75 - 114

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-82693/4
Matrix: Water
Analysis Batch: 82693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methyl acetate			10.0	11.3		ug/L		113	58 - 131		
Methyl tert-butyl ether			10.0	9.61		ug/L		96	52 - 144		
1,1,2-Trichloro-1,2,2-trifluoroethane			10.0	11.9		ug/L		119	74 - 151		
1,2,4-Trichlorobenzene			10.0	8.16		ug/L		82	48 - 135		
1,2-Dichlorobenzene			10.0	9.48		ug/L		95	81 - 110		
1,3-Dichlorobenzene			10.0	9.70		ug/L		97	80 - 110		
1,4-Dichlorobenzene			10.0	9.34		ug/L		93	82 - 110		
Trichlorofluoromethane			10.0	10.1		ug/L		101	49 - 157		
Dibromochloromethane			10.0	9.61		ug/L		96	64 - 119		
Methylcyclohexane			10.0	8.23		ug/L		82	56 - 127		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*63 - 129*
4-Bromofluorobenzene (Surr)	*104*		*66 - 117*
Toluene-d8 (Surr)	*87*		*74 - 115*
Dibromofluoromethane (Surr)	*90*		*75 - 121*

Lab Sample ID: 240-23245-7 MS
Matrix: Water
Analysis Batch: 82693

Client Sample ID: GW-17358-041613-DR-108
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Acetone	3.3	J	20.0	16.3		ug/L		65	33 - 145		
Benzene	1.0	U	10.0	9.95		ug/L		100	72 - 121		
Bromodichloromethane	1.0	U	10.0	9.91		ug/L		99	67 - 120		
Bromoform	1.0	U	10.0	9.64		ug/L		96	32 - 128		
Bromomethane	1.0	U	10.0	9.00		ug/L		90	10 - 186		
2-Butanone (MEK)	10	U	20.0	17.5		ug/L		88	54 - 129		
Carbon disulfide	5.0	U	10.0	11.3		ug/L		113	57 - 147		
Carbon tetrachloride	1.0	U	10.0	9.47		ug/L		95	59 - 129		
Chlorobenzene	1.0	U	10.0	9.32		ug/L		93	80 - 110		
Chloroethane	1.0	U	10.0	11.8		ug/L		118	21 - 165		
Chloroform	1.0	U	10.0	9.67		ug/L		97	76 - 118		
Chloromethane	1.0	U	10.0	9.95		ug/L		99	33 - 132		
1,1-Dichloroethane	1.0	U	10.0	9.65		ug/L		96	79 - 116		
1,2-Dichloroethane	1.0	U	10.0	9.86		ug/L		99	68 - 129		
1,1-Dichloroethene	1.0	U	10.0	10.3		ug/L		103	74 - 135		
1,2-Dichloropropane	1.0	U	10.0	9.75		ug/L		97	78 - 115		
cis-1,3-Dichloropropene	1.0	U	10.0	9.01		ug/L		90	51 - 110		
trans-1,3-Dichloropropene	1.0	U	10.0	8.67		ug/L		87	46 - 116		
Ethylbenzene	1.0	U	10.0	9.51		ug/L		95	75 - 116		
2-Hexanone	10	U	20.0	20.6		ug/L		103	47 - 139		
Methylene Chloride	5.0	U	10.0	8.60		ug/L		86	63 - 128		
4-Methyl-2-pentanone (MIBK)	10	U	20.0	19.7		ug/L		98	56 - 131		
Styrene	1.0	U	10.0	10.2		ug/L		102	71 - 117		
1,1,2,2-Tetrachloroethane	1.0	U	10.0	10.2		ug/L		102	63 - 122		
Tetrachloroethene	1.0	U	10.0	9.39		ug/L		94	70 - 117		

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-23245-7 MS
Matrix: Water
Analysis Batch: 82693

Client Sample ID: GW-17358-041613-DR-108
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	0.68	J	10.0	9.59		ug/L		89	78 - 114
Trichloroethene	1.0	U	10.0	10.0		ug/L		100	66 - 120
Vinyl chloride	3.5		10.0	13.8		ug/L		103	49 - 130
Xylenes, Total	2.0	U	30.0	29.1		ug/L		97	76 - 116
1,1,1-Trichloroethane	1.0	U	10.0	9.71		ug/L		97	68 - 121
1,1,2-Trichloroethane	1.0	U	10.0	9.61		ug/L		96	75 - 115
Cyclohexane	1.0	U	10.0	9.43		ug/L		94	49 - 123
1,2-Dibromo-3-Chloropropane	1.0	U	10.0	10.2		ug/L		102	32 - 139
1,2-Dibromoethane	1.0	U	10.0	9.00		ug/L		90	74 - 113
Dichlorodifluoromethane	1.0	U	10.0	7.66		ug/L		77	17 - 128
cis-1,2-Dichloroethene	1.0	U	10.0	9.85		ug/L		98	70 - 120
trans-1,2-Dichloroethene	1.0	U	10.0	9.62		ug/L		96	80 - 119
Isopropylbenzene	1.0	U	10.0	9.46		ug/L		95	68 - 116
Methyl acetate	10	U	10.0	9.01	J	ug/L		90	47 - 130
Methyl tert-butyl ether	1.0	U	10.0	8.12		ug/L		81	46 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	10.0	13.9		ug/L		139	70 - 152
1,2,4-Trichlorobenzene	1.0	U	10.0	7.92		ug/L		79	38 - 138
1,2-Dichlorobenzene	1.0	U	10.0	9.30		ug/L		93	75 - 111
1,3-Dichlorobenzene	1.0	U	10.0	9.11		ug/L		91	73 - 110
1,4-Dichlorobenzene	1.0	U	10.0	9.30		ug/L		93	75 - 110
Trichlorofluoromethane	1.0	U	10.0	10.8		ug/L		108	46 - 157
Dibromochloromethane	1.0	U	10.0	9.33		ug/L		93	56 - 118
Methylcyclohexane	1.0	U	10.0	8.87		ug/L		89	49 - 127

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*87*		*63 - 129*
4-Bromofluorobenzene (Surr)	*105*		*66 - 117*
Toluene-d8 (Surr)	*87*		*74 - 115*
Dibromofluoromethane (Surr)	*90*		*75 - 121*

Lab Sample ID: 240-23245-7 MSD
Matrix: Water
Analysis Batch: 82693

Client Sample ID: GW-17358-041613-DR-108
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	3.3	J	20.0	16.4		ug/L		65	33 - 145	0	30
Benzene	1.0	U	10.0	9.41		ug/L		94	72 - 121	6	30
Bromodichloromethane	1.0	U	10.0	9.45		ug/L		95	67 - 120	5	30
Bromoform	1.0	U	10.0	9.40		ug/L		94	32 - 128	3	30
Bromomethane	1.0	U	10.0	7.34		ug/L		73	10 - 186	20	30
2-Butanone (MEK)	10	U	20.0	16.7		ug/L		84	54 - 129	5	30
Carbon disulfide	5.0	U	10.0	10.5		ug/L		105	57 - 147	8	30
Carbon tetrachloride	1.0	U	10.0	9.34		ug/L		93	59 - 129	1	30
Chlorobenzene	1.0	U	10.0	9.06		ug/L		91	80 - 110	3	30
Chloroethane	1.0	U	10.0	10.2		ug/L		102	21 - 165	14	30
Chloroform	1.0	U	10.0	9.12		ug/L		91	76 - 118	6	30
Chloromethane	1.0	U	10.0	9.13		ug/L		91	33 - 132	9	30

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-23245-7 MSD
Matrix: Water
Analysis Batch: 82693

Client Sample ID: GW-17358-041613-DR-108
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	1.0	U	10.0	9.45		ug/L		95	79 - 116	2	30
1,2-Dichloroethane	1.0	U	10.0	9.35		ug/L		93	68 - 129	5	30
1,1-Dichloroethene	1.0	U	10.0	9.81		ug/L		98	74 - 135	5	30
1,2-Dichloropropane	1.0	U	10.0	9.47		ug/L		95	78 - 115	3	30
cis-1,3-Dichloropropene	1.0	U	10.0	8.49		ug/L		85	51 - 110	6	30
trans-1,3-Dichloropropene	1.0	U	10.0	8.52		ug/L		85	46 - 116	2	30
Ethylbenzene	1.0	U	10.0	8.92		ug/L		89	75 - 116	6	30
2-Hexanone	10	U	20.0	19.4		ug/L		97	47 - 139	6	30
Methylene Chloride	5.0	U	10.0	8.44		ug/L		84	63 - 128	2	30
4-Methyl-2-pentanone (MIBK)	10	U	20.0	18.4		ug/L		92	56 - 131	7	30
Styrene	1.0	U	10.0	9.39		ug/L		94	71 - 117	8	30
1,1,2,2-Tetrachloroethane	1.0	U	10.0	9.19		ug/L		92	63 - 122	10	30
Tetrachloroethene	1.0	U	10.0	8.82		ug/L		88	70 - 117	6	30
Toluene	0.68	J	10.0	9.24		ug/L		86	78 - 114	4	30
Trichloroethene	1.0	U	10.0	9.59		ug/L		96	66 - 120	5	30
Vinyl chloride	3.5		10.0	12.9		ug/L		94	49 - 130	7	30
Xylenes, Total	2.0	U	30.0	27.2		ug/L		91	76 - 116	7	30
1,1,1-Trichloroethane	1.0	U	10.0	9.54		ug/L		95	68 - 121	2	30
1,1,2-Trichloroethane	1.0	U	10.0	9.27		ug/L		93	75 - 115	4	30
Cyclohexane	1.0	U	10.0	9.30		ug/L		93	49 - 123	1	30
1,2-Dibromo-3-Chloropropane	1.0	U	10.0	10.5		ug/L		105	32 - 139	3	30
1,2-Dibromoethane	1.0	U	10.0	8.77		ug/L		88	74 - 113	3	30
Dichlorodifluoromethane	1.0	U	10.0	7.14		ug/L		71	17 - 128	7	30
cis-1,2-Dichloroethene	1.0	U	10.0	9.22		ug/L		92	70 - 120	7	30
trans-1,2-Dichloroethene	1.0	U	10.0	9.44		ug/L		94	80 - 119	2	30
Isopropylbenzene	1.0	U	10.0	9.03		ug/L		90	68 - 116	5	30
Methyl acetate	10	U	10.0	9.03	J	ug/L		90	47 - 130	0	30
Methyl tert-butyl ether	1.0	U	10.0	8.79		ug/L		88	46 - 144	8	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	10.0	13.5		ug/L		135	70 - 152	3	30
1,2,4-Trichlorobenzene	1.0	U	10.0	7.98		ug/L		80	38 - 138	1	30
1,2-Dichlorobenzene	1.0	U	10.0	8.96		ug/L		90	75 - 111	4	30
1,3-Dichlorobenzene	1.0	U	10.0	8.52		ug/L		85	73 - 110	7	30
1,4-Dichlorobenzene	1.0	U	10.0	8.34		ug/L		83	75 - 110	11	30
Trichlorofluoromethane	1.0	U	10.0	10.7		ug/L		107	46 - 157	1	30
Dibromochloromethane	1.0	U	10.0	9.10		ug/L		91	56 - 118	2	30
Methylcyclohexane	1.0	U	10.0	8.87		ug/L		89	49 - 127	0	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*63 - 129*
4-Bromofluorobenzene (Surr)	*100*		*66 - 117*
Toluene-d8 (Surr)	*87*		*74 - 115*
Dibromofluoromethane (Surr)	*90*		*75 - 121*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-82831/5
Matrix: Water
Analysis Batch: 82831

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/20/13 12:09	1
Benzene	1.0	U	1.0	0.13	ug/L			04/20/13 12:09	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/20/13 12:09	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/20/13 12:09	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/20/13 12:09	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/20/13 12:09	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/20/13 12:09	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/20/13 12:09	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 12:09	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/20/13 12:09	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/20/13 12:09	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/20/13 12:09	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/20/13 12:09	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 12:09	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 12:09	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/20/13 12:09	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/20/13 12:09	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/20/13 12:09	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/20/13 12:09	1
2-Hexanone	10	U	10	0.41	ug/L			04/20/13 12:09	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/20/13 12:09	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/20/13 12:09	1
Styrene	1.0	U	1.0	0.11	ug/L			04/20/13 12:09	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/20/13 12:09	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/20/13 12:09	1
Toluene	1.0	U	1.0	0.13	ug/L			04/20/13 12:09	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 12:09	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/20/13 12:09	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/20/13 12:09	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/20/13 12:09	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/20/13 12:09	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/20/13 12:09	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/20/13 12:09	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/20/13 12:09	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/20/13 12:09	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/20/13 12:09	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/20/13 12:09	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/20/13 12:09	1
Methyl acetate	10	U	10	0.38	ug/L			04/20/13 12:09	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/20/13 12:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/20/13 12:09	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/20/13 12:09	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 12:09	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/20/13 12:09	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/20/13 12:09	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/20/13 12:09	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/20/13 12:09	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/20/13 12:09	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-82831/5
Matrix: Water
Analysis Batch: 82831

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	88		63 - 129		04/20/13 12:09	1
4-Bromofluorobenzene (Surr)	93		66 - 117		04/20/13 12:09	1
Toluene-d8 (Surr)	87		74 - 115		04/20/13 12:09	1
Dibromofluoromethane (Surr)	92		75 - 121		04/20/13 12:09	1

Lab Sample ID: LCS 240-82831/4
Matrix: Water
Analysis Batch: 82831

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	21.7		ug/L		108	43 - 136
Benzene	10.0	10.2		ug/L		102	83 - 112
Bromodichloromethane	10.0	10.4		ug/L		104	72 - 121
Bromoform	10.0	9.68		ug/L		97	40 - 131
Bromomethane	10.0	8.53		ug/L		85	11 - 185
2-Butanone (MEK)	20.0	20.0		ug/L		100	60 - 126
Carbon disulfide	10.0	11.1		ug/L		111	62 - 142
Carbon tetrachloride	10.0	10.0		ug/L		100	66 - 128
Chlorobenzene	10.0	9.69		ug/L		97	85 - 110
Chloroethane	10.0	10.3		ug/L		103	25 - 153
Chloroform	10.0	10.1		ug/L		101	79 - 117
Chloromethane	10.0	9.55		ug/L		96	44 - 126
1,1-Dichloroethane	10.0	10.1		ug/L		101	82 - 115
1,2-Dichloroethane	10.0	10.2		ug/L		102	71 - 127
1,1-Dichloroethene	10.0	10.5		ug/L		105	78 - 131
1,2-Dichloropropane	10.0	10.1		ug/L		101	81 - 115
cis-1,3-Dichloropropene	10.0	10.0		ug/L		100	61 - 115
trans-1,3-Dichloropropene	10.0	9.73		ug/L		97	58 - 117
Ethylbenzene	10.0	9.77		ug/L		98	83 - 112
2-Hexanone	20.0	19.3		ug/L		96	55 - 133
Methylene Chloride	10.0	10.7		ug/L		107	66 - 131
4-Methyl-2-pentanone (MIBK)	20.0	19.4		ug/L		97	63 - 128
Styrene	10.0	10.5		ug/L		105	79 - 114
1,1,2,2-Tetrachloroethane	10.0	9.20		ug/L		92	68 - 118
Tetrachloroethene	10.0	9.81		ug/L		98	79 - 114
Toluene	10.0	9.65		ug/L		96	84 - 111
Trichloroethene	10.0	10.2		ug/L		102	76 - 117
Vinyl chloride	10.0	9.16		ug/L		92	53 - 127
Xylenes, Total	30.0	29.7		ug/L		99	83 - 112
1,1,1-Trichloroethane	10.0	10.7		ug/L		107	74 - 118
1,1,2-Trichloroethane	10.0	10.0		ug/L		100	80 - 112
Cyclohexane	10.0	9.51		ug/L		95	54 - 121
1,2-Dibromo-3-Chloropropane	10.0	8.40		ug/L		84	42 - 136
1,2-Dibromoethane	10.0	9.79		ug/L		98	79 - 113
Dichlorodifluoromethane	10.0	7.13		ug/L		71	19 - 129
cis-1,2-Dichloroethene	10.0	10.1		ug/L		101	80 - 113
trans-1,2-Dichloroethene	10.0	10.2		ug/L		102	83 - 117
Isopropylbenzene	10.0	9.68		ug/L		97	75 - 114

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-82831/4
Matrix: Water
Analysis Batch: 82831

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	10.0	11.6		ug/L		116	58 - 131
Methyl tert-butyl ether	10.0	10.2		ug/L		102	52 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	12.5		ug/L		125	74 - 151
1,2,4-Trichlorobenzene	10.0	7.70		ug/L		77	48 - 135
1,2-Dichlorobenzene	10.0	9.54		ug/L		95	81 - 110
1,3-Dichlorobenzene	10.0	9.60		ug/L		96	80 - 110
1,4-Dichlorobenzene	10.0	9.35		ug/L		93	82 - 110
Trichlorofluoromethane	10.0	10.3		ug/L		103	49 - 157
Dibromochloromethane	10.0	9.86		ug/L		99	64 - 119
Methylcyclohexane	10.0	8.64		ug/L		86	56 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*63 - 129*
4-Bromofluorobenzene (Surr)	*99*		*66 - 117*
Toluene-d8 (Surr)	*89*		*74 - 115*
Dibromofluoromethane (Surr)	*88*		*75 - 121*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Lab Sample ID: MB 240-82851/17-A
Matrix: Water
Analysis Batch: 83105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 82851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/20/13 12:00	04/23/13 09:51	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/20/13 12:00	04/23/13 09:51	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/20/13 12:00	04/23/13 09:51	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/20/13 12:00	04/23/13 09:51	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/20/13 12:00	04/23/13 09:51	1
2-Methylnaphthalene	5.0	U	5.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
2-Nitroaniline	20	U	20	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/20/13 12:00	04/23/13 09:51	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/20/13 12:00	04/23/13 09:51	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/20/13 12:00	04/23/13 09:51	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/20/13 12:00	04/23/13 09:51	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
4-Chloroaniline	10	U	10	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/20/13 12:00	04/23/13 09:51	1
4-Nitroaniline	20	U	20	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-82851/17-A
Matrix: Water
Analysis Batch: 83105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 82851

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	20	U	20	2.4	ug/L		04/20/13 12:00	04/23/13 09:51	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/20/13 12:00	04/23/13 09:51	1
Anthracene	5.0	U	5.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/20/13 12:00	04/23/13 09:51	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/20/13 12:00	04/23/13 09:51	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/20/13 12:00	04/23/13 09:51	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
Caprolactam	10	U	10	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
Carbazole	10	U	10	0.28	ug/L		04/20/13 12:00	04/23/13 09:51	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		04/20/13 12:00	04/23/13 09:51	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/20/13 12:00	04/23/13 09:51	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		04/20/13 12:00	04/23/13 09:51	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Fluorene	5.0	U	5.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/20/13 12:00	04/23/13 09:51	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
Hexachloroethane	5.0	U	5.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/20/13 12:00	04/23/13 09:51	1
Naphthalene	5.0	U	5.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/20/13 12:00	04/23/13 09:51	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		04/20/13 12:00	04/23/13 09:51	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/20/13 12:00	04/23/13 09:51	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/20/13 12:00	04/23/13 09:51	1
Phenol	5.0	U	5.0	0.60	ug/L		04/20/13 12:00	04/23/13 09:51	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
Pyrene	5.0	U	5.0	0.10	ug/L		04/20/13 12:00	04/23/13 09:51	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		04/20/13 12:00	04/23/13 09:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*65*		*20 - 110*	*04/20/13 12:00*	*04/23/13 09:51*	*1*
2-Fluorophenol (Surr)	*70*		*10 - 110*	*04/20/13 12:00*	*04/23/13 09:51*	*1*
2,4,6-Tribromophenol (Surr)	*41*		*21 - 110*	*04/20/13 12:00*	*04/23/13 09:51*	*1*
Nitrobenzene-d5 (Surr)	*62*		*21 - 110*	*04/20/13 12:00*	*04/23/13 09:51*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-82851/17-A
Matrix: Water
Analysis Batch: 83105

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 82851

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Phenol-d5 (Surr)	*68*		*21 - 110*	*04/20/13 12:00*	*04/23/13 09:51*	*1*
Terphenyl-d14 (Surr)	*58*		*24 - 110*	*04/20/13 12:00*	*04/23/13 09:51*	*1*

Lab Sample ID: LCS 240-82851/18-A
Matrix: Water
Analysis Batch: 83105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 82851

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	20.0	17.3		ug/L		86	43 - 110
2,2'-oxybis[1-chloropropane]	20.0	16.7		ug/L		84	37 - 110
2,4,5-Trichlorophenol	20.0	18.1		ug/L		91	48 - 110
2,4,6-Trichlorophenol	20.0	17.1		ug/L		85	45 - 110
2,4-Dichlorophenol	20.0	18.6		ug/L		93	41 - 110
2,4-Dimethylphenol	20.0	17.4		ug/L		87	32 - 110
2,4-Dinitrophenol	20.0	3.80	J	ug/L		19	10 - 110
2,4-Dinitrotoluene	20.0	19.1		ug/L		95	53 - 110
2,6-Dinitrotoluene	20.0	20.0		ug/L		100	54 - 110
2-Chloronaphthalene	20.0	17.9		ug/L		89	43 - 110
2-Chlorophenol	20.0	18.6		ug/L		93	29 - 110
2-Methylnaphthalene	20.0	17.2		ug/L		86	45 - 110
2-Methylphenol	20.0	17.5		ug/L		87	42 - 110
2-Nitroaniline	20.0	17.6	J	ug/L		88	54 - 110
2-Nitrophenol	20.0	18.1		ug/L		90	40 - 110
3,3'-Dichlorobenzidine	20.0	10.5		ug/L		52	22 - 110
3-Nitroaniline	20.0	17.7	J	ug/L		89	53 - 110
4,6-Dinitro-2-methylphenol	20.0	10.3	J	ug/L		51	31 - 110
4-Bromophenyl phenyl ether	20.0	18.5		ug/L		93	45 - 110
4-Chloro-3-methylphenol	20.0	17.8		ug/L		89	52 - 110
4-Chloroaniline	20.0	14.2		ug/L		71	44 - 110
4-Chlorophenyl phenyl ether	20.0	18.6		ug/L		93	47 - 110
4-Nitroaniline	20.0	19.4	J	ug/L		97	54 - 110
4-Nitrophenol	20.0	17.4	J	ug/L		87	33 - 112
Acenaphthene	20.0	17.5		ug/L		88	47 - 110
Acenaphthylene	20.0	18.5		ug/L		92	49 - 110
Acetophenone	20.0	18.1		ug/L		91	46 - 110
Anthracene	20.0	18.3		ug/L		91	52 - 110
Atrazine	20.0	20.0		ug/L		100	66 - 126
Benzaldehyde	20.0	17.3		ug/L		87	38 - 110
Benzo[a]anthracene	20.0	17.8		ug/L		89	52 - 110
Benzo[a]pyrene	20.0	15.9		ug/L		80	44 - 110
Benzo[b]fluoranthene	20.0	16.9		ug/L		84	48 - 110
Benzo[g,h,i]perylene	20.0	16.9		ug/L		85	50 - 110
Benzo[k]fluoranthene	20.0	16.8		ug/L		84	49 - 110
Bis(2-chloroethoxy)methane	20.0	17.6		ug/L		88	43 - 110
Bis(2-chloroethyl)ether	20.0	17.5		ug/L		87	40 - 110
Bis(2-ethylhexyl) phthalate	20.0	15.6		ug/L		78	39 - 116
Butyl benzyl phthalate	20.0	18.6		ug/L		93	55 - 110
Caprolactam	20.0	18.2		ug/L		91	45 - 111

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-82851/18-A
Matrix: Water
Analysis Batch: 83105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 82851

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbazole	20.0	18.7		ug/L		94	55 - 110
Chrysene	20.0	18.5		ug/L		92	55 - 110
Dibenz(a,h)anthracene	20.0	17.1		ug/L		85	49 - 110
Dibenzofuran	20.0	17.8		ug/L		89	51 - 110
Diethyl phthalate	20.0	18.9		ug/L		94	58 - 110
Dimethyl phthalate	20.0	18.9		ug/L		95	57 - 110
Di-n-butyl phthalate	20.0	18.8		ug/L		94	57 - 110
Di-n-octyl phthalate	20.0	12.9		ug/L		64	40 - 110
Fluoranthene	20.0	18.5		ug/L		93	54 - 110
Fluorene	20.0	18.0		ug/L		90	52 - 110
Hexachlorobenzene	20.0	17.7		ug/L		89	50 - 110
Hexachlorobutadiene	20.0	16.7		ug/L		83	33 - 110
Hexachlorocyclopentadiene	20.0	8.65		ug/L		43	10 - 110
Hexachloroethane	20.0	15.8		ug/L		79	35 - 110
Indeno[1,2,3-cd]pyrene	20.0	14.5		ug/L		72	50 - 110
Isophorone	20.0	17.4		ug/L		87	49 - 110
Naphthalene	20.0	17.5		ug/L		87	44 - 110
Nitrobenzene	20.0	17.7		ug/L		89	42 - 110
N-Nitrosodi-n-propylamine	20.0	16.9		ug/L		84	47 - 110
N-Nitrosodiphenylamine	20.0	18.0		ug/L		90	50 - 110
Pentachlorophenol	20.0	9.25		ug/L		46	18 - 110
Phenol	20.0	17.8		ug/L		89	33 - 110
Phenanthrene	20.0	18.1		ug/L		91	53 - 110
Pyrene	20.0	18.2		ug/L		91	52 - 110
3 & 4 Methylphenol	40.0	35.1		ug/L		88	44 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*78*		*20 - 110*
2-Fluorophenol (Surr)	*83*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*80*		*21 - 110*
Nitrobenzene-d5 (Surr)	*78*		*21 - 110*
Phenol-d5 (Surr)	*81*		*21 - 110*
Terphenyl-d14 (Surr)	*69*		*24 - 110*

Lab Sample ID: MB 240-82908/22-A
Matrix: Water
Analysis Batch: 83273

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 82908

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/22/13 08:00	04/24/13 08:52	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/22/13 08:00	04/24/13 08:52	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/22/13 08:00	04/24/13 08:52	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/22/13 08:00	04/24/13 08:52	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-82908/22-A
Matrix: Water
Analysis Batch: 83273

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 82908

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/22/13 08:00	04/24/13 08:52	1
2-Methylnaphthalene	5.0	U	5.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
2-Nitroaniline	20	U	20	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/22/13 08:00	04/24/13 08:52	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/22/13 08:00	04/24/13 08:52	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/22/13 08:00	04/24/13 08:52	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/22/13 08:00	04/24/13 08:52	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
4-Chloroaniline	10	U	10	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/22/13 08:00	04/24/13 08:52	1
4-Nitroaniline	20	U	20	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/22/13 08:00	04/24/13 08:52	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/22/13 08:00	04/24/13 08:52	1
Anthracene	5.0	U	5.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/22/13 08:00	04/24/13 08:52	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/22/13 08:00	04/24/13 08:52	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/22/13 08:00	04/24/13 08:52	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
Caprolactam	10	U	10	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
Carbazole	10	U	10	0.28	ug/L		04/22/13 08:00	04/24/13 08:52	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		04/22/13 08:00	04/24/13 08:52	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/22/13 08:00	04/24/13 08:52	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		04/22/13 08:00	04/24/13 08:52	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Fluorene	5.0	U	5.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/22/13 08:00	04/24/13 08:52	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
Hexachloroethane	5.0	U	5.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/22/13 08:00	04/24/13 08:52	1
Naphthalene	5.0	U	5.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-82908/22-A
Matrix: Water
Analysis Batch: 83273

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 82908

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/22/13 08:00	04/24/13 08:52	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		04/22/13 08:00	04/24/13 08:52	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/22/13 08:00	04/24/13 08:52	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/22/13 08:00	04/24/13 08:52	1
Phenol	5.0	U	5.0	0.60	ug/L		04/22/13 08:00	04/24/13 08:52	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
Pyrene	5.0	U	5.0	0.10	ug/L		04/22/13 08:00	04/24/13 08:52	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		04/22/13 08:00	04/24/13 08:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*57*		*20 - 110*	*04/22/13 08:00*	*04/24/13 08:52*	*1*
2-Fluorophenol (Surr)	*59*		*10 - 110*	*04/22/13 08:00*	*04/24/13 08:52*	*1*
2,4,6-Tribromophenol (Surr)	*41*		*21 - 110*	*04/22/13 08:00*	*04/24/13 08:52*	*1*
Nitrobenzene-d5 (Surr)	*54*		*21 - 110*	*04/22/13 08:00*	*04/24/13 08:52*	*1*
Phenol-d5 (Surr)	*58*		*21 - 110*	*04/22/13 08:00*	*04/24/13 08:52*	*1*
Terphenyl-d14 (Surr)	*54*		*24 - 110*	*04/22/13 08:00*	*04/24/13 08:52*	*1*

Lab Sample ID: LCS 240-82908/23-A
Matrix: Water
Analysis Batch: 83273

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 82908

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	20.0	17.7		ug/L		89	43 - 110
2,2'-oxybis[1-chloropropane]	20.0	16.8		ug/L		84	37 - 110
2,4,5-Trichlorophenol	20.0	18.4		ug/L		92	48 - 110
2,4,6-Trichlorophenol	20.0	18.5		ug/L		92	45 - 110
2,4-Dichlorophenol	20.0	18.2		ug/L		91	41 - 110
2,4-Dimethylphenol	20.0	12.6		ug/L		63	32 - 110
2,4-Dinitrophenol	20.0	5.37	J	ug/L		27	10 - 110
2,4-Dinitrotoluene	20.0	19.4		ug/L		97	53 - 110
2,6-Dinitrotoluene	20.0	19.4		ug/L		97	54 - 110
2-Chloronaphthalene	20.0	17.5		ug/L		88	43 - 110
2-Chlorophenol	20.0	18.5		ug/L		93	29 - 110
2-Methylnaphthalene	20.0	16.4		ug/L		82	45 - 110
2-Methylphenol	20.0	17.0		ug/L		85	42 - 110
2-Nitroaniline	20.0	18.1	J	ug/L		91	54 - 110
2-Nitrophenol	20.0	17.5		ug/L		87	40 - 110
3,3'-Dichlorobenzidine	20.0	9.09		ug/L		45	22 - 110
3-Nitroaniline	20.0	17.5	J	ug/L		88	53 - 110
4,6-Dinitro-2-methylphenol	20.0	10.4	J	ug/L		52	31 - 110
4-Bromophenyl phenyl ether	20.0	17.6		ug/L		88	45 - 110
4-Chloro-3-methylphenol	20.0	18.2		ug/L		91	52 - 110
4-Chloroaniline	20.0	13.6		ug/L		68	44 - 110
4-Chlorophenyl phenyl ether	20.0	18.7		ug/L		94	47 - 110
4-Nitroaniline	20.0	19.9	J	ug/L		99	54 - 110
4-Nitrophenol	20.0	18.0	J	ug/L		90	33 - 112
Acenaphthene	20.0	17.5		ug/L		88	47 - 110
Acenaphthylene	20.0	18.4		ug/L		92	49 - 110

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-82908/23-A
Matrix: Water
Analysis Batch: 83273

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 82908

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetophenone	20.0	18.3		ug/L		91	46 - 110
Anthracene	20.0	17.7		ug/L		88	52 - 110
Atrazine	20.0	19.5		ug/L		98	66 - 126
Benzaldehyde	20.0	17.5		ug/L		88	38 - 110
Benzo[a]anthracene	20.0	17.4		ug/L		87	52 - 110
Benzo[a]pyrene	20.0	14.5		ug/L		72	44 - 110
Benzo[b]fluoranthene	20.0	16.3		ug/L		82	48 - 110
Benzo[g,h,i]perylene	20.0	15.5		ug/L		77	50 - 110
Benzo[k]fluoranthene	20.0	16.3		ug/L		82	49 - 110
Bis(2-chloroethoxy)methane	20.0	17.5		ug/L		88	43 - 110
Bis(2-chloroethyl)ether	20.0	17.5		ug/L		88	40 - 110
Bis(2-ethylhexyl) phthalate	20.0	13.1		ug/L		66	39 - 116
Butyl benzyl phthalate	20.0	18.8		ug/L		94	55 - 110
Caprolactam	20.0	19.0		ug/L		95	45 - 111
Carbazole	20.0	18.1		ug/L		91	55 - 110
Chrysene	20.0	18.3		ug/L		91	55 - 110
Dibenz(a,h)anthracene	20.0	15.0		ug/L		75	49 - 110
Dibenzofuran	20.0	17.8		ug/L		89	51 - 110
Diethyl phthalate	20.0	19.2		ug/L		96	58 - 110
Dimethyl phthalate	20.0	19.0		ug/L		95	57 - 110
Di-n-butyl phthalate	20.0	18.6		ug/L		93	57 - 110
Di-n-octyl phthalate	20.0	10.9		ug/L		55	40 - 110
Fluoranthene	20.0	18.1		ug/L		90	54 - 110
Fluorene	20.0	18.5		ug/L		93	52 - 110
Hexachlorobenzene	20.0	17.0		ug/L		85	50 - 110
Hexachlorobutadiene	20.0	14.9		ug/L		75	33 - 110
Hexachlorocyclopentadiene	20.0	1.42	J *	ug/L		7	10 - 110
Hexachloroethane	20.0	14.9		ug/L		74	35 - 110
Indeno[1,2,3-cd]pyrene	20.0	13.2		ug/L		66	50 - 110
Isophorone	20.0	17.6		ug/L		88	49 - 110
Naphthalene	20.0	16.8		ug/L		84	44 - 110
Nitrobenzene	20.0	17.8		ug/L		89	42 - 110
N-Nitrosodi-n-propylamine	20.0	16.4		ug/L		82	47 - 110
N-Nitrosodiphenylamine	20.0	16.8		ug/L		84	50 - 110
Pentachlorophenol	20.0	10.1		ug/L		50	18 - 110
Phenol	20.0	17.8		ug/L		89	33 - 110
Phenanthrene	20.0	17.8		ug/L		89	53 - 110
Pyrene	20.0	18.2		ug/L		91	52 - 110
3 & 4 Methylphenol	40.0	34.6		ug/L		86	44 - 110

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*77*		*20 - 110*
2-Fluorophenol (Surr)	*81*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*76*		*21 - 110*
Nitrobenzene-d5 (Surr)	*76*		*21 - 110*
Phenol-d5 (Surr)	*80*		*21 - 110*
Terphenyl-d14 (Surr)	*67*		*24 - 110*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: 240-23245-7 MS
Matrix: Water
Analysis Batch: 83273

Client Sample ID: GW-17358-041613-DR-108
Prep Type: Total/NA
Prep Batch: 82908

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	4.8	U	19.0	11.5		ug/L		61	34 - 110
2,2'-oxybis[1-chloropropane]	4.8	U	19.0	13.1		ug/L		69	10 - 145
2,4,5-Trichlorophenol	4.8	U	19.0	13.7		ug/L		72	36 - 110
2,4,6-Trichlorophenol	3.8	U	19.0	14.2		ug/L		75	33 - 110
2,4-Dichlorophenol	9.5	U	19.0	14.9		ug/L		78	28 - 110
2,4-Dimethylphenol	4.8	U	19.0	14.2		ug/L		74	15 - 110
2,4-Dinitrophenol	19	U	19.0	9.46	J	ug/L		50	10 - 124
2,4-Dinitrotoluene	4.8	U	19.0	13.7		ug/L		72	37 - 110
2,6-Dinitrotoluene	4.8	U	19.0	13.6		ug/L		71	38 - 110
2-Chloronaphthalene	4.8	U	19.0	11.9		ug/L		62	28 - 110
2-Chlorophenol	4.8	U	19.0	14.1		ug/L		74	20 - 110
2-Methylnaphthalene	0.22	J	19.0	13.2		ug/L		68	32 - 110
2-Methylphenol	4.8	U	19.0	13.9		ug/L		73	27 - 110
2-Nitroaniline	19	U	19.0	12.6	J	ug/L		66	38 - 110
2-Nitrophenol	4.8	U	19.0	14.5		ug/L		76	26 - 110
3,3'-Dichlorobenzidine	0.95	U	19.0	0.95	U F	ug/L		0	10 - 110
3-Nitroaniline	19	U	19.0	19	U F	ug/L		0	22 - 110
4,6-Dinitro-2-methylphenol	19	U	19.0	11.3	J	ug/L		59	10 - 110
4-Bromophenyl phenyl ether	4.8	U	19.0	12.7		ug/L		66	26 - 110
4-Chloro-3-methylphenol	4.8	U	19.0	15.0		ug/L		79	38 - 110
4-Chloroaniline	9.5	U	19.0	1.03	J F	ug/L		5	15 - 110
4-Chlorophenyl phenyl ether	4.8	U	19.0	12.0		ug/L		63	30 - 110
4-Nitroaniline	19	U	19.0	19	U F	ug/L		0	18 - 110
4-Nitrophenol	19	U	19.0	16.1	J	ug/L		85	16 - 111
Acenaphthene	4.8	U	19.0	11.9		ug/L		62	35 - 110
Acenaphthylene	4.8	U	19.0	10.2		ug/L		54	33 - 110
Acetophenone	4.8	U	19.0	13.8		ug/L		72	10 - 155
Anthracene	4.8	U	19.0	11.8		ug/L		62	26 - 110
Atrazine	2.9	U	19.0	4.70	F	ug/L		25	40 - 124
Benzaldehyde	4.8	U	19.0	13.0		ug/L		68	24 - 110
Benzo[a]anthracene	0.95	U	19.0	7.86		ug/L		41	16 - 110
Benzo[a]pyrene	0.95	U	19.0	5.27		ug/L		28	10 - 110
Benzo[b]fluoranthene	0.95	U	19.0	5.80		ug/L		30	10 - 110
Benzo[g,h,i]perylene	0.95	U	19.0	4.05		ug/L		21	10 - 110
Benzo[k]fluoranthene	0.95	U	19.0	5.78		ug/L		30	10 - 110
Bis(2-chloroethoxy)methane	4.8	U	19.0	11.5		ug/L		60	27 - 110
Bis(2-chloroethyl)ether	0.95	U	19.0	13.8		ug/L		73	24 - 110
Bis(2-ethylhexyl) phthalate	4.8	U	19.0	4.38	J	ug/L		23	10 - 112
Butyl benzyl phthalate	4.8	U	19.0	10.9		ug/L		57	31 - 110
Caprolactam	9.5	U	19.0	19.3		ug/L		101	10 - 199
Carbazole	9.5	U	19.0	13.8		ug/L		72	28 - 110
Chrysene	0.95	U	19.0	8.29		ug/L		44	17 - 110
Dibenz(a,h)anthracene	1.9	U	19.0	4.37		ug/L		23	10 - 111
Dibenzofuran	3.8	U	19.0	12.0		ug/L		63	36 - 110
Diethyl phthalate	4.8	U	19.0	12.9		ug/L		67	42 - 110
Dimethyl phthalate	4.8	U	19.0	13.0		ug/L		68	42 - 110
Di-n-butyl phthalate	4.8	U	19.0	12.1		ug/L		64	35 - 110
Di-n-octyl phthalate	4.8	U	19.0	3.99	J	ug/L		21	10 - 118

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: 240-23245-7 MS — **Client Sample ID: GW-17358-041613-DR-108**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 83273 — **Prep Batch: 82908**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	0.95	U	19.0	12.1		ug/L		64	31 - 110
Fluorene	0.69	J	19.0	12.9		ug/L		64	36 - 110
Hexachlorobenzene	0.19	U	19.0	10.4		ug/L		54	23 - 110
Hexachlorobutadiene	0.95	U	19.0	11.2		ug/L		59	15 - 110
Hexachlorocyclopentadiene	4.8	U *	19.0	5.10		ug/L		27	10 - 110
Hexachloroethane	4.8	U	19.0	11.8		ug/L		62	10 - 122
Indeno[1,2,3-cd]pyrene	1.9	U	19.0	3.86		ug/L		20	10 - 110
Isophorone	4.8	U	19.0	14.0		ug/L		73	33 - 110
Naphthalene	0.28	J	19.0	13.2		ug/L		68	28 - 110
Nitrobenzene	2.9	U	19.0	13.6		ug/L		71	15 - 110
N-Nitrosodi-n-propylamine	4.8	U	19.0	13.0		ug/L		68	32 - 110
N-Nitrosodiphenylamine	4.8	U	19.0	12.0		ug/L		63	10 - 110
Pentachlorophenol	4.8	U	19.0	16.1		ug/L		84	10 - 123
Phenol	4.8	U	19.0	14.1		ug/L		74	25 - 110
Phenanthrene	1.9		19.0	14.2		ug/L		65	34 - 110
Pyrene	4.8	U	19.0	11.7		ug/L		62	32 - 110
3 & 4 Methylphenol	4.8	U	38.1	28.0		ug/L		73	31 - 110

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*54*		*20 - 110*
2-Fluorophenol (Surr)	*66*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*70*		*21 - 110*
Nitrobenzene-d5 (Surr)	*63*		*21 - 110*
Phenol-d5 (Surr)	*66*		*21 - 110*
Terphenyl-d14 (Surr)	*29*		*24 - 110*

Lab Sample ID: 240-23245-7 MSD — **Client Sample ID: GW-17358-041613-DR-108**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 83273 — **Prep Batch: 82908**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1'-Biphenyl	4.8	U	19.0	12.3		ug/L		64	34 - 110	6	31
2,2'-oxybis[1-chloropropane]	4.8	U	19.0	12.7		ug/L		67	10 - 145	3	43
2,4,5-Trichlorophenol	4.8	U	19.0	14.7		ug/L		77	36 - 110	7	60
2,4,6-Trichlorophenol	3.8	U	19.0	15.0		ug/L		79	33 - 110	6	63
2,4-Dichlorophenol	9.5	U	19.0	14.8		ug/L		78	28 - 110	1	69
2,4-Dimethylphenol	4.8	U	19.0	14.3		ug/L		75	15 - 110	1	36
2,4-Dinitrophenol	19	U	19.0	9.16	J	ug/L		48	10 - 124	3	70
2,4-Dinitrotoluene	4.8	U	19.0	14.3		ug/L		75	37 - 110	4	56
2,6-Dinitrotoluene	4.8	U	19.0	14.2		ug/L		74	38 - 110	4	54
2-Chloronaphthalene	4.8	U	19.0	12.6		ug/L		66	28 - 110	6	37
2-Chlorophenol	4.8	U	19.0	13.5		ug/L		71	20 - 110	4	70
2-Methylnaphthalene	0.22	J	19.0	13.0		ug/L		67	32 - 110	2	33
2-Methylphenol	4.8	U	19.0	13.5		ug/L		71	27 - 110	3	42
2-Nitroaniline	19	U	19.0	13.4	J	ug/L		70	38 - 110	6	32
2-Nitrophenol	4.8	U	19.0	14.6		ug/L		76	26 - 110	0	64
3,3'-Dichlorobenzidine	0.95	U	19.0	0.95	U F	ug/L		0	10 - 110	NC	99
3-Nitroaniline	19	U	19.0	19	U F	ug/L		0	22 - 110	NC	69

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: 240-23245-7 MSD | **Client Sample ID: GW-17358-041613-DR-108**
Matrix: Water | **Prep Type: Total/NA**
Analysis Batch: 83273 | **Prep Batch: 82908**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,6-Dinitro-2-methylphenol	19	U	19.0	11.0	J	ug/L		58	10 - 110	3	93
4-Bromophenyl phenyl ether	4.8	U	19.0	12.8		ug/L		67	26 - 110	1	35
4-Chloro-3-methylphenol	4.8	U	19.0	15.1		ug/L		79	38 - 110	1	35
4-Chloroaniline	9.5	U	19.0	0.977	J F	ug/L		5	15 - 110	5	73
4-Chlorophenyl phenyl ether	4.8	U	19.0	12.8		ug/L		67	30 - 110	6	36
4-Nitroaniline	19	U	19.0	19	U F	ug/L		0	18 - 110	NC	60
4-Nitrophenol	19	U	19.0	16.5	J	ug/L		87	16 - 111	3	65
Acenaphthene	4.8	U	19.0	12.6		ug/L		66	35 - 110	6	30
Acenaphthylene	4.8	U	19.0	10.7		ug/L		56	33 - 110	5	30
Acetophenone	4.8	U	19.0	13.6		ug/L		72	10 - 155	1	31
Anthracene	4.8	U	19.0	12.1		ug/L		64	26 - 110	2	37
Atrazine	2.9	U	19.0	4.82	F	ug/L		25	40 - 124	2	30
Benzaldehyde	4.8	U	19.0	12.8		ug/L		67	24 - 110	2	34
Benzo[a]anthracene	0.95	U	19.0	7.85		ug/L		41	16 - 110	0	30
Benzo[a]pyrene	0.95	U	19.0	5.09		ug/L		27	10 - 110	3	60
Benzo[b]fluoranthene	0.95	U	19.0	5.73		ug/L		30	10 - 110	1	45
Benzo[g,h,i]perylene	0.95	U	19.0	3.62		ug/L		19	10 - 110	11	60
Benzo[k]fluoranthene	0.95	U	19.0	5.39		ug/L		28	10 - 110	7	48
Bis(2-chloroethoxy)methane	4.8	U	19.0	11.3		ug/L		59	27 - 110	2	33
Bis(2-chloroethyl)ether	0.95	U	19.0	13.6		ug/L		72	24 - 110	1	42
Bis(2-ethylhexyl) phthalate	4.8	U	19.0	3.06	J	ug/L		16	10 - 112	35	71
Butyl benzyl phthalate	4.8	U	19.0	11.2		ug/L		59	31 - 110	3	37
Caprolactam	9.5	U	19.0	19.7		ug/L		104	10 - 199	2	99
Carbazole	9.5	U	19.0	14.1		ug/L		74	28 - 110	3	30
Chrysene	0.95	U	19.0	7.81		ug/L		41	17 - 110	6	30
Dibenz(a,h)anthracene	1.9	U	19.0	3.98		ug/L		21	10 - 111	9	63
Dibenzofuran	3.8	U	19.0	12.9		ug/L		68	36 - 110	7	30
Diethyl phthalate	4.8	U	19.0	13.7		ug/L		72	42 - 110	6	30
Dimethyl phthalate	4.8	U	19.0	13.8		ug/L		72	42 - 110	5	30
Di-n-butyl phthalate	4.8	U	19.0	12.5		ug/L		66	35 - 110	3	37
Di-n-octyl phthalate	4.8	U	19.0	2.59	J	ug/L		14	10 - 118	42	92
Fluoranthene	0.95	U	19.0	12.3		ug/L		65	31 - 110	1	30
Fluorene	0.69	J	19.0	13.8		ug/L		69	36 - 110	6	30
Hexachlorobenzene	0.19	U	19.0	10.0		ug/L		53	23 - 110	4	30
Hexachlorobutadiene	0.95	U	19.0	11.6		ug/L		61	15 - 110	3	49
Hexachlorocyclopentadiene	4.8	U *	19.0	5.53		ug/L		29	10 - 110	8	99
Hexachloroethane	4.8	U	19.0	11.8		ug/L		62	10 - 122	0	44
Indeno[1,2,3-cd]pyrene	1.9	U	19.0	3.53		ug/L		19	10 - 110	9	58
Isophorone	4.8	U	19.0	13.9		ug/L		73	33 - 110	0	31
Naphthalene	0.28	J	19.0	13.1		ug/L		67	28 - 110	1	80
Nitrobenzene	2.9	U	19.0	13.5		ug/L		71	15 - 110	1	34
N-Nitrosodi-n-propylamine	4.8	U	19.0	12.7		ug/L		67	32 - 110	2	32
N-Nitrosodiphenylamine	4.8	U	19.0	13.0		ug/L		68	10 - 110	8	38
Pentachlorophenol	4.8	U	19.0	15.2		ug/L		80	10 - 123	6	76
Phenol	4.8	U	19.0	13.9		ug/L		73	25 - 110	2	74
Phenanthrene	1.9		19.0	14.7		ug/L		67	34 - 110	3	30
Pyrene	4.8	U	19.0	11.5		ug/L		61	32 - 110	2	30
3 & 4 Methylphenol	4.8	U	38.1	27.6		ug/L		73	31 - 110	1	42

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: 240-23245-7 MSD
Matrix: Water
Analysis Batch: 83273

Client Sample ID: GW-17358-041613-DR-108
Prep Type: Total/NA
Prep Batch: 82908

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	*57*		*20 - 110*
2-Fluorophenol (Surr)	*66*		*10 - 110*
2,4,6-Tribromophenol (Surr)	*76*		*21 - 110*
Nitrobenzene-d5 (Surr)	*61*		*21 - 110*
Phenol-d5 (Surr)	*65*		*21 - 110*
Terphenyl-d14 (Surr)	*28*		*24 - 110*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-82850/12-A
Matrix: Water
Analysis Batch: 83043

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 82850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/20/13 11:53	04/23/13 04:32	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/20/13 11:53	04/23/13 04:32	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		04/20/13 11:53	04/23/13 04:32	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		04/20/13 11:53	04/23/13 04:32	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		04/20/13 11:53	04/23/13 04:32	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/20/13 11:53	04/23/13 04:32	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/20/13 11:53	04/23/13 04:32	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/20/13 11:53	04/23/13 04:32	1
Aroclor-1268	0.10	U	0.10	0.055	ug/L		04/20/13 11:53	04/23/13 04:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	*88*		*23 - 136*	*04/20/13 11:53*	*04/23/13 04:32*	*1*
DCB Decachlorobiphenyl	*114*		*10 - 130*	*04/20/13 11:53*	*04/23/13 04:32*	*1*

Lab Sample ID: LCS 240-82850/13-A
Matrix: Water
Analysis Batch: 83043

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 82850

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			2.50	2.79		ug/L		112	66 - 120		
Aroclor-1260			2.50	2.90		ug/L		116	55 - 120		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	*96*		*23 - 136*
DCB Decachlorobiphenyl	*120*		*10 - 130*

Lab Sample ID: 240-23245-7 MS
Matrix: Water
Analysis Batch: 83043

Client Sample ID: GW-17358-041613-DR-108
Prep Type: Total/NA
Prep Batch: 82850

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016	0.095	U	2.38	1.83		ug/L		77	67 - 120		
Aroclor-1260	0.095	U	2.38	0.830		ug/L		35	31 - 120		

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 240-23245-7 MS
Matrix: Water
Analysis Batch: 83043

Client Sample ID: GW-17358-041613-DR-108
Prep Type: Total/NA
Prep Batch: 82850

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	101		23 - 136
DCB Decachlorobiphenyl	22		10 - 130

Lab Sample ID: 240-23245-7 MSD
Matrix: Water
Analysis Batch: 83043

Client Sample ID: GW-17358-041613-DR-108
Prep Type: Total/NA
Prep Batch: 82850

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aroclor-1016	0.095	U	2.38	1.80		ug/L		76	67 - 120	2	30
Aroclor-1260	0.095	U	2.38	0.716	F	ug/L		30	31 - 120	15	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	96		23 - 136
DCB Decachlorobiphenyl	18		10 - 130

Lab Sample ID: MB 240-82913/6-A
Matrix: Water
Analysis Batch: 83244

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 82913

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/22/13 08:12	04/23/13 17:04	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/22/13 08:12	04/23/13 17:04	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		04/22/13 08:12	04/23/13 17:04	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		04/22/13 08:12	04/23/13 17:04	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		04/22/13 08:12	04/23/13 17:04	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/22/13 08:12	04/23/13 17:04	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/22/13 08:12	04/23/13 17:04	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/22/13 08:12	04/23/13 17:04	1
Aroclor-1268	0.10	U	0.10	0.055	ug/L		04/22/13 08:12	04/23/13 17:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	88		23 - 136	04/22/13 08:12	04/23/13 17:04	1
DCB Decachlorobiphenyl	88		10 - 130	04/22/13 08:12	04/23/13 17:04	1

Lab Sample ID: LCS 240-82913/7-A
Matrix: Water
Analysis Batch: 83244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 82913

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aroclor-1016			2.50	2.49		ug/L		99	66 - 120		
Aroclor-1260			2.50	2.74		ug/L		110	55 - 120		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	74		23 - 136
DCB Decachlorobiphenyl	102		10 - 130

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-82905/1-A
Matrix: Water
Analysis Batch: 83108

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 82905

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.144	J	2.0	0.080	ug/L		04/22/13 07:06	04/23/13 00:37	1
Arsenic	5.0	U	5.0	0.063	ug/L		04/22/13 07:06	04/23/13 00:37	1
Barium	1.30	J	100	0.32	ug/L		04/22/13 07:06	04/23/13 00:37	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:06	04/23/13 00:37	1
Cadmium	1.0	U	1.0	0.026	ug/L		04/22/13 07:06	04/23/13 00:37	1
Cobalt	20	U	20	0.020	ug/L		04/22/13 07:06	04/23/13 00:37	1
Chromium	0.163	J	10	0.13	ug/L		04/22/13 07:06	04/23/13 00:37	1
Iron	14.4	J	200	12	ug/L		04/22/13 07:06	04/23/13 00:37	1
Manganese	0.891	J	50	0.36	ug/L		04/22/13 07:06	04/23/13 00:37	1
Nickel	0.167	J	20	0.087	ug/L		04/22/13 07:06	04/23/13 00:37	1
Lead	3.0	U	3.0	0.14	ug/L		04/22/13 07:06	04/23/13 00:37	1
Selenium	5.0	U	5.0	0.18	ug/L		04/22/13 07:06	04/23/13 00:37	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:06	04/23/13 00:37	1
Vanadium	4.0	U	4.0	0.15	ug/L		04/22/13 07:06	04/23/13 00:37	1
Zinc	20.3	J	50	2.1	ug/L		04/22/13 07:06	04/23/13 00:37	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:06	04/23/13 00:37	1

Lab Sample ID: MB 240-82905/1-A
Matrix: Water
Analysis Batch: 83278

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 82905

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	7.5	ug/L		04/22/13 07:06	04/23/13 13:50	1
Copper	0.747	J	4.0	0.24	ug/L		04/22/13 07:06	04/23/13 13:50	1

Lab Sample ID: LCS 240-82905/2-A
Matrix: Water
Analysis Batch: 83108

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 82905

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	100	96.0		ug/L		96	80 - 120
Arsenic	1000	967		ug/L		97	80 - 120
Barium	1000	944		ug/L		94	80 - 120
Beryllium	1000	906		ug/L		91	80 - 120
Cadmium	1000	996		ug/L		100	80 - 120
Cobalt	1000	955		ug/L		96	80 - 120
Chromium	1000	952		ug/L		95	80 - 120
Iron	10000	9360		ug/L		94	80 - 120
Manganese	1000	997		ug/L		100	80 - 120
Nickel	1000	993		ug/L		99	80 - 120
Lead	1000	980		ug/L		98	80 - 120
Selenium	1000	957		ug/L		96	80 - 120
Thallium	250	241		ug/L		96	80 - 120
Vanadium	1000	927		ug/L		93	80 - 120
Zinc	1000	1030		ug/L		103	80 - 120
Silver	100	103		ug/L		103	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 240-82905/2-A
Matrix: Water
Analysis Batch: 83278

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 82905

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aluminum			10000	8970		ug/L		90	80 - 120		
Copper			1000	959		ug/L		96	80 - 120		

Lab Sample ID: 240-23245-7 MS
Matrix: Water
Analysis Batch: 83108

Client Sample ID: GW-17358-041613-DR-108
Prep Type: Total Recoverable
Prep Batch: 82905

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Aluminum	7.7	J ^	10000	9880	^	ug/L		99	63 - 128		
Antimony	0.17	J B	100	99.8		ug/L		100	44 - 153		
Arsenic	27		1000	1020		ug/L		99	82 - 123		
Barium	180	B	1000	1190		ug/L		101	45 - 144		
Beryllium	0.16	J	1000	946		ug/L		95	77 - 124		
Cadmium	0.14	J	1000	1010		ug/L		101	78 - 117		
Cobalt	1.5	J	1000	978		ug/L		98	67 - 114		
Chromium	0.52	J B	1000	994		ug/L		99	72 - 110		
Copper	0.60	J B ^	1000	972	^	ug/L		97	60 - 123		
Iron	14000	B	10000	24100		ug/L		98	22 - 169		
Manganese	140	B	1000	1170		ug/L		103	10 - 172		
Nickel	27	B	1000	1010		ug/L		99	72 - 111		
Lead	0.34	J	1000	979		ug/L		98	73 - 115		
Selenium	0.47	J	1000	943		ug/L		94	72 - 148		
Thallium	1.1	J	250	245		ug/L		98	69 - 117		
Vanadium	1.1	J	1000	989		ug/L		99	70 - 112		
Zinc	6.9	J B	1000	970		ug/L		96	49 - 156		
Silver	0.013	J	100	104		ug/L		104	10 - 139		

Lab Sample ID: 240-23245-7 MSD
Matrix: Water
Analysis Batch: 83108

Client Sample ID: GW-17358-041613-DR-108
Prep Type: Total Recoverable
Prep Batch: 82905

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	7.7	J ^	10000	9910	^	ug/L		99	63 - 128	0	20
Antimony	0.17	J B	100	102		ug/L		101	44 - 153	2	20
Arsenic	27		1000	1020		ug/L		99	82 - 123	0	20
Barium	180	B	1000	1190		ug/L		101	45 - 144	0	20
Beryllium	0.16	J	1000	943		ug/L		94	77 - 124	0	20
Cadmium	0.14	J	1000	1020		ug/L		102	78 - 117	1	20
Cobalt	1.5	J	1000	986		ug/L		98	67 - 114	1	20
Chromium	0.52	J B	1000	1010		ug/L		101	72 - 110	2	20
Copper	0.60	J B ^	1000	981	^	ug/L		98	60 - 123	1	20
Iron	14000	B	10000	23200		ug/L		89	22 - 169	4	20
Manganese	140	B	1000	1190		ug/L		105	10 - 172	1	20
Nickel	27	B	1000	1020		ug/L		99	72 - 111	0	20
Lead	0.34	J	1000	991		ug/L		99	73 - 115	1	20
Selenium	0.47	J	1000	941		ug/L		94	72 - 148	0	20
Thallium	1.1	J	250	249		ug/L		99	69 - 117	2	20
Vanadium	1.1	J	1000	996		ug/L		99	70 - 112	1	20

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-23245-7 MSD — **Client Sample ID: GW-17358-041613-DR-108**
Matrix: Water — **Prep Type: Total Recoverable**
Analysis Batch: 83108 — **Prep Batch: 82905**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Zinc	6.9	J B	1000	972		ug/L		96	49 - 156	0	20
Silver	0.013	J	100	105		ug/L		104	10 - 139	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-82480/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 82636 — **Prep Batch: 82480**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.127	J	0.20	0.12	ug/L		04/18/13 12:35	04/18/13 15:40	1

Lab Sample ID: LCS 240-82480/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 82636 — **Prep Batch: 82480**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.10		ug/L		102	81 - 123

Lab Sample ID: 240-23245-7 MS — **Client Sample ID: GW-17358-041613-DR-108**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 82636 — **Prep Batch: 82480**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.20	U	1.00	1.03		ug/L		103	69 - 134

Lab Sample ID: 240-23245-7 MSD — **Client Sample ID: GW-17358-041613-DR-108**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 82636 — **Prep Batch: 82480**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.20	U	1.00	0.993		ug/L		99	69 - 134	3	20

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 240-83103/10-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 83218 — **Prep Batch: 83103**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/23/13 05:08	04/23/13 12:04	1

Lab Sample ID: LCS 240-83103/11-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 83218 — **Prep Batch: 83103**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Phosphorus as P	4.48	4.42		mg/L		99	53 - 134

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(63-129)	(66-117)	(74-115)	(75-121)
240-23245-1	GW-17358-041513-DR-102	87	89	84	91
240-23245-2	GW-17358-041513-DR-103	87	94	84	91
240-23245-3	GW-17358-041513-DR-104	88	97	86	91
240-23245-4	GW-17358-041513-DR-105	86	89	85	93
240-23245-5	GW-17358-041513-DR-106	87	89	85	92
240-23245-6	GW-17358-041513-DR-107	88	91	87	93
240-23245-7	GW-17358-041613-DR-108	87	97	84	91
240-23245-7 MS	GW-17358-041613-DR-108	87	105	87	90
240-23245-7 MSD	GW-17358-041613-DR-108	88	100	87	90
240-23245-8	GW-17358-041613-DR-109	87	90	84	92
240-23245-9	GW-17358-041613-DR-110	89	96	88	91
240-23245-10	GW-17358-041613-DR-111	87	96	89	92
240-23245-11	GW-17358-041613-DR-112	86	93	86	91
240-23245-12	GW-17358-041613-DR-113	87	91	85	90
240-23245-13	GW-17358-041613-DR-114	86	87	84	88
240-23245-14	GW-17358-041613-DR-115	85	88	85	91
240-23245-15	TB-17358-041613	86	93	90	90
LCS 240-82693/4	Lab Control Sample	85	104	87	90
LCS 240-82831/4	Lab Control Sample	81	99	89	88
MB 240-82693/5	Method Blank	89	92	85	91
MB 240-82831/5	Method Blank	88	93	87	92

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(20-110)	(10-110)	(21-110)	(21-110)	(21-110)	(24-110)
240-23245-1	GW-17358-041513-DR-102	57	57	28	56	58	53
240-23245-2	GW-17358-041513-DR-103	56	58	33	53	58	51
240-23245-3	GW-17358-041513-DR-104	59	62	34	55	61	54
240-23245-4	GW-17358-041513-DR-105	53	55	32	51	54	51
240-23245-5	GW-17358-041513-DR-106	56	59	32	53	58	52
240-23245-6	GW-17358-041513-DR-107	54	53	42	50	53	50
240-23245-7	GW-17358-041613-DR-108	62	74	79	68	75	28
240-23245-7 MS	GW-17358-041613-DR-108	54	66	70	63	66	29
240-23245-7 MSD	GW-17358-041613-DR-108	57	66	76	61	65	28
240-23245-8	GW-17358-041613-DR-109	61	65	67	59	66	55
240-23245-9	GW-17358-041613-DR-110	55	56	65	52	57	52
240-23245-10	GW-17358-041613-DR-111	59	57	60	55	59	51
240-23245-11	GW-17358-041613-DR-112	59	59	62	55	60	52
240-23245-12	GW-17358-041613-DR-113	59	58	62	56	60	53
240-23245-13	GW-17358-041613-DR-114	57	60	58	55	60	53

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		FBP	2FP	TBP	NBZ	PHL	TPH		
Lab Sample ID	Client Sample ID	(20-110)	(10-110)	(21-110)	(21-110)	(21-110)	(24-110)		
240-23245-14	GW-17358-041613-DR-115	58	63	59	58	63	55		
LCS 240-82851/18-A	Lab Control Sample	78	83	80	78	81	69		
LCS 240-82908/23-A	Lab Control Sample	77	81	76	76	80	67		
MB 240-82851/17-A	Method Blank	65	70	41	62	68	58		
MB 240-82908/22-A	Method Blank	57	59	41	54	58	54		

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TCX2	DCB2						
Lab Sample ID	Client Sample ID	(23-136)	(10-130)						
240-23245-1	GW-17358-041513-DR-102	92	85						
240-23245-2	GW-17358-041513-DR-103	92	77						
240-23245-3	GW-17358-041513-DR-104	93	66						
240-23245-4	GW-17358-041513-DR-105	82	53						
240-23245-5	GW-17358-041513-DR-106	82	75						
240-23245-6	GW-17358-041513-DR-107	88	69						
240-23245-7	GW-17358-041613-DR-108	104	11						
240-23245-7 MS	GW-17358-041613-DR-108	101	22						
240-23245-7 MSD	GW-17358-041613-DR-108	96	18						
240-23245-8	GW-17358-041613-DR-109	82	62						
240-23245-9	GW-17358-041613-DR-110	89	54						
240-23245-10	GW-17358-041613-DR-111	73	65						
240-23245-11	GW-17358-041613-DR-112	86	65						
240-23245-12	GW-17358-041613-DR-113	92	48						
240-23245-13	GW-17358-041613-DR-114	90	92						
240-23245-14	GW-17358-041613-DR-115	74	83						
LCS 240-82850/13-A	Lab Control Sample	96	120						
LCS 240-82913/7-A	Lab Control Sample	74	102						
MB 240-82850/12-A	Method Blank	88	114						
MB 240-82913/6-A	Method Blank	88	88						

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Client Sample ID: GW-17358-041513-DR-102

Lab Sample ID: 240-23245-1

Date Collected: 04/15/13 08:05

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82693	04/19/13 17:12	RQ	TAL CAN
Total/NA	Prep	3520C			82851	04/20/13 12:00	SE	TAL CAN
Total/NA	Analysis	8270C		1	83105	04/23/13 17:08	TH	TAL CAN
Total/NA	Prep	3520C			82850	04/20/13 11:53	SE	TAL CAN
Total/NA	Analysis	8082		1	83043	04/23/13 01:57	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 15:50	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 02:00	NJT	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83278	04/23/13 14:13	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			83103	04/23/13 05:24	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	83218	04/23/13 12:08	TH	TAL CAN

Client Sample ID: GW-17358-041513-DR-103

Lab Sample ID: 240-23245-2

Date Collected: 04/15/13 09:30

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82693	04/19/13 17:35	RQ	TAL CAN
Total/NA	Prep	3520C			82851	04/20/13 12:00	SE	TAL CAN
Total/NA	Analysis	8270C		1	83105	04/23/13 17:30	TH	TAL CAN
Total/NA	Prep	3520C			82850	04/20/13 11:53	SE	TAL CAN
Total/NA	Analysis	8082		1	83043	04/23/13 02:11	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 15:51	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 02:07	NJT	TAL CAN

Client Sample ID: GW-17358-041513-DR-104

Lab Sample ID: 240-23245-3

Date Collected: 04/15/13 09:45

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82693	04/19/13 17:57	RQ	TAL CAN
Total/NA	Prep	3520C			82851	04/20/13 12:00	SE	TAL CAN
Total/NA	Analysis	8270C		1	83105	04/23/13 17:52	TH	TAL CAN
Total/NA	Prep	3520C			82850	04/20/13 11:53	SE	TAL CAN
Total/NA	Analysis	8082		1	83043	04/23/13 02:26	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 15:53	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 02:15	NJT	TAL CAN

Client Sample ID: GW-17358-041513-DR-105

Lab Sample ID: 240-23245-4

Date Collected: 04/15/13 10:10

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82693	04/19/13 18:20	RQ	TAL CAN
Total/NA	Prep	3520C			82851	04/20/13 12:00	SE	TAL CAN
Total/NA	Analysis	8270C		1	83105	04/23/13 18:14	TH	TAL CAN
Total/NA	Prep	3520C			82850	04/20/13 11:53	SE	TAL CAN
Total/NA	Analysis	8082		1	83043	04/23/13 02:40	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 15:54	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 02:22	NJT	TAL CAN

Client Sample ID: GW-17358-041513-DR-106

Lab Sample ID: 240-23245-5

Date Collected: 04/15/13 11:30

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82693	04/19/13 18:43	RQ	TAL CAN
Total/NA	Prep	3520C			82851	04/20/13 12:00	SE	TAL CAN
Total/NA	Analysis	8270C		1	83105	04/23/13 18:35	TH	TAL CAN
Total/NA	Prep	3520C			82850	04/20/13 11:53	SE	TAL CAN
Total/NA	Analysis	8082		1	83043	04/23/13 02:54	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 15:55	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 02:44	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			83103	04/23/13 05:25	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	83218	04/23/13 12:08	TH	TAL CAN

Client Sample ID: GW-17358-041513-DR-107

Lab Sample ID: 240-23245-6

Date Collected: 04/15/13 13:10

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82693	04/19/13 19:06	RQ	TAL CAN
Total/NA	Prep	3520C			82851	04/20/13 12:00	SE	TAL CAN
Total/NA	Analysis	8270C		1	83105	04/23/13 18:57	TH	TAL CAN
Total/NA	Prep	3520C			82850	04/20/13 11:53	SE	TAL CAN
Total/NA	Analysis	8082		1	83043	04/23/13 03:08	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 15:58	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 02:52	NJT	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83278	04/23/13 14:20	NJT	TAL CAN

Client Sample ID: GW-17358-041613-DR-108

Lab Sample ID: 240-23245-7

Date Collected: 04/16/13 09:30

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82693	04/19/13 13:47	RQ	TAL CAN
Total/NA	Prep	3520C			82908	04/22/13 08:00	CC	TAL CAN
Total/NA	Analysis	8270C		1	83273	04/24/13 12:52	TH	TAL CAN
Total/NA	Prep	3520C			82850	04/20/13 11:53	SE	TAL CAN
Total/NA	Analysis	8082		1	83043	04/23/13 03:22	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 15:42	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 00:52	NJT	TAL CAN

Client Sample ID: GW-17358-041613-DR-109

Lab Sample ID: 240-23245-8

Date Collected: 04/16/13 09:05

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82693	04/19/13 19:28	RQ	TAL CAN
Total/NA	Prep	3520C			82908	04/22/13 08:00	CC	TAL CAN
Total/NA	Analysis	8270C		1	83273	04/24/13 16:36	TH	TAL CAN
Total/NA	Prep	3520C			82850	04/20/13 11:53	SE	TAL CAN
Total/NA	Analysis	8082		1	83043	04/23/13 04:05	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 15:59	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 02:59	NJT	TAL CAN

Client Sample ID: GW-17358-041613-DR-110

Lab Sample ID: 240-23245-9

Date Collected: 04/16/13 09:25

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		25	82693	04/19/13 14:10	RQ	TAL CAN
Total/NA	Prep	3520C			82908	04/22/13 08:00	CC	TAL CAN
Total/NA	Analysis	8270C		1	83273	04/24/13 16:58	TH	TAL CAN
Total/NA	Prep	3520C			82850	04/20/13 11:53	SE	TAL CAN
Total/NA	Analysis	8082		1	83043	04/23/13 04:19	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 16:01	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 03:07	NJT	TAL CAN

Client Sample ID: GW-17358-041613-DR-111

Lab Sample ID: 240-23245-10

Date Collected: 04/16/13 10:55

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82831	04/20/13 13:20	LE	TAL CAN
Total/NA	Prep	3520C			82908	04/22/13 08:00	CC	TAL CAN
Total/NA	Analysis	8270C		1	83273	04/24/13 17:20	TH	TAL CAN
Total/NA	Prep	3520C			82913	04/22/13 08:12	CC	TAL CAN
Total/NA	Analysis	8082		1	83244	04/23/13 15:53	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 16:02	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 03:14	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			83103	04/23/13 05:26	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	83218	04/23/13 12:11	TH	TAL CAN

Client Sample ID: GW-17358-041613-DR-112

Lab Sample ID: 240-23245-11

Date Collected: 04/16/13 11:10

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82831	04/20/13 13:42	LE	TAL CAN
Total/NA	Prep	3520C			82908	04/22/13 08:00	CC	TAL CAN
Total/NA	Analysis	8270C		1	83273	04/24/13 17:41	TH	TAL CAN
Total/NA	Prep	3520C			82913	04/22/13 08:12	CC	TAL CAN
Total/NA	Analysis	8082		1	83244	04/23/13 16:07	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 16:07	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 03:22	NJT	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83278	04/23/13 14:28	NJT	TAL CAN

Client Sample ID: GW-17358-041613-DR-113

Lab Sample ID: 240-23245-12

Date Collected: 04/16/13 13:30

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82831	04/20/13 14:05	LE	TAL CAN
Total/NA	Prep	3520C			82908	04/22/13 08:00	CC	TAL CAN
Total/NA	Analysis	8270C		1	83273	04/24/13 18:03	TH	TAL CAN
Total/NA	Prep	3520C			82913	04/22/13 08:12	CC	TAL CAN
Total/NA	Analysis	8082		1	83244	04/23/13 16:21	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 16:09	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 03:29	NJT	TAL CAN

Client Sample ID: GW-17358-041613-DR-113

Lab Sample ID: 240-23245-12

Date Collected: 04/16/13 13:30

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83278	04/23/13 14:35	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			83103	04/23/13 05:27	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	83218	04/23/13 12:11	TH	TAL CAN

Client Sample ID: GW-17358-041613-DR-114

Lab Sample ID: 240-23245-13

Date Collected: 04/16/13 13:50

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82831	04/20/13 14:28	LE	TAL CAN
Total/NA	Prep	3520C			82908	04/22/13 08:00	CC	TAL CAN
Total/NA	Analysis	8270C		1	83273	04/24/13 18:25	TH	TAL CAN
Total/NA	Prep	3520C			82913	04/22/13 08:12	CC	TAL CAN
Total/NA	Analysis	8082		1	83244	04/23/13 16:35	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 16:10	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 03:37	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			83103	04/23/13 05:28	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	83218	04/23/13 12:11	TH	TAL CAN

Client Sample ID: GW-17358-041613-DR-115

Lab Sample ID: 240-23245-14

Date Collected: 04/16/13 14:45

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82831	04/20/13 14:50	LE	TAL CAN
Total/NA	Prep	3520C			82908	04/22/13 08:00	CC	TAL CAN
Total/NA	Analysis	8270C		1	83273	04/24/13 18:47	TH	TAL CAN
Total/NA	Prep	3520C			82913	04/22/13 08:12	CC	TAL CAN
Total/NA	Analysis	8082		1	83244	04/23/13 16:50	LH	TAL CAN
Total/NA	Prep	7470A			82480	04/18/13 12:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	82636	04/18/13 16:12	AS	TAL CAN
Total Recoverable	Prep	3005A			82905	04/22/13 07:06	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 03:45	NJT	TAL CAN

Client Sample ID: TB-17358-041613

Lab Sample ID: 240-23245-15

Date Collected: 04/16/13 00:00

Matrix: Water

Date Received: 04/17/13 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	82831	04/20/13 15:12	LE	TAL CAN

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23245-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-13
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-13
Georgia	State Program	4	N/A	06-30-13
Illinois	NELAP	5	200004	07-31-13
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-13
L-A-B	DoD ELAP		L2315	07-28-13
Minnesota	NELAP	5	039-999-348	12-31-13
Nevada	State Program	9	OH-000482008A	07-31-13
New Jersey	NELAP	2	OH001	06-30-13
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-13
Texas	NELAP	6		08-03-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
West Virginia DEP	State Program	3	210	12-31-13
Wisconsin	State Program	5	999518190	08-31-13

CHAIN OF CUSTODY RECORD

CONESTOGA-ROVERS & ASSOCIATES

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170
Phone: (734) 453-5123 Fax: (734) 453-5201

COC NO: PL-10894
PAGE ___ OF ___
(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 17358-TO1-0813	Laboratory Name: Test America	Lab Location: North Canton, OH	SSOW ID: 17358-TO1-010
Project Name: RACER-Willow Run	Lab Contact: D. Heckler	Lab Quote No:	Cooler No: 7 Coolers
Project Location: Ypsilanti, MI			Carrier: FED EX
Chemistry Contact: P. Wiseman			Airbill No: 8010 4772 7604
Sampler(s): D. Rivers / E. Lowe			Date Shipped: 4/16/13

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	TCL SVOCs	PCBs	Site TAL metals	Phosphorus	MS/MSD Request
1	GW-17358-041513-DR-102	4/15/13	805	W6	6	4	3	1	1					9	X	X	X	X	X	
2	-DR-103		930			4	3	1						8	X	X	X	X		
3	-DR-104		945			4	3	1						8	X	X	X	X		
4	-DR-105		1010			4	3	1						8	X	X	X	X		
5	-DR-106		1130			4	3	1	1					9	X	X	X	X	X	
6	-DR-107		1310			4	3	1						8	X	X	X	X		
7	-041613-DR-108	4/16/13	930			8	9	2						19	X	X	X	X		X
8	-DR-109		905			4	3	1						8	X	X	X	X		
9	-DR-110		925			4	3	1						8	X	X	X	X		
10	-DR-111		1055			4	3	1	1					9	X	X	X	X	X	
11	-DR-112		1110			4	3	1						8	X	X	X	X		
12	-DR-113		1330			4	3	1	1					9	X	X	X	X	X	
13	-DR-114		1350			4	3	1	1					9	X	X	X	X	X	
14	-DR-115		1445			4	3	1						8	X	X	X	X		
	TB-17358-041613		—	WQ	—		1							1	X					

Analysis Requested (See Back of COC for Definitions)

240-23245 Chain of Custody

Comments/ Special Instructions:

T Required in business days (use separate COCs for different TATs):
1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers:

All Samples in Cooler must be on COC

Notes/ Special Requirements:

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
David Rivers	CRA	4/16/13	1800	1.	TA	4-17-13	920
				2.			
				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

bution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew CRA Form: COC-10A (20110804)

4/28/2013

TestAmerica Canton Sample Receipt Form/Narrative Login # : 23245
Canton Facility

Client CRA Site Name _____ Cooler unpacked by:

Cooler Received on 4-17-13 Opened on 4-17-13

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box (Other) _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF –0 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 4G	(CF +1 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	☑ See Multiple Cooler Form
IR GUN# 5G	(CF +1 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 8	(CF +1 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes (No)	
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes No (NA)	
-Were custody seals on the bottle(s)?	Yes (No)	
3. Shippers' packing slip attached to the cooler(s)?	(Yes) No	
4. Did custody papers accompany the sample(s)?	(Yes) No	
5. Were the custody papers relinquished & signed in the appropriate place?	(Yes) No	
6. Did all bottles arrive in good condition (Unbroken)?	(Yes) No	
7. Could all bottle labels be reconciled with the COC?	(Yes) No	
8. Were correct bottle(s) used for the test(s) indicated?	(Yes) No	
9. Sufficient quantity received to perform indicated analyses?	(Yes) No	
10. Were sample(s) at the correct pH upon receipt?	(Yes) No NA	pH Strip Lot# HC256691
11. Were VOAs on the COC?	(Yes) No	
12. Were air bubbles >6 mm in any VOA vials?	Yes (No) NA	
13. Was a trip blank present in the cooler(s)?	(Yes) No	

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

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). Preservation Lot: Nitric Acid Lot# 100110-HNO3; Sulfuric Acid Lot# 051012-H2SO4; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH.
Time preservative was added to sample(s): _____.

TestAmerica Multiple Cooler Receipt Form/Narrative **Login # :** 23245
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
No#	8	0.7	1.7	Ice
No#		1.3	2.3	
No#		0.4	1.4	
No#		2.1	3.1	
No#		1.8	2.8	
No#		1.5	2.5	
No#		0.9	1.9	

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
GW-17358-041513-DR-102	240-23245-D-1	Plastic 500ml - with Sulfuric Acid	<2		
GW-17358-041513-DR-102	240-23245-E-1	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041513-DR-103	240-23245-D-2	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041513-DR-104	240-23245-D-3	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041513-DR-105	240-23245-D-4	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041513-DR-106	240-23245-D-5	Plastic 500ml - with Sulfuric Acid	<2		
GW-17358-041513-DR-106	240-23245-E-5	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041513-DR-107	240-23245-D-6	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041613-DR-108	240-23245-J-7	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041613-DR-108	240-23245-K-7	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041613-DR-109	240-23245-D-8	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041613-DR-110	240-23245-D-9	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041613-DR-111	240-23245-D-10	Plastic 500ml - with Sulfuric Acid	<2		
GW-17358-041613-DR-111	240-23245-E-10	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041613-DR-112	240-23245-D-11	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041613-DR-113	240-23245-D-12	Plastic 500ml - with Sulfuric Acid	<2		
GW-17358-041613-DR-113	240-23245-E-12	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041613-DR-114	240-23245-D-13	Plastic 500ml - with Sulfuric Acid	<2		
GW-17358-041613-DR-114	240-23245-E-13	Plastic 500ml - with Nitric Acid	<2		
GW-17358-041613-DR-115	240-23245-D-14	Plastic 500ml - with Nitric Acid	<2		

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-23368-1
Client Project/Site: 17358-T01-10, RACER Willow Run

For:
Conestoga-Rovers & Associates, Inc.
14496 Sheldon Road, Suite 200
Plymouth, Michigan 48170

Attn: Mr. Paul Wiseman

Denise D Heckler

Authorized for release by:
5/7/2013 10:05:18 AM

Denise Heckler, Project Manager II
denise.heckler@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Case Narrative 3
Definitions/Glossary 5
Sample Summary 6
Detection Summary 7
Method Summary 9
Client Sample Results 10
QC Association Summary 34
QC Sample Results 37
Surrogate Summary 50
Lab Chronicle 51
Certification Summary 53
Chain of Custody 54

Job ID: 240-23368-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Conestoga-Rovers & Associates, Inc.

Project: 17358-T01-10, RACER Willow Run

Report Number: 240-23368-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica 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 application 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.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 04/18/2013; the samples arrived in good condition, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 5.5º C and 5.6º C.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GW-17358-041713-DR-116 (240-23368-1), GW-17358-041713-DR-117 (240-23368-2), GW-17358-041713-DR-118 (240-23368-3) and TB-17358-041713 (240-23368-4) were analyzed for volatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 04/23/2013 and 04/24/2013.

No difficulties were encountered during the VOCs analyses.

All quality control parameters were within the acceptance limits.

SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples GW-17358-041713-DR-116 (240-23368-1), GW-17358-041713-DR-117 (240-23368-2) and GW-17358-041713-DR-118 (240-23368-3) were analyzed for semivolatile organic compounds (GC-MS) in accordance with EPA SW-846 Method 8270C. The samples were prepared on 04/23/2013 and analyzed on 04/25/2013.

The laboratory control sample for batch 83167, recovered outside control limits for the following analyte: Hexachlorocyclopentadiene. This compound has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not

Job ID: 240-23368-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

performed. The results have been reported and qualified.

No other difficulties were encountered during the SVOCs analyses.

All other quality control parameters were within the acceptance limits.

POLYCHLORINATED BIPHENYLS (PCBS)

Samples GW-17358-041713-DR-116 (240-23368-1), GW-17358-041713-DR-117 (240-23368-2) and GW-17358-041713-DR-118 (240-23368-3) were analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082. The samples were prepared on 04/23/2013 and analyzed on 04/24/2013.

No difficulties were encountered during the PCBs analyses.

All quality control parameters were within the acceptance limits.

TOTAL RECOVERABLE METALS (ICPMS)

Samples GW-17358-041713-DR-116 (240-23368-1), GW-17358-041713-DR-117 (240-23368-2) and GW-17358-041713-DR-118 (240-23368-3) were analyzed for total recoverable metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 04/22/2013 and 04/23/2013 and analyzed on 04/23/2013, 04/24/2013 and 04/25/2013.

Several analytes were detected in method blanks 240-83119/1-A and 240-82906/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged.

Zinc was detected in method blank MB 240-83214/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged “J”. If the associated sample reported a result above the MDL and/or RL, the result has been “B” flagged.

The continuing calibration verification (CCV) for Copper associated with batch 82906 recovered above the upper control limit. The samples associated with this CCV: GW-17358-041713-DR-116 (240-23368-1), GW-17358-041713-DR-117 (240-23368-2) were non-detects or J values for the affected analyte; therefore, the data has been reported.

The continuing calibration verification (CCV) for Aluminum associated with batch 83108 recovered above the upper control limit. The samples associated with this CCV: GW-17358-041713-DR-116 (240-23368-1), GW-17358-041713-DR-117 (240-23368-2) were non-detects or J values for the affected analyte; therefore, the data has been reported.

No other difficulties were encountered during the metals analyses.

All other quality control parameters were within the acceptance limits.

TOTAL MERCURY

Samples GW-17358-041713-DR-116 (240-23368-1), GW-17358-041713-DR-117 (240-23368-2) and GW-17358-041713-DR-118 (240-23368-3) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 04/22/2013 and analyzed on 04/23/2013.

No difficulties were encountered during the mercury analyses.

All quality control parameters were within the acceptance limits.

TOTAL PHOSPHORUS

Sample GW-17358-041713-DR-116 (240-23368-1) was analyzed for total phosphorus in accordance with SM 4500 P E. The samples were prepared and analyzed on 04/25/2013.

No difficulties were encountered during the total phosphorus analysis.

All other quality control parameters were within the acceptance limits.

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
U	Indicates the analyte was analyzed for but not detected.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-23368-1	GW-17358-041713-DR-116	Water	04/17/13 14:10	04/18/13 09:00
240-23368-2	GW-17358-041713-DR-117	Water	04/17/13 14:30	04/18/13 09:00
240-23368-3	GW-17358-041713-DR-118	Water	04/17/13 15:25	04/18/13 09:00
240-23368-4	TB-17358-041713	Water	04/17/13 00:00	04/18/13 09:00

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Client Sample ID: GW-17358-041713-DR-116 — Lab Sample ID: 240-23368-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.21	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	0.31	J B	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	81	J B	100	0.32	ug/L	1		6020	Total Recoverable
Cobalt	0.076	J B	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	0.26	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	0.92	J B ^	4.0	0.24	ug/L	1		6020	Total Recoverable
Iron	440	B	200	12	ug/L	1		6020	Total Recoverable
Manganese	190	B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	0.78	J B	20	0.087	ug/L	1		6020	Total Recoverable
Selenium	1.3	J	5.0	0.18	ug/L	1		6020	Total Recoverable
Zinc	4.4	J B	50	2.1	ug/L	1		6020	Total Recoverable

Client Sample ID: GW-17358-041713-DR-117 — Lab Sample ID: 240-23368-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	19	J ^	50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.52	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	1.1	J B	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	84	J B	100	0.32	ug/L	1		6020	Total Recoverable
Cadmium	0.053	J	1.0	0.026	ug/L	1		6020	Total Recoverable
Cobalt	0.26	J B	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	0.52	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	3.7	J B ^	4.0	0.24	ug/L	1		6020	Total Recoverable
Iron	210	B	200	12	ug/L	1		6020	Total Recoverable
Manganese	16	J B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	2.8	J B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.26	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Selenium	0.72	J	5.0	0.18	ug/L	1		6020	Total Recoverable
Vanadium	0.39	J	4.0	0.15	ug/L	1		6020	Total Recoverable
Zinc	12	J B	50	2.1	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Client Sample ID: GW-17358-041713-DR-118 — Lab Sample ID: 240-23368-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	140		50	7.5	ug/L	1		6020	Total Recoverable
Antimony	0.30	J B	2.0	0.080	ug/L	1		6020	Total Recoverable
Arsenic	2.4	J	5.0	0.063	ug/L	1		6020	Total Recoverable
Barium	97	J B	100	0.32	ug/L	1		6020	Total Recoverable
Beryllium	0.28	J	1.0	0.031	ug/L	1		6020	Total Recoverable
Cadmium	0.17	J	1.0	0.026	ug/L	1		6020	Total Recoverable
Cobalt	0.32	J	20	0.020	ug/L	1		6020	Total Recoverable
Chromium	1.3	J B	10	0.13	ug/L	1		6020	Total Recoverable
Copper	1.7	J	4.0	0.24	ug/L	1		6020	Total Recoverable
Iron	990		200	12	ug/L	1		6020	Total Recoverable
Manganese	210	B	50	0.36	ug/L	1		6020	Total Recoverable
Nickel	1.3	J B	20	0.087	ug/L	1		6020	Total Recoverable
Lead	0.45	J	3.0	0.14	ug/L	1		6020	Total Recoverable
Selenium	0.27	J	5.0	0.18	ug/L	1		6020	Total Recoverable
Thallium	1.2	J	2.0	0.40	ug/L	1		6020	Total Recoverable
Vanadium	0.60	J	4.0	0.15	ug/L	1		6020	Total Recoverable
Zinc	14	J B	50	2.1	ug/L	1		6020	Total Recoverable
Silver	0.013	J	0.20	0.0083	ug/L	1		6020	Total Recoverable

Client Sample ID: TB-17358-041713 — Lab Sample ID: 240-23368-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.7	J	10	1.1	ug/L	1		8260B	Total/NA
Methylene Chloride	2.2	J	5.0	0.33	ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	TCL Semivolatile Compounds (OLMO4.2)	SW846	TAL CAN
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6020	Metals (ICP/MS)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
SM 4500 P E	Phosphorus	SM	TAL CAN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041713-DR-116
Date Collected: 04/17/13 14:10
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/24/13 07:08	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/13 07:08	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/13 07:08	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/13 07:08	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/13 07:08	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/13 07:08	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/13 07:08	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/13 07:08	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/13 07:08	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/13 07:08	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/24/13 07:08	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/13 07:08	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/24/13 07:08	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/13 07:08	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/13 07:08	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/13 07:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/13 07:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/13 07:08	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/13 07:08	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/13 07:08	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/13 07:08	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/13 07:08	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/13 07:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/13 07:08	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/13 07:08	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/13 07:08	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/13 07:08	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/13 07:08	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/13 07:08	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/24/13 07:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/13 07:08	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/13 07:08	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/13 07:08	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/13 07:08	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/13 07:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/13 07:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/13 07:08	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/13 07:08	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/13 07:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/24/13 07:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/13 07:08	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/13 07:08	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/13 07:08	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/13 07:08	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/13 07:08	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/13 07:08	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/13 07:08	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/13 07:08	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 129		04/24/13 07:08	1
4-Bromofluorobenzene (Surr)	73		66 - 117		04/24/13 07:08	1
Toluene-d8 (Surr)	85		74 - 115		04/24/13 07:08	1
Dibromofluoromethane (Surr)	90		75 - 121		04/24/13 07:08	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041713-DR-117
Date Collected: 04/17/13 14:30
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/24/13 07:30	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/13 07:30	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/13 07:30	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/13 07:30	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/13 07:30	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/13 07:30	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/13 07:30	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/13 07:30	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/13 07:30	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/13 07:30	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/24/13 07:30	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/13 07:30	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/24/13 07:30	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/13 07:30	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/13 07:30	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/13 07:30	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/13 07:30	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/13 07:30	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/13 07:30	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/13 07:30	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/13 07:30	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/13 07:30	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/13 07:30	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/13 07:30	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/13 07:30	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/13 07:30	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/13 07:30	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/13 07:30	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/13 07:30	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/24/13 07:30	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/13 07:30	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/13 07:30	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/13 07:30	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/13 07:30	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/13 07:30	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/13 07:30	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/13 07:30	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/13 07:30	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/13 07:30	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/24/13 07:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/13 07:30	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/13 07:30	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/13 07:30	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/13 07:30	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/13 07:30	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/13 07:30	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/13 07:30	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/13 07:30	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		63 - 129		04/24/13 07:30	1
4-Bromofluorobenzene (Surr)	72		66 - 117		04/24/13 07:30	1
Toluene-d8 (Surr)	85		74 - 115		04/24/13 07:30	1
Dibromofluoromethane (Surr)	91		75 - 121		04/24/13 07:30	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: GW-17358-041713-DR-118
Date Collected: 04/17/13 15:25
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/24/13 07:52	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/13 07:52	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/13 07:52	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/13 07:52	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/13 07:52	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/13 07:52	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/13 07:52	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/13 07:52	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/13 07:52	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/13 07:52	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/24/13 07:52	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/13 07:52	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/24/13 07:52	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/13 07:52	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/13 07:52	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/13 07:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/13 07:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/13 07:52	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/13 07:52	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/13 07:52	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/13 07:52	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/13 07:52	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/13 07:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/13 07:52	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/13 07:52	1
Toluene	1.0	U	1.0	0.13	ug/L			04/24/13 07:52	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/13 07:52	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/13 07:52	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/13 07:52	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/24/13 07:52	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/13 07:52	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/13 07:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/13 07:52	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/13 07:52	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/13 07:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/13 07:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/13 07:52	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/13 07:52	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/13 07:52	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/24/13 07:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/13 07:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/13 07:52	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/13 07:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/13 07:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/13 07:52	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/13 07:52	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/13 07:52	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/13 07:52	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		63 - 129		04/24/13 07:52	1
4-Bromofluorobenzene (Surr)	76		66 - 117		04/24/13 07:52	1
Toluene-d8 (Surr)	90		74 - 115		04/24/13 07:52	1
Dibromofluoromethane (Surr)	101		75 - 121		04/24/13 07:52	1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Client Sample ID: TB-17358-041713
Date Collected: 04/17/13 00:00
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-4
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**8.7**	**J**	10	1.1	ug/L			04/23/13 21:08	1
Benzene	1.0	U	1.0	0.13	ug/L			04/23/13 21:08	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/23/13 21:08	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/23/13 21:08	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/23/13 21:08	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/23/13 21:08	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/23/13 21:08	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/23/13 21:08	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/23/13 21:08	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/23/13 21:08	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/23/13 21:08	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/23/13 21:08	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/23/13 21:08	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/23/13 21:08	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/23/13 21:08	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/23/13 21:08	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/23/13 21:08	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/23/13 21:08	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/23/13 21:08	1
2-Hexanone	10	U	10	0.41	ug/L			04/23/13 21:08	1
Methylene Chloride	**2.2**	**J**	5.0	0.33	ug/L			04/23/13 21:08	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/23/13 21:08	1
Styrene	1.0	U	1.0	0.11	ug/L			04/23/13 21:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/23/13 21:08	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/23/13 21:08	1
Toluene	1.0	U	1.0	0.13	ug/L			04/23/13 21:08	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/23/13 21:08	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/23/13 21:08	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/23/13 21:08	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/23/13 21:08	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/23/13 21:08	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/23/13 21:08	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/23/13 21:08	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/23/13 21:08	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/23/13 21:08	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/23/13 21:08	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/23/13 21:08	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/23/13 21:08	1
Methyl acetate	10	U	10	0.38	ug/L			04/23/13 21:08	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/23/13 21:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/23/13 21:08	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/23/13 21:08	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/23/13 21:08	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/23/13 21:08	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/23/13 21:08	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/23/13 21:08	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/23/13 21:08	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/23/13 21:08	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		63 - 129		04/23/13 21:08	1
4-Bromofluorobenzene (Surr)	74		66 - 117		04/23/13 21:08	1
Toluene-d8 (Surr)	84		74 - 115		04/23/13 21:08	1
Dibromofluoromethane (Surr)	93		75 - 121		04/23/13 21:08	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041713-DR-116
Date Collected: 04/17/13 14:10
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.40	ug/L		04/23/13 10:08	04/25/13 17:32	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.30	ug/L		04/23/13 10:08	04/25/13 17:32	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
2,4-Dichlorophenol	10	U	10	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
2,4-Dimethylphenol	5.1	U	5.1	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/23/13 10:08	04/25/13 17:32	1
2,4-Dinitrotoluene	5.1	U	5.1	0.27	ug/L		04/23/13 10:08	04/25/13 17:32	1
2,6-Dinitrotoluene	5.1	U	5.1	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
2-Chlorophenol	5.1	U	5.1	0.29	ug/L		04/23/13 10:08	04/25/13 17:32	1
2-Methylnaphthalene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
2-Methylphenol	5.1	U	5.1	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
2-Nitroaniline	20	U	20	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
2-Nitrophenol	5.1	U	5.1	0.28	ug/L		04/23/13 10:08	04/25/13 17:32	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/23/13 10:08	04/25/13 17:32	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/23/13 10:08	04/25/13 17:32	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/23/13 10:08	04/25/13 17:32	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
4-Chloroaniline	10	U	10	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.30	ug/L		04/23/13 10:08	04/25/13 17:32	1
4-Nitroaniline	20	U	20	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/23/13 10:08	04/25/13 17:32	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Acetophenone	5.1	U	5.1	0.34	ug/L		04/23/13 10:08	04/25/13 17:32	1
Anthracene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/23/13 10:08	04/25/13 17:32	1
Benzaldehyde	5.1	U	5.1	0.39	ug/L		04/23/13 10:08	04/25/13 17:32	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.32	ug/L		04/23/13 10:08	04/25/13 17:32	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
Butyl benzyl phthalate	5.1	U	5.1	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
Caprolactam	10	U	10	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
Carbazole	10	U	10	0.28	ug/L		04/23/13 10:08	04/25/13 17:32	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		04/23/13 10:08	04/25/13 17:32	1
Dimethyl phthalate	5.1	U	5.1	0.29	ug/L		04/23/13 10:08	04/25/13 17:32	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		04/23/13 10:08	04/25/13 17:32	1
Di-n-octyl phthalate	5.1	U	5.1	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041713-DR-116
Date Collected: 04/17/13 14:10
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/23/13 10:08	04/25/13 17:32	1
Hexachlorocyclopentadiene	5.1	U *	5.1	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
Hexachloroethane	5.1	U	5.1	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Isophorone	5.1	U	5.1	0.27	ug/L		04/23/13 10:08	04/25/13 17:32	1
Naphthalene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/23/13 10:08	04/25/13 17:32	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.81	ug/L		04/23/13 10:08	04/25/13 17:32	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.31	ug/L		04/23/13 10:08	04/25/13 17:32	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		04/23/13 10:08	04/25/13 17:32	1
Phenol	5.1	U	5.1	0.61	ug/L		04/23/13 10:08	04/25/13 17:32	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
Pyrene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:32	1
3 & 4 Methylphenol	5.1	U	5.1	0.76	ug/L		04/23/13 10:08	04/25/13 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*66*		*20 - 110*	*04/23/13 10:08*	*04/25/13 17:32*	*1*
2-Fluorophenol (Surr)	*78*		*10 - 110*	*04/23/13 10:08*	*04/25/13 17:32*	*1*
2,4,6-Tribromophenol (Surr)	*70*		*21 - 110*	*04/23/13 10:08*	*04/25/13 17:32*	*1*
Nitrobenzene-d5 (Surr)	*77*		*21 - 110*	*04/23/13 10:08*	*04/25/13 17:32*	*1*
Phenol-d5 (Surr)	*76*		*21 - 110*	*04/23/13 10:08*	*04/25/13 17:32*	*1*
Terphenyl-d14 (Surr)	*55*		*24 - 110*	*04/23/13 10:08*	*04/25/13 17:32*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041713-DR-117
Date Collected: 04/17/13 14:30
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.1	U	5.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
2,2'-oxybis[1-chloropropane]	5.1	U	5.1	0.41	ug/L		04/23/13 10:08	04/25/13 17:56	1
2,4,5-Trichlorophenol	5.1	U	5.1	0.31	ug/L		04/23/13 10:08	04/25/13 17:56	1
2,4,6-Trichlorophenol	4.1	U	4.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
2,4-Dichlorophenol	10	U	10	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
2,4-Dimethylphenol	5.1	U	5.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/23/13 10:08	04/25/13 17:56	1
2,4-Dinitrotoluene	5.1	U	5.1	0.28	ug/L		04/23/13 10:08	04/25/13 17:56	1
2,6-Dinitrotoluene	5.1	U	5.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
2-Chloronaphthalene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
2-Chlorophenol	5.1	U	5.1	0.30	ug/L		04/23/13 10:08	04/25/13 17:56	1
2-Methylnaphthalene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
2-Methylphenol	5.1	U	5.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
2-Nitroaniline	20	U	20	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
2-Nitrophenol	5.1	U	5.1	0.29	ug/L		04/23/13 10:08	04/25/13 17:56	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.38	ug/L		04/23/13 10:08	04/25/13 17:56	1
3-Nitroaniline	20	U	20	0.29	ug/L		04/23/13 10:08	04/25/13 17:56	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/23/13 10:08	04/25/13 17:56	1
4-Bromophenyl phenyl ether	5.1	U	5.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
4-Chloro-3-methylphenol	5.1	U	5.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
4-Chloroaniline	10	U	10	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
4-Chlorophenyl phenyl ether	5.1	U	5.1	0.31	ug/L		04/23/13 10:08	04/25/13 17:56	1
4-Nitroaniline	20	U	20	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/23/13 10:08	04/25/13 17:56	1
Acenaphthene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Acenaphthylene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Acetophenone	5.1	U	5.1	0.35	ug/L		04/23/13 10:08	04/25/13 17:56	1
Anthracene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Atrazine	3.1	U	3.1	0.35	ug/L		04/23/13 10:08	04/25/13 17:56	1
Benzaldehyde	5.1	U	5.1	0.40	ug/L		04/23/13 10:08	04/25/13 17:56	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Bis(2-chloroethoxy)methane	5.1	U	5.1	0.33	ug/L		04/23/13 10:08	04/25/13 17:56	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Bis(2-ethylhexyl) phthalate	5.1	U	5.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
Butyl benzyl phthalate	5.1	U	5.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
Caprolactam	10	U	10	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
Carbazole	10	U	10	0.29	ug/L		04/23/13 10:08	04/25/13 17:56	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Dibenzofuran	4.1	U	4.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Diethyl phthalate	5.1	U	5.1	0.61	ug/L		04/23/13 10:08	04/25/13 17:56	1
Dimethyl phthalate	5.1	U	5.1	0.30	ug/L		04/23/13 10:08	04/25/13 17:56	1
Di-n-butyl phthalate	5.1	U	5.1	0.68	ug/L		04/23/13 10:08	04/25/13 17:56	1
Di-n-octyl phthalate	5.1	U	5.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041713-DR-117
Date Collected: 04/17/13 14:30
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		04/23/13 10:08	04/25/13 17:56	1
Hexachlorocyclopentadiene	5.1	U *	5.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
Hexachloroethane	5.1	U	5.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Isophorone	5.1	U	5.1	0.28	ug/L		04/23/13 10:08	04/25/13 17:56	1
Naphthalene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Nitrobenzene	3.1	U	3.1	0.041	ug/L		04/23/13 10:08	04/25/13 17:56	1
N-Nitrosodi-n-propylamine	5.1	U	5.1	0.82	ug/L		04/23/13 10:08	04/25/13 17:56	1
N-Nitrosodiphenylamine	5.1	U	5.1	0.32	ug/L		04/23/13 10:08	04/25/13 17:56	1
Pentachlorophenol	5.1	U	5.1	2.4	ug/L		04/23/13 10:08	04/25/13 17:56	1
Phenol	5.1	U	5.1	0.61	ug/L		04/23/13 10:08	04/25/13 17:56	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
Pyrene	5.1	U	5.1	0.10	ug/L		04/23/13 10:08	04/25/13 17:56	1
3 & 4 Methylphenol	5.1	U	5.1	0.77	ug/L		04/23/13 10:08	04/25/13 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*20 - 110*	*04/23/13 10:08*	*04/25/13 17:56*	*1*
2-Fluorophenol (Surr)	*77*		*10 - 110*	*04/23/13 10:08*	*04/25/13 17:56*	*1*
2,4,6-Tribromophenol (Surr)	*70*		*21 - 110*	*04/23/13 10:08*	*04/25/13 17:56*	*1*
Nitrobenzene-d5 (Surr)	*72*		*21 - 110*	*04/23/13 10:08*	*04/25/13 17:56*	*1*
Phenol-d5 (Surr)	*76*		*21 - 110*	*04/23/13 10:08*	*04/25/13 17:56*	*1*
Terphenyl-d14 (Surr)	*55*		*24 - 110*	*04/23/13 10:08*	*04/25/13 17:56*	*1*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Client Sample ID: GW-17358-041713-DR-118
Date Collected: 04/17/13 15:25
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.2	U	5.2	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
2,2'-oxybis[1-chloropropane]	5.2	U	5.2	0.41	ug/L		04/23/13 10:08	04/25/13 18:19	1
2,4,5-Trichlorophenol	5.2	U	5.2	0.31	ug/L		04/23/13 10:08	04/25/13 18:19	1
2,4,6-Trichlorophenol	4.1	U	4.1	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
2,4-Dichlorophenol	10	U	10	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
2,4-Dimethylphenol	5.2	U	5.2	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
2,4-Dinitrophenol	21	U	21	2.5	ug/L		04/23/13 10:08	04/25/13 18:19	1
2,4-Dinitrotoluene	5.2	U	5.2	0.28	ug/L		04/23/13 10:08	04/25/13 18:19	1
2,6-Dinitrotoluene	5.2	U	5.2	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
2-Chloronaphthalene	5.2	U	5.2	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
2-Chlorophenol	5.2	U	5.2	0.30	ug/L		04/23/13 10:08	04/25/13 18:19	1
2-Methylnaphthalene	5.2	U	5.2	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
2-Methylphenol	5.2	U	5.2	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
2-Nitroaniline	21	U	21	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
2-Nitrophenol	5.2	U	5.2	0.29	ug/L		04/23/13 10:08	04/25/13 18:19	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.38	ug/L		04/23/13 10:08	04/25/13 18:19	1
3-Nitroaniline	21	U	21	0.29	ug/L		04/23/13 10:08	04/25/13 18:19	1
4,6-Dinitro-2-methylphenol	21	U	21	2.5	ug/L		04/23/13 10:08	04/25/13 18:19	1
4-Bromophenyl phenyl ether	5.2	U	5.2	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
4-Chloro-3-methylphenol	5.2	U	5.2	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
4-Chloroaniline	10	U	10	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
4-Chlorophenyl phenyl ether	5.2	U	5.2	0.31	ug/L		04/23/13 10:08	04/25/13 18:19	1
4-Nitroaniline	21	U	21	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
4-Nitrophenol	21	U	21	2.5	ug/L		04/23/13 10:08	04/25/13 18:19	1
Acenaphthene	5.2	U	5.2	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Acenaphthylene	5.2	U	5.2	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Acetophenone	5.2	U	5.2	0.35	ug/L		04/23/13 10:08	04/25/13 18:19	1
Anthracene	5.2	U	5.2	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Atrazine	3.1	U	3.1	0.35	ug/L		04/23/13 10:08	04/25/13 18:19	1
Benzaldehyde	5.2	U	5.2	0.40	ug/L		04/23/13 10:08	04/25/13 18:19	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Bis(2-chloroethoxy)methane	5.2	U	5.2	0.33	ug/L		04/23/13 10:08	04/25/13 18:19	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Bis(2-ethylhexyl) phthalate	5.2	U	5.2	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
Butyl benzyl phthalate	5.2	U	5.2	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
Caprolactam	10	U	10	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
Carbazole	10	U	10	0.29	ug/L		04/23/13 10:08	04/25/13 18:19	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Dibenz(a,h)anthracene	2.1	U	2.1	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Dibenzofuran	4.1	U	4.1	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Diethyl phthalate	5.2	U	5.2	0.62	ug/L		04/23/13 10:08	04/25/13 18:19	1
Dimethyl phthalate	5.2	U	5.2	0.30	ug/L		04/23/13 10:08	04/25/13 18:19	1
Di-n-butyl phthalate	5.2	U	5.2	0.69	ug/L		04/23/13 10:08	04/25/13 18:19	1
Di-n-octyl phthalate	5.2	U	5.2	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Client Sample ID: GW-17358-041713-DR-118
Date Collected: 04/17/13 15:25
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	5.2	U	5.2	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Hexachlorobenzene	0.21	U	0.21	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Hexachlorobutadiene	1.0	U	1.0	0.28	ug/L		04/23/13 10:08	04/25/13 18:19	1
Hexachlorocyclopentadiene	5.2	U *	5.2	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
Hexachloroethane	5.2	U	5.2	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
Indeno[1,2,3-cd]pyrene	2.1	U	2.1	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Isophorone	5.2	U	5.2	0.28	ug/L		04/23/13 10:08	04/25/13 18:19	1
Naphthalene	5.2	U	5.2	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Nitrobenzene	3.1	U	3.1	0.041	ug/L		04/23/13 10:08	04/25/13 18:19	1
N-Nitrosodi-n-propylamine	5.2	U	5.2	0.82	ug/L		04/23/13 10:08	04/25/13 18:19	1
N-Nitrosodiphenylamine	5.2	U	5.2	0.32	ug/L		04/23/13 10:08	04/25/13 18:19	1
Pentachlorophenol	5.2	U	5.2	2.5	ug/L		04/23/13 10:08	04/25/13 18:19	1
Phenol	5.2	U	5.2	0.62	ug/L		04/23/13 10:08	04/25/13 18:19	1
Phenanthrene	2.1	U	2.1	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
Pyrene	5.2	U	5.2	0.10	ug/L		04/23/13 10:08	04/25/13 18:19	1
3 & 4 Methylphenol	5.2	U	5.2	0.77	ug/L		04/23/13 10:08	04/25/13 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*68*		*20 - 110*	*04/23/13 10:08*	*04/25/13 18:19*	*1*
2-Fluorophenol (Surr)	*80*		*10 - 110*	*04/23/13 10:08*	*04/25/13 18:19*	*1*
2,4,6-Tribromophenol (Surr)	*74*		*21 - 110*	*04/23/13 10:08*	*04/25/13 18:19*	*1*
Nitrobenzene-d5 (Surr)	*78*		*21 - 110*	*04/23/13 10:08*	*04/25/13 18:19*	*1*
Phenol-d5 (Surr)	*80*		*21 - 110*	*04/23/13 10:08*	*04/25/13 18:19*	*1*
Terphenyl-d14 (Surr)	*57*		*24 - 110*	*04/23/13 10:08*	*04/25/13 18:19*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041713-DR-116
Date Collected: 04/17/13 14:10
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.046	ug/L		04/23/13 10:25	04/24/13 18:09	1
Aroclor-1221	0.10	U	0.10	0.047	ug/L		04/23/13 10:25	04/24/13 18:09	1
Aroclor-1232	0.10	U	0.10	0.076	ug/L		04/23/13 10:25	04/24/13 18:09	1
Aroclor-1242	0.10	U	0.10	0.063	ug/L		04/23/13 10:25	04/24/13 18:09	1
Aroclor-1248	0.10	U	0.10	0.064	ug/L		04/23/13 10:25	04/24/13 18:09	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/23/13 10:25	04/24/13 18:09	1
Aroclor-1260	0.10	U	0.10	0.040	ug/L		04/23/13 10:25	04/24/13 18:09	1
Aroclor-1262	0.10	U	0.10	0.038	ug/L		04/23/13 10:25	04/24/13 18:09	1
Aroclor-1268	0.10	U	0.10	0.057	ug/L		04/23/13 10:25	04/24/13 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*73*		*23 - 136*	*04/23/13 10:25*	*04/24/13 18:09*	*1*
DCB Decachlorobiphenyl	*43*		*10 - 130*	*04/23/13 10:25*	*04/24/13 18:09*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041713-DR-117
Date Collected: 04/17/13 14:30
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.045	ug/L		04/23/13 10:25	04/24/13 18:23	1
Aroclor-1221	0.10	U	0.10	0.046	ug/L		04/23/13 10:25	04/24/13 18:23	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		04/23/13 10:25	04/24/13 18:23	1
Aroclor-1242	0.10	U	0.10	0.061	ug/L		04/23/13 10:25	04/24/13 18:23	1
Aroclor-1248	0.10	U	0.10	0.062	ug/L		04/23/13 10:25	04/24/13 18:23	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/23/13 10:25	04/24/13 18:23	1
Aroclor-1260	0.10	U	0.10	0.039	ug/L		04/23/13 10:25	04/24/13 18:23	1
Aroclor-1262	0.10	U	0.10	0.037	ug/L		04/23/13 10:25	04/24/13 18:23	1
Aroclor-1268	0.10	U	0.10	0.056	ug/L		04/23/13 10:25	04/24/13 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*61*		*23 - 136*	*04/23/13 10:25*	*04/24/13 18:23*	*1*
DCB Decachlorobiphenyl	*32*		*10 - 130*	*04/23/13 10:25*	*04/24/13 18:23*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Client Sample ID: GW-17358-041713-DR-118
Date Collected: 04/17/13 15:25
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.045	ug/L		04/23/13 10:25	04/24/13 18:38	1
Aroclor-1221	0.10	U	0.10	0.046	ug/L		04/23/13 10:25	04/24/13 18:38	1
Aroclor-1232	0.10	U	0.10	0.074	ug/L		04/23/13 10:25	04/24/13 18:38	1
Aroclor-1242	0.10	U	0.10	0.061	ug/L		04/23/13 10:25	04/24/13 18:38	1
Aroclor-1248	0.10	U	0.10	0.062	ug/L		04/23/13 10:25	04/24/13 18:38	1
Aroclor-1254	0.10	U	0.10	0.033	ug/L		04/23/13 10:25	04/24/13 18:38	1
Aroclor-1260	0.10	U	0.10	0.039	ug/L		04/23/13 10:25	04/24/13 18:38	1
Aroclor-1262	0.10	U	0.10	0.037	ug/L		04/23/13 10:25	04/24/13 18:38	1
Aroclor-1268	0.10	U	0.10	0.056	ug/L		04/23/13 10:25	04/24/13 18:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*76*		*23 - 136*	*04/23/13 10:25*	*04/24/13 18:38*	*1*
DCB Decachlorobiphenyl	*49*		*10 - 130*	*04/23/13 10:25*	*04/24/13 18:38*	*1*

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041713-DR-116
Date Collected: 04/17/13 14:10
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U ^	50	7.5	ug/L		04/22/13 07:13	04/23/13 00:22	1
Antimony	**0.21**	**J B**	2.0	0.080	ug/L		04/22/13 07:13	04/23/13 00:22	1
Arsenic	**0.31**	**J B**	5.0	0.063	ug/L		04/22/13 07:13	04/23/13 00:22	1
Barium	**81**	**J B**	100	0.32	ug/L		04/22/13 07:13	04/23/13 00:22	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:13	04/23/13 00:22	1
Cadmium	1.0	U	1.0	0.026	ug/L		04/22/13 07:13	04/23/13 00:22	1
Cobalt	**0.076**	**J B**	20	0.020	ug/L		04/22/13 07:13	04/23/13 00:22	1
Chromium	**0.26**	**J B**	10	0.13	ug/L		04/22/13 07:13	04/23/13 00:22	1
Copper	**0.92**	**J B ^**	4.0	0.24	ug/L		04/22/13 07:13	04/23/13 00:22	1
Iron	**440**	**B**	200	12	ug/L		04/22/13 07:13	04/23/13 00:22	1
Manganese	**190**	**B**	50	0.36	ug/L		04/22/13 07:13	04/23/13 00:22	1
Nickel	**0.78**	**J B**	20	0.087	ug/L		04/22/13 07:13	04/23/13 00:22	1
Lead	3.0	U	3.0	0.14	ug/L		04/22/13 07:13	04/23/13 00:22	1
Selenium	**1.3**	**J**	5.0	0.18	ug/L		04/22/13 07:13	04/23/13 00:22	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:13	04/23/13 00:22	1
Vanadium	4.0	U	4.0	0.15	ug/L		04/22/13 07:13	04/23/13 00:22	1
Zinc	**4.4**	**J B**	50	2.1	ug/L		04/23/13 13:01	04/25/13 03:41	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:13	04/23/13 00:22	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041713-DR-117
Date Collected: 04/17/13 14:30
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**19**	**J ^**	50	7.5	ug/L		04/22/13 07:13	04/23/13 00:30	1
Antimony	**0.52**	**J B**	2.0	0.080	ug/L		04/22/13 07:13	04/23/13 00:30	1
Arsenic	**1.1**	**J B**	5.0	0.063	ug/L		04/22/13 07:13	04/23/13 00:30	1
Barium	**84**	**J B**	100	0.32	ug/L		04/22/13 07:13	04/23/13 00:30	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:13	04/23/13 00:30	1
Cadmium	**0.053**	**J**	1.0	0.026	ug/L		04/22/13 07:13	04/23/13 00:30	1
Cobalt	**0.26**	**J B**	20	0.020	ug/L		04/22/13 07:13	04/23/13 00:30	1
Chromium	**0.52**	**J B**	10	0.13	ug/L		04/22/13 07:13	04/23/13 00:30	1
Copper	**3.7**	**J B ^**	4.0	0.24	ug/L		04/22/13 07:13	04/23/13 00:30	1
Iron	**210**	**B**	200	12	ug/L		04/22/13 07:13	04/23/13 00:30	1
Manganese	**16**	**J B**	50	0.36	ug/L		04/22/13 07:13	04/23/13 00:30	1
Nickel	**2.8**	**J B**	20	0.087	ug/L		04/22/13 07:13	04/23/13 00:30	1
Lead	**0.26**	**J**	3.0	0.14	ug/L		04/22/13 07:13	04/23/13 00:30	1
Selenium	**0.72**	**J**	5.0	0.18	ug/L		04/22/13 07:13	04/23/13 00:30	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:13	04/23/13 00:30	1
Vanadium	**0.39**	**J**	4.0	0.15	ug/L		04/22/13 07:13	04/23/13 00:30	1
Zinc	**12**	**J B**	50	2.1	ug/L		04/22/13 07:13	04/23/13 00:30	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:13	04/23/13 00:30	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Client Sample ID: GW-17358-041713-DR-118
Date Collected: 04/17/13 15:25
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	140		50	7.5	ug/L		04/23/13 08:26	04/24/13 14:21	1
Antimony	0.30	J B	2.0	0.080	ug/L		04/23/13 08:26	04/24/13 14:21	1
Arsenic	2.4	J	5.0	0.063	ug/L		04/23/13 08:26	04/24/13 14:21	1
Barium	97	J B	100	0.32	ug/L		04/23/13 08:26	04/24/13 14:21	1
Beryllium	0.28	J	1.0	0.031	ug/L		04/23/13 08:26	04/24/13 14:21	1
Cadmium	0.17	J	1.0	0.026	ug/L		04/23/13 08:26	04/24/13 14:21	1
Cobalt	0.32	J	20	0.020	ug/L		04/23/13 08:26	04/24/13 14:21	1
Chromium	1.3	J B	10	0.13	ug/L		04/23/13 08:26	04/24/13 14:21	1
Copper	1.7	J	4.0	0.24	ug/L		04/23/13 08:26	04/24/13 14:21	1
Iron	990		200	12	ug/L		04/23/13 08:26	04/24/13 14:21	1
Manganese	210	B	50	0.36	ug/L		04/23/13 08:26	04/24/13 14:21	1
Nickel	1.3	J B	20	0.087	ug/L		04/23/13 08:26	04/24/13 14:21	1
Lead	0.45	J	3.0	0.14	ug/L		04/23/13 08:26	04/24/13 14:21	1
Selenium	0.27	J	5.0	0.18	ug/L		04/23/13 08:26	04/24/13 14:21	1
Thallium	1.2	J	2.0	0.40	ug/L		04/23/13 08:26	04/24/13 14:21	1
Vanadium	0.60	J	4.0	0.15	ug/L		04/23/13 08:26	04/24/13 14:21	1
Zinc	14	J B	50	2.1	ug/L		04/23/13 08:26	04/24/13 14:21	1
Silver	0.013	J	0.20	0.0083	ug/L		04/23/13 08:26	04/24/13 14:21	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041713-DR-116
Date Collected: 04/17/13 14:10
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/22/13 15:35	04/23/13 09:39	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041713-DR-117
Date Collected: 04/17/13 14:30
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-2
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/22/13 15:35	04/23/13 09:40	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 7470A - Mercury (CVAA)

Client Sample ID: GW-17358-041713-DR-118
Date Collected: 04/17/13 15:25
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-3
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/22/13 15:35	04/23/13 09:41	1

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

General Chemistry

Client Sample ID: GW-17358-041713-DR-116
Date Collected: 04/17/13 14:10
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-1
Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/25/13 07:36	04/25/13 14:04	1

GC/MS VOA

Analysis Batch: 83178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-4	TB-17358-041713	Total/NA	Water	8260B	
LCS 240-83178/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-83178/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 83213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total/NA	Water	8260B	
240-23368-2	GW-17358-041713-DR-117	Total/NA	Water	8260B	
240-23368-3	GW-17358-041713-DR-118	Total/NA	Water	8260B	
LCS 240-83213/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-83213/6	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 83167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total/NA	Water	3520C	
240-23368-2	GW-17358-041713-DR-117	Total/NA	Water	3520C	
240-23368-3	GW-17358-041713-DR-118	Total/NA	Water	3520C	
LCS 240-83167/22-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-83167/21-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 83500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total/NA	Water	8270C	83167
240-23368-2	GW-17358-041713-DR-117	Total/NA	Water	8270C	83167
240-23368-3	GW-17358-041713-DR-118	Total/NA	Water	8270C	83167
LCS 240-83167/22-A	Lab Control Sample	Total/NA	Water	8270C	83167
MB 240-83167/21-A	Method Blank	Total/NA	Water	8270C	83167

GC Semi VOA

Prep Batch: 83171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total/NA	Water	3520C	
240-23368-2	GW-17358-041713-DR-117	Total/NA	Water	3520C	
240-23368-3	GW-17358-041713-DR-118	Total/NA	Water	3520C	
LCS 240-83171/12-A	Lab Control Sample	Total/NA	Water	3520C	
MB 240-83171/11-A	Method Blank	Total/NA	Water	3520C	

Analysis Batch: 83421

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total/NA	Water	8082	83171
240-23368-2	GW-17358-041713-DR-117	Total/NA	Water	8082	83171
240-23368-3	GW-17358-041713-DR-118	Total/NA	Water	8082	83171
LCS 240-83171/12-A	Lab Control Sample	Total/NA	Water	8082	83171
MB 240-83171/11-A	Method Blank	Total/NA	Water	8082	83171

Metals

Prep Batch: 82906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total Recoverable	Water	3005A	
240-23368-2	GW-17358-041713-DR-117	Total Recoverable	Water	3005A	
LCS 240-82906/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-82906/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 83019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total/NA	Water	7470A	
240-23368-2	GW-17358-041713-DR-117	Total/NA	Water	7470A	
240-23368-3	GW-17358-041713-DR-118	Total/NA	Water	7470A	
LCS 240-83019/2-A	Lab Control Sample	Total/NA	Water	7470A	
MB 240-83019/1-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 83108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total Recoverable	Water	6020	82906
240-23368-2	GW-17358-041713-DR-117	Total Recoverable	Water	6020	82906
LCS 240-82906/2-A	Lab Control Sample	Total Recoverable	Water	6020	82906
MB 240-82906/1-A	Method Blank	Total Recoverable	Water	6020	82906

Prep Batch: 83119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-3	GW-17358-041713-DR-118	Total Recoverable	Water	3005A	
240-23368-3 MS	GW-17358-041713-DR-118	Total Recoverable	Water	3005A	
240-23368-3 MSD	GW-17358-041713-DR-118	Total Recoverable	Water	3005A	
LCS 240-83119/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-83119/1-A	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 83214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total Recoverable	Water	3005A	
LCS 240-83214/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-83214/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 83234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total/NA	Water	7470A	83019
240-23368-2	GW-17358-041713-DR-117	Total/NA	Water	7470A	83019
240-23368-3	GW-17358-041713-DR-118	Total/NA	Water	7470A	83019
LCS 240-83019/2-A	Lab Control Sample	Total/NA	Water	7470A	83019
MB 240-83019/1-A	Method Blank	Total/NA	Water	7470A	83019

Analysis Batch: 83472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total Recoverable	Water	6020	83214
240-23368-3	GW-17358-041713-DR-118	Total Recoverable	Water	6020	83119
240-23368-3 MS	GW-17358-041713-DR-118	Total Recoverable	Water	6020	83119
240-23368-3 MSD	GW-17358-041713-DR-118	Total Recoverable	Water	6020	83119
LCS 240-83119/2-A	Lab Control Sample	Total Recoverable	Water	6020	83119
LCS 240-83214/2-A	Lab Control Sample	Total Recoverable	Water	6020	83214
MB 240-83119/1-A	Method Blank	Total Recoverable	Water	6020	83119

Metals (Continued)

Analysis Batch: 83472 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-83214/1-A	Method Blank	Total Recoverable	Water	6020	83214

General Chemistry

Prep Batch: 83474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total/NA	Water	365.2/365.3/365	
LCS 240-83474/11-A	Lab Control Sample	Total/NA	Water	365.2/365.3/365	
MB 240-83474/10-A	Method Blank	Total/NA	Water	365.2/365.3/365	

Analysis Batch: 83608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-23368-1	GW-17358-041713-DR-116	Total/NA	Water	SM 4500 P E	83474
LCS 240-83474/11-A	Lab Control Sample	Total/NA	Water	SM 4500 P E	83474
MB 240-83474/10-A	Method Blank	Total/NA	Water	SM 4500 P E	83474

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-83178/6
Matrix: Water
Analysis Batch: 83178

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/23/13 13:44	1
Benzene	1.0	U	1.0	0.13	ug/L			04/23/13 13:44	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/23/13 13:44	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/23/13 13:44	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/23/13 13:44	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/23/13 13:44	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/23/13 13:44	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/23/13 13:44	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/23/13 13:44	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/23/13 13:44	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/23/13 13:44	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/23/13 13:44	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/23/13 13:44	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/23/13 13:44	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/23/13 13:44	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/23/13 13:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/23/13 13:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/23/13 13:44	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/23/13 13:44	1
2-Hexanone	10	U	10	0.41	ug/L			04/23/13 13:44	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/23/13 13:44	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/23/13 13:44	1
Styrene	1.0	U	1.0	0.11	ug/L			04/23/13 13:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/23/13 13:44	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/23/13 13:44	1
Toluene	1.0	U	1.0	0.13	ug/L			04/23/13 13:44	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/23/13 13:44	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/23/13 13:44	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/23/13 13:44	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/23/13 13:44	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/23/13 13:44	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/23/13 13:44	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/23/13 13:44	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/23/13 13:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/23/13 13:44	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/23/13 13:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/23/13 13:44	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/23/13 13:44	1
Methyl acetate	10	U	10	0.38	ug/L			04/23/13 13:44	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/23/13 13:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/23/13 13:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/23/13 13:44	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/23/13 13:44	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/23/13 13:44	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/23/13 13:44	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/23/13 13:44	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/23/13 13:44	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/23/13 13:44	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-83178/6
Matrix: Water
Analysis Batch: 83178

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		63 - 129		04/23/13 13:44	1
4-Bromofluorobenzene (Surr)	78		66 - 117		04/23/13 13:44	1
Toluene-d8 (Surr)	86		74 - 115		04/23/13 13:44	1
Dibromofluoromethane (Surr)	86		75 - 121		04/23/13 13:44	1

Lab Sample ID: LCS 240-83178/4
Matrix: Water
Analysis Batch: 83178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	20.4		ug/L		102	43 - 136
Benzene	10.0	9.53		ug/L		95	83 - 112
Bromodichloromethane	10.0	9.36		ug/L		94	72 - 121
Bromoform	10.0	9.34		ug/L		93	40 - 131
Bromomethane	10.0	8.40		ug/L		84	11 - 185
2-Butanone (MEK)	20.0	19.3		ug/L		96	60 - 126
Carbon disulfide	10.0	9.27		ug/L		93	62 - 142
Carbon tetrachloride	10.0	9.57		ug/L		96	66 - 128
Chlorobenzene	10.0	10.1		ug/L		101	85 - 110
Chloroethane	10.0	8.37		ug/L		84	25 - 153
Chloroform	10.0	9.21		ug/L		92	79 - 117
Chloromethane	10.0	9.21		ug/L		92	44 - 126
1,1-Dichloroethane	10.0	9.70		ug/L		97	82 - 115
1,2-Dichloroethane	10.0	9.43		ug/L		94	71 - 127
1,1-Dichloroethene	10.0	9.33		ug/L		93	78 - 131
1,2-Dichloropropane	10.0	9.45		ug/L		95	81 - 115
cis-1,3-Dichloropropene	10.0	7.72		ug/L		77	61 - 115
trans-1,3-Dichloropropene	10.0	8.31		ug/L		83	58 - 117
Ethylbenzene	10.0	9.53		ug/L		95	83 - 112
2-Hexanone	20.0	19.2		ug/L		96	55 - 133
Methylene Chloride	10.0	9.31		ug/L		93	66 - 131
4-Methyl-2-pentanone (MIBK)	20.0	17.6		ug/L		88	63 - 128
Styrene	10.0	9.39		ug/L		94	79 - 114
1,1,2,2-Tetrachloroethane	10.0	9.60		ug/L		96	68 - 118
Tetrachloroethene	10.0	9.93		ug/L		99	79 - 114
Toluene	10.0	10.0		ug/L		100	84 - 111
Trichloroethene	10.0	9.11		ug/L		91	76 - 117
Vinyl chloride	10.0	8.91		ug/L		89	53 - 127
Xylenes, Total	30.0	28.7		ug/L		96	83 - 112
1,1,1-Trichloroethane	10.0	9.34		ug/L		93	74 - 118
1,1,2-Trichloroethane	10.0	9.85		ug/L		98	80 - 112
Cyclohexane	10.0	9.13		ug/L		91	54 - 121
1,2-Dibromo-3-Chloropropane	10.0	8.90		ug/L		89	42 - 136
1,2-Dibromoethane	10.0	10.0		ug/L		100	79 - 113
Dichlorodifluoromethane	10.0	7.39		ug/L		74	19 - 129
cis-1,2-Dichloroethene	10.0	9.46		ug/L		95	80 - 113
trans-1,2-Dichloroethene	10.0	9.28		ug/L		93	83 - 117
Isopropylbenzene	10.0	9.59		ug/L		96	75 - 114

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-83178/4
Matrix: Water
Analysis Batch: 83178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	10.0	9.72	J	ug/L		97	58 - 131
Methyl tert-butyl ether	10.0	9.30		ug/L		93	52 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.4		ug/L		114	74 - 151
1,2,4-Trichlorobenzene	10.0	8.63		ug/L		86	48 - 135
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	81 - 110
1,3-Dichlorobenzene	10.0	10.4		ug/L		104	80 - 110
1,4-Dichlorobenzene	10.0	9.91		ug/L		99	82 - 110
Trichlorofluoromethane	10.0	10.2		ug/L		102	49 - 157
Dibromochloromethane	10.0	9.09		ug/L		91	64 - 119
Methylcyclohexane	10.0	8.66		ug/L		87	56 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*63 - 129*
4-Bromofluorobenzene (Surr)	*101*		*66 - 117*
Toluene-d8 (Surr)	*91*		*74 - 115*
Dibromofluoromethane (Surr)	*86*		*75 - 121*

Lab Sample ID: MB 240-83213/6
Matrix: Water
Analysis Batch: 83213

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	1.1	ug/L			04/24/13 00:27	1
Benzene	1.0	U	1.0	0.13	ug/L			04/24/13 00:27	1
Bromodichloromethane	1.0	U	1.0	0.15	ug/L			04/24/13 00:27	1
Bromoform	1.0	U	1.0	0.64	ug/L			04/24/13 00:27	1
Bromomethane	1.0	U	1.0	0.41	ug/L			04/24/13 00:27	1
2-Butanone (MEK)	10	U	10	0.57	ug/L			04/24/13 00:27	1
Carbon disulfide	5.0	U	5.0	0.13	ug/L			04/24/13 00:27	1
Carbon tetrachloride	1.0	U	1.0	0.13	ug/L			04/24/13 00:27	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/13 00:27	1
Chloroethane	1.0	U	1.0	0.29	ug/L			04/24/13 00:27	1
Chloroform	1.0	U	1.0	0.16	ug/L			04/24/13 00:27	1
Chloromethane	1.0	U	1.0	0.30	ug/L			04/24/13 00:27	1
1,1-Dichloroethane	1.0	U	1.0	0.15	ug/L			04/24/13 00:27	1
1,2-Dichloroethane	1.0	U	1.0	0.22	ug/L			04/24/13 00:27	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/13 00:27	1
1,2-Dichloropropane	1.0	U	1.0	0.18	ug/L			04/24/13 00:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.14	ug/L			04/24/13 00:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.19	ug/L			04/24/13 00:27	1
Ethylbenzene	1.0	U	1.0	0.17	ug/L			04/24/13 00:27	1
2-Hexanone	10	U	10	0.41	ug/L			04/24/13 00:27	1
Methylene Chloride	5.0	U	5.0	0.33	ug/L			04/24/13 00:27	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.32	ug/L			04/24/13 00:27	1
Styrene	1.0	U	1.0	0.11	ug/L			04/24/13 00:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.18	ug/L			04/24/13 00:27	1
Tetrachloroethene	1.0	U	1.0	0.29	ug/L			04/24/13 00:27	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-83213/6
Matrix: Water
Analysis Batch: 83213

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	1.0	U	1.0	0.13	ug/L			04/24/13 00:27	1
Trichloroethene	1.0	U	1.0	0.17	ug/L			04/24/13 00:27	1
Vinyl chloride	1.0	U	1.0	0.22	ug/L			04/24/13 00:27	1
Xylenes, Total	2.0	U	2.0	0.28	ug/L			04/24/13 00:27	1
1,1,1-Trichloroethane	1.0	U	1.0	0.22	ug/L			04/24/13 00:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.27	ug/L			04/24/13 00:27	1
Cyclohexane	1.0	U	1.0	0.12	ug/L			04/24/13 00:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.67	ug/L			04/24/13 00:27	1
1,2-Dibromoethane	1.0	U	1.0	0.24	ug/L			04/24/13 00:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			04/24/13 00:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.17	ug/L			04/24/13 00:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			04/24/13 00:27	1
Isopropylbenzene	1.0	U	1.0	0.13	ug/L			04/24/13 00:27	1
Methyl acetate	10	U	10	0.38	ug/L			04/24/13 00:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.17	ug/L			04/24/13 00:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.28	ug/L			04/24/13 00:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.15	ug/L			04/24/13 00:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/13 00:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.14	ug/L			04/24/13 00:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.13	ug/L			04/24/13 00:27	1
Trichlorofluoromethane	1.0	U	1.0	0.21	ug/L			04/24/13 00:27	1
Dibromochloromethane	1.0	U	1.0	0.18	ug/L			04/24/13 00:27	1
Methylcyclohexane	1.0	U	1.0	0.13	ug/L			04/24/13 00:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*63 - 129*		*04/24/13 00:27*	*1*
4-Bromofluorobenzene (Surr)	*76*		*66 - 117*		*04/24/13 00:27*	*1*
Toluene-d8 (Surr)	*86*		*74 - 115*		*04/24/13 00:27*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 121*		*04/24/13 00:27*	*1*

Lab Sample ID: LCS 240-83213/4
Matrix: Water
Analysis Batch: 83213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	20.0		ug/L		100	43 - 136
Benzene	10.0	9.32		ug/L		93	83 - 112
Bromodichloromethane	10.0	9.02		ug/L		90	72 - 121
Bromoform	10.0	8.37		ug/L		84	40 - 131
Bromomethane	10.0	8.67		ug/L		87	11 - 185
2-Butanone (MEK)	20.0	18.6		ug/L		93	60 - 126
Carbon disulfide	10.0	8.46		ug/L		85	62 - 142
Carbon tetrachloride	10.0	8.74		ug/L		87	66 - 128
Chlorobenzene	10.0	9.74		ug/L		97	85 - 110
Chloroethane	10.0	8.78		ug/L		88	25 - 153
Chloroform	10.0	9.15		ug/L		92	79 - 117
Chloromethane	10.0	9.15		ug/L		92	44 - 126
1,1-Dichloroethane	10.0	9.54		ug/L		95	82 - 115

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-83213/4
Matrix: Water
Analysis Batch: 83213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	9.33		ug/L		93	71 - 127
1,1-Dichloroethene	10.0	8.85		ug/L		88	78 - 131
1,2-Dichloropropane	10.0	9.36		ug/L		94	81 - 115
cis-1,3-Dichloropropene	10.0	7.22		ug/L		72	61 - 115
trans-1,3-Dichloropropene	10.0	7.99		ug/L		80	58 - 117
Ethylbenzene	10.0	8.84		ug/L		88	83 - 112
2-Hexanone	20.0	18.6		ug/L		93	55 - 133
Methylene Chloride	10.0	9.12		ug/L		91	66 - 131
4-Methyl-2-pentanone (MIBK)	20.0	17.0		ug/L		85	63 - 128
Styrene	10.0	8.97		ug/L		90	79 - 114
1,1,2,2-Tetrachloroethane	10.0	9.83		ug/L		98	68 - 118
Tetrachloroethene	10.0	9.09		ug/L		91	79 - 114
Toluene	10.0	9.82		ug/L		98	84 - 111
Trichloroethene	10.0	8.75		ug/L		88	76 - 117
Vinyl chloride	10.0	8.87		ug/L		89	53 - 127
Xylenes, Total	30.0	26.9		ug/L		90	83 - 112
1,1,1-Trichloroethane	10.0	8.72		ug/L		87	74 - 118
1,1,2-Trichloroethane	10.0	9.92		ug/L		99	80 - 112
Cyclohexane	10.0	7.97		ug/L		80	54 - 121
1,2-Dibromo-3-Chloropropane	10.0	8.57		ug/L		86	42 - 136
1,2-Dibromoethane	10.0	9.69		ug/L		97	79 - 113
Dichlorodifluoromethane	10.0	6.50		ug/L		65	19 - 129
cis-1,2-Dichloroethene	10.0	9.21		ug/L		92	80 - 113
trans-1,2-Dichloroethene	10.0	8.91		ug/L		89	83 - 117
Isopropylbenzene	10.0	8.65		ug/L		86	75 - 114
Methyl acetate	10.0	10.2		ug/L		102	58 - 131
Methyl tert-butyl ether	10.0	9.03		ug/L		90	52 - 144
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.2		ug/L		102	74 - 151
1,2,4-Trichlorobenzene	10.0	7.97		ug/L		80	48 - 135
1,2-Dichlorobenzene	10.0	9.59		ug/L		96	81 - 110
1,3-Dichlorobenzene	10.0	9.68		ug/L		97	80 - 110
1,4-Dichlorobenzene	10.0	9.27		ug/L		93	82 - 110
Trichlorofluoromethane	10.0	9.44		ug/L		94	49 - 157
Dibromochloromethane	10.0	8.68		ug/L		87	64 - 119
Methylcyclohexane	10.0	7.46		ug/L		75	56 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*82*		*63 - 129*
4-Bromofluorobenzene (Surr)	*101*		*66 - 117*
Toluene-d8 (Surr)	*91*		*74 - 115*
Dibromofluoromethane (Surr)	*85*		*75 - 121*

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Lab Sample ID: MB 240-83167/21-A
Matrix: Water
Analysis Batch: 83500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 83167

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	5.0	U	5.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
2,2'-oxybis[1-chloropropane]	5.0	U	5.0	0.40	ug/L		04/23/13 10:08	04/25/13 10:25	1
2,4,5-Trichlorophenol	5.0	U	5.0	0.30	ug/L		04/23/13 10:08	04/25/13 10:25	1
2,4,6-Trichlorophenol	4.0	U	4.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
2,4-Dichlorophenol	10	U	10	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
2,4-Dimethylphenol	5.0	U	5.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
2,4-Dinitrophenol	20	U	20	2.4	ug/L		04/23/13 10:08	04/25/13 10:25	1
2,4-Dinitrotoluene	5.0	U	5.0	0.27	ug/L		04/23/13 10:08	04/25/13 10:25	1
2,6-Dinitrotoluene	5.0	U	5.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
2-Chloronaphthalene	5.0	U	5.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
2-Chlorophenol	5.0	U	5.0	0.29	ug/L		04/23/13 10:08	04/25/13 10:25	1
2-Methylnaphthalene	5.0	U	5.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
2-Methylphenol	5.0	U	5.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
2-Nitroaniline	20	U	20	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
2-Nitrophenol	5.0	U	5.0	0.28	ug/L		04/23/13 10:08	04/25/13 10:25	1
3,3'-Dichlorobenzidine	1.0	U	1.0	0.37	ug/L		04/23/13 10:08	04/25/13 10:25	1
3-Nitroaniline	20	U	20	0.28	ug/L		04/23/13 10:08	04/25/13 10:25	1
4,6-Dinitro-2-methylphenol	20	U	20	2.4	ug/L		04/23/13 10:08	04/25/13 10:25	1
4-Bromophenyl phenyl ether	5.0	U	5.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
4-Chloro-3-methylphenol	5.0	U	5.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
4-Chloroaniline	10	U	10	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
4-Chlorophenyl phenyl ether	5.0	U	5.0	0.30	ug/L		04/23/13 10:08	04/25/13 10:25	1
4-Nitroaniline	20	U	20	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
4-Nitrophenol	20	U	20	2.4	ug/L		04/23/13 10:08	04/25/13 10:25	1
Acenaphthene	5.0	U	5.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Acenaphthylene	5.0	U	5.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Acetophenone	5.0	U	5.0	0.34	ug/L		04/23/13 10:08	04/25/13 10:25	1
Anthracene	5.0	U	5.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Atrazine	3.0	U	3.0	0.34	ug/L		04/23/13 10:08	04/25/13 10:25	1
Benzaldehyde	5.0	U	5.0	0.39	ug/L		04/23/13 10:08	04/25/13 10:25	1
Benzo[a]anthracene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Benzo[a]pyrene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Benzo[b]fluoranthene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Benzo[g,h,i]perylene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Benzo[k]fluoranthene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Bis(2-chloroethoxy)methane	5.0	U	5.0	0.32	ug/L		04/23/13 10:08	04/25/13 10:25	1
Bis(2-chloroethyl)ether	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Bis(2-ethylhexyl) phthalate	5.0	U	5.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
Butyl benzyl phthalate	5.0	U	5.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
Caprolactam	10	U	10	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
Carbazole	10	U	10	0.28	ug/L		04/23/13 10:08	04/25/13 10:25	1
Chrysene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Dibenz(a,h)anthracene	2.0	U	2.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Dibenzofuran	4.0	U	4.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Diethyl phthalate	5.0	U	5.0	0.60	ug/L		04/23/13 10:08	04/25/13 10:25	1
Dimethyl phthalate	5.0	U	5.0	0.29	ug/L		04/23/13 10:08	04/25/13 10:25	1
Di-n-butyl phthalate	5.0	U	5.0	0.67	ug/L		04/23/13 10:08	04/25/13 10:25	1
Di-n-octyl phthalate	5.0	U	5.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: MB 240-83167/21-A
Matrix: Water
Analysis Batch: 83500

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 83167

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	1.0	U	1.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Fluorene	5.0	U	5.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Hexachlorobenzene	0.20	U	0.20	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Hexachlorobutadiene	1.0	U	1.0	0.27	ug/L		04/23/13 10:08	04/25/13 10:25	1
Hexachlorocyclopentadiene	5.0	U	5.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
Hexachloroethane	5.0	U	5.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
Indeno[1,2,3-cd]pyrene	2.0	U	2.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Isophorone	5.0	U	5.0	0.27	ug/L		04/23/13 10:08	04/25/13 10:25	1
Naphthalene	5.0	U	5.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Nitrobenzene	3.0	U	3.0	0.040	ug/L		04/23/13 10:08	04/25/13 10:25	1
N-Nitrosodi-n-propylamine	5.0	U	5.0	0.80	ug/L		04/23/13 10:08	04/25/13 10:25	1
N-Nitrosodiphenylamine	5.0	U	5.0	0.31	ug/L		04/23/13 10:08	04/25/13 10:25	1
Pentachlorophenol	5.0	U	5.0	2.4	ug/L		04/23/13 10:08	04/25/13 10:25	1
Phenol	5.0	U	5.0	0.60	ug/L		04/23/13 10:08	04/25/13 10:25	1
Phenanthrene	2.0	U	2.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
Pyrene	5.0	U	5.0	0.10	ug/L		04/23/13 10:08	04/25/13 10:25	1
3 & 4 Methylphenol	5.0	U	5.0	0.75	ug/L		04/23/13 10:08	04/25/13 10:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*71*		*20 - 110*	*04/23/13 10:08*	*04/25/13 10:25*	*1*
2-Fluorophenol (Surr)	*84*		*10 - 110*	*04/23/13 10:08*	*04/25/13 10:25*	*1*
2,4,6-Tribromophenol (Surr)	*66*		*21 - 110*	*04/23/13 10:08*	*04/25/13 10:25*	*1*
Nitrobenzene-d5 (Surr)	*80*		*21 - 110*	*04/23/13 10:08*	*04/25/13 10:25*	*1*
Phenol-d5 (Surr)	*81*		*21 - 110*	*04/23/13 10:08*	*04/25/13 10:25*	*1*
Terphenyl-d14 (Surr)	*64*		*24 - 110*	*04/23/13 10:08*	*04/25/13 10:25*	*1*

Lab Sample ID: LCS 240-83167/22-A
Matrix: Water
Analysis Batch: 83500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 83167

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	20.0	16.6		ug/L		83	43 - 110
2,2'-oxybis[1-chloropropane]	20.0	16.5		ug/L		82	37 - 110
2,4,5-Trichlorophenol	20.0	17.6		ug/L		88	48 - 110
2,4,6-Trichlorophenol	20.0	17.9		ug/L		89	45 - 110
2,4-Dichlorophenol	20.0	18.3		ug/L		91	41 - 110
2,4-Dimethylphenol	20.0	12.2		ug/L		61	32 - 110
2,4-Dinitrophenol	20.0	7.14	J	ug/L		36	10 - 110
2,4-Dinitrotoluene	20.0	16.9		ug/L		84	53 - 110
2,6-Dinitrotoluene	20.0	19.5		ug/L		97	54 - 110
2-Chloronaphthalene	20.0	18.4		ug/L		92	43 - 110
2-Chlorophenol	20.0	17.8		ug/L		89	29 - 110
2-Methylnaphthalene	20.0	17.1		ug/L		86	45 - 110
2-Methylphenol	20.0	16.3		ug/L		81	42 - 110
2-Nitroaniline	20.0	18.8	J	ug/L		94	54 - 110
2-Nitrophenol	20.0	17.8		ug/L		89	40 - 110
3,3'-Dichlorobenzidine	20.0	8.09		ug/L		40	22 - 110
3-Nitroaniline	20.0	17.2	J	ug/L		86	53 - 110

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-83167/22-A
Matrix: Water
Analysis Batch: 83500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 83167

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	20.0	11.8	J	ug/L		59	31 - 110
4-Bromophenyl phenyl ether	20.0	18.2		ug/L		91	45 - 110
4-Chloro-3-methylphenol	20.0	16.8		ug/L		84	52 - 110
4-Chloroaniline	20.0	14.1		ug/L		71	44 - 110
4-Chlorophenyl phenyl ether	20.0	16.0		ug/L		80	47 - 110
4-Nitroaniline	20.0	19.8	J	ug/L		99	54 - 110
4-Nitrophenol	20.0	16.3	J	ug/L		82	33 - 112
Acenaphthene	20.0	16.2		ug/L		81	47 - 110
Acenaphthylene	20.0	17.7		ug/L		89	49 - 110
Acetophenone	20.0	17.6		ug/L		88	46 - 110
Anthracene	20.0	19.0		ug/L		95	52 - 110
Atrazine	20.0	19.4		ug/L		97	66 - 126
Benzaldehyde	20.0	16.7		ug/L		83	38 - 110
Benzo[a]anthracene	20.0	16.3		ug/L		82	52 - 110
Benzo[a]pyrene	20.0	14.6		ug/L		73	44 - 110
Benzo[b]fluoranthene	20.0	16.1		ug/L		81	48 - 110
Benzo[g,h,i]perylene	20.0	14.6		ug/L		73	50 - 110
Benzo[k]fluoranthene	20.0	17.0		ug/L		85	49 - 110
Bis(2-chloroethoxy)methane	20.0	19.7		ug/L		98	43 - 110
Bis(2-chloroethyl)ether	20.0	18.4		ug/L		92	40 - 110
Bis(2-ethylhexyl) phthalate	20.0	14.0		ug/L		70	39 - 116
Butyl benzyl phthalate	20.0	22.0		ug/L		110	55 - 110
Caprolactam	20.0	18.5		ug/L		93	45 - 111
Carbazole	20.0	19.7		ug/L		98	55 - 110
Chrysene	20.0	18.3		ug/L		91	55 - 110
Dibenz(a,h)anthracene	20.0	14.0		ug/L		70	49 - 110
Dibenzofuran	20.0	17.6		ug/L		88	51 - 110
Diethyl phthalate	20.0	18.4		ug/L		92	58 - 110
Dimethyl phthalate	20.0	19.3		ug/L		96	57 - 110
Di-n-butyl phthalate	20.0	20.7		ug/L		104	57 - 110
Di-n-octyl phthalate	20.0	12.2		ug/L		61	40 - 110
Fluoranthene	20.0	17.9		ug/L		89	54 - 110
Fluorene	20.0	17.8		ug/L		89	52 - 110
Hexachlorobenzene	20.0	17.7		ug/L		89	50 - 110
Hexachlorobutadiene	20.0	14.6		ug/L		73	33 - 110
Hexachlorocyclopentadiene	20.0	5.0	U *	ug/L		2	10 - 110
Hexachloroethane	20.0	16.3		ug/L		82	35 - 110
Indeno[1,2,3-cd]pyrene	20.0	13.7		ug/L		69	50 - 110
Isophorone	20.0	19.3		ug/L		97	49 - 110
Naphthalene	20.0	17.7		ug/L		89	44 - 110
Nitrobenzene	20.0	19.2		ug/L		96	42 - 110
N-Nitrosodi-n-propylamine	20.0	17.3		ug/L		87	47 - 110
N-Nitrosodiphenylamine	20.0	17.7		ug/L		89	50 - 110
Pentachlorophenol	20.0	14.2		ug/L		71	18 - 110
Phenol	20.0	17.8		ug/L		89	33 - 110
Phenanthrene	20.0	19.3		ug/L		96	53 - 110
Pyrene	20.0	18.0		ug/L		90	52 - 110
3 & 4 Methylphenol	40.0	35.0		ug/L		87	44 - 110

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2) (Continued)

Lab Sample ID: LCS 240-83167/22-A
Matrix: Water
Analysis Batch: 83500

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 83167

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	76		20 - 110
2-Fluorophenol (Surr)	81		10 - 110
2,4,6-Tribromophenol (Surr)	74		21 - 110
Nitrobenzene-d5 (Surr)	87		21 - 110
Phenol-d5 (Surr)	81		21 - 110
Terphenyl-d14 (Surr)	61		24 - 110

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-83171/11-A
Matrix: Water
Analysis Batch: 83421

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 83171

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	0.10	U	0.10	0.044	ug/L		04/23/13 10:25	04/24/13 19:21	1
Aroclor-1221	0.10	U	0.10	0.045	ug/L		04/23/13 10:25	04/24/13 19:21	1
Aroclor-1232	0.10	U	0.10	0.073	ug/L		04/23/13 10:25	04/24/13 19:21	1
Aroclor-1242	0.10	U	0.10	0.060	ug/L		04/23/13 10:25	04/24/13 19:21	1
Aroclor-1248	0.10	U	0.10	0.061	ug/L		04/23/13 10:25	04/24/13 19:21	1
Aroclor-1254	0.10	U	0.10	0.032	ug/L		04/23/13 10:25	04/24/13 19:21	1
Aroclor-1260	0.10	U	0.10	0.038	ug/L		04/23/13 10:25	04/24/13 19:21	1
Aroclor-1262	0.10	U	0.10	0.036	ug/L		04/23/13 10:25	04/24/13 19:21	1
Aroclor-1268	0.10	U	0.10	0.055	ug/L		04/23/13 10:25	04/24/13 19:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	67		23 - 136	04/23/13 10:25	04/24/13 19:21	1
DCB Decachlorobiphenyl	74		10 - 130	04/23/13 10:25	04/24/13 19:21	1

Lab Sample ID: LCS 240-83171/12-A
Matrix: Water
Analysis Batch: 83421

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 83171

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	2.50	2.80		ug/L		112	66 - 120
Aroclor-1260	2.50	2.33		ug/L		93	55 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	88		23 - 136
DCB Decachlorobiphenyl	76		10 - 130

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-82906/1-A
Matrix: Water
Analysis Batch: 83108

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 82906

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	7.5	ug/L		04/22/13 07:13	04/22/13 20:15	1
Antimony	0.212	J	2.0	0.080	ug/L		04/22/13 07:13	04/22/13 20:15	1
Arsenic	0.116	J	5.0	0.063	ug/L		04/22/13 07:13	04/22/13 20:15	1
Barium	2.35	J	100	0.32	ug/L		04/22/13 07:13	04/22/13 20:15	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/22/13 07:13	04/22/13 20:15	1
Cadmium	1.0	U	1.0	0.026	ug/L		04/22/13 07:13	04/22/13 20:15	1
Cobalt	0.0220	J	20	0.020	ug/L		04/22/13 07:13	04/22/13 20:15	1
Chromium	0.516	J	10	0.13	ug/L		04/22/13 07:13	04/22/13 20:15	1
Copper	0.828	J	4.0	0.24	ug/L		04/22/13 07:13	04/22/13 20:15	1
Iron	13.4	J	200	12	ug/L		04/22/13 07:13	04/22/13 20:15	1
Manganese	0.504	J	50	0.36	ug/L		04/22/13 07:13	04/22/13 20:15	1
Nickel	0.218	J	20	0.087	ug/L		04/22/13 07:13	04/22/13 20:15	1
Lead	3.0	U	3.0	0.14	ug/L		04/22/13 07:13	04/22/13 20:15	1
Selenium	5.0	U	5.0	0.18	ug/L		04/22/13 07:13	04/22/13 20:15	1
Thallium	2.0	U	2.0	0.40	ug/L		04/22/13 07:13	04/22/13 20:15	1
Vanadium	4.0	U	4.0	0.15	ug/L		04/22/13 07:13	04/22/13 20:15	1
Zinc	100		50	2.1	ug/L		04/22/13 07:13	04/22/13 20:15	1
Silver	0.20	U	0.20	0.0083	ug/L		04/22/13 07:13	04/22/13 20:15	1

Lab Sample ID: LCS 240-82906/2-A
Matrix: Water
Analysis Batch: 83108

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 82906

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9770		ug/L		98	80 - 120
Antimony	100	98.9		ug/L		99	80 - 120
Arsenic	1000	1020		ug/L		102	80 - 120
Barium	1000	988		ug/L		99	80 - 120
Beryllium	1000	965		ug/L		97	80 - 120
Cadmium	1000	1030		ug/L		103	80 - 120
Cobalt	1000	994		ug/L		99	80 - 120
Chromium	1000	969		ug/L		97	80 - 120
Copper	1000	1030		ug/L		103	80 - 120
Iron	10000	9370		ug/L		94	80 - 120
Manganese	1000	1020		ug/L		102	80 - 120
Nickel	1000	1020		ug/L		102	80 - 120
Lead	1000	1010		ug/L		101	80 - 120
Selenium	1000	1020		ug/L		102	80 - 120
Thallium	250	248		ug/L		99	80 - 120
Vanadium	1000	940		ug/L		94	80 - 120
Zinc	1000	1080		ug/L		108	80 - 120
Silver	100	107		ug/L		107	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-83119/1-A
Matrix: Water
Analysis Batch: 83472

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 83119

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	50	U	50	7.5	ug/L		04/23/13 08:26	04/24/13 14:06	1
Antimony	0.281	J	2.0	0.080	ug/L		04/23/13 08:26	04/24/13 14:06	1
Arsenic	5.0	U	5.0	0.063	ug/L		04/23/13 08:26	04/24/13 14:06	1
Barium	1.25	J	100	0.32	ug/L		04/23/13 08:26	04/24/13 14:06	1
Beryllium	1.0	U	1.0	0.031	ug/L		04/23/13 08:26	04/24/13 14:06	1
Cadmium	1.0	U	1.0	0.026	ug/L		04/23/13 08:26	04/24/13 14:06	1
Cobalt	20	U	20	0.020	ug/L		04/23/13 08:26	04/24/13 14:06	1
Chromium	0.350	J	10	0.13	ug/L		04/23/13 08:26	04/24/13 14:06	1
Copper	4.0	U	4.0	0.24	ug/L		04/23/13 08:26	04/24/13 14:06	1
Iron	200	U	200	12	ug/L		04/23/13 08:26	04/24/13 14:06	1
Manganese	0.896	J	50	0.36	ug/L		04/23/13 08:26	04/24/13 14:06	1
Nickel	0.171	J	20	0.087	ug/L		04/23/13 08:26	04/24/13 14:06	1
Lead	3.0	U	3.0	0.14	ug/L		04/23/13 08:26	04/24/13 14:06	1
Selenium	5.0	U	5.0	0.18	ug/L		04/23/13 08:26	04/24/13 14:06	1
Thallium	2.0	U	2.0	0.40	ug/L		04/23/13 08:26	04/24/13 14:06	1
Vanadium	4.0	U	4.0	0.15	ug/L		04/23/13 08:26	04/24/13 14:06	1
Zinc	5.94	J	50	2.1	ug/L		04/23/13 08:26	04/24/13 14:06	1
Silver	0.20	U	0.20	0.0083	ug/L		04/23/13 08:26	04/24/13 14:06	1

Lab Sample ID: LCS 240-83119/2-A
Matrix: Water
Analysis Batch: 83472

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 83119

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10000	9680		ug/L		97	80 - 120
Antimony	100	96.3		ug/L		96	80 - 120
Arsenic	1000	1010		ug/L		101	80 - 120
Barium	1000	962		ug/L		96	80 - 120
Beryllium	1000	940		ug/L		94	80 - 120
Cadmium	1000	1020		ug/L		102	80 - 120
Cobalt	1000	976		ug/L		98	80 - 120
Chromium	1000	975		ug/L		97	80 - 120
Copper	1000	1020		ug/L		102	80 - 120
Iron	10000	10300		ug/L		103	80 - 120
Manganese	1000	1020		ug/L		102	80 - 120
Nickel	1000	1000		ug/L		100	80 - 120
Lead	1000	999		ug/L		100	80 - 120
Selenium	1000	1000		ug/L		100	80 - 120
Thallium	250	251		ug/L		100	80 - 120
Vanadium	1000	951		ug/L		95	80 - 120
Zinc	1000	1050		ug/L		105	80 - 120
Silver	100	106		ug/L		106	80 - 120

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 240-23368-3 MS
Matrix: Water
Analysis Batch: 83472

Client Sample ID: GW-17358-041713-DR-118
Prep Type: Total Recoverable
Prep Batch: 83119

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	140		10000	9670		ug/L		95	63 - 128
Antimony	0.30	J B	100	98.1		ug/L		98	44 - 153
Arsenic	2.4	J	1000	998		ug/L		100	82 - 123
Barium	97	J B	1000	1090		ug/L		99	45 - 144
Beryllium	0.28	J	1000	951		ug/L		95	77 - 124
Cadmium	0.17	J	1000	1010		ug/L		101	78 - 117
Cobalt	0.32	J	1000	970		ug/L		97	67 - 114
Chromium	1.3	J B	1000	987		ug/L		99	72 - 110
Copper	1.7	J	1000	960		ug/L		96	60 - 123
Iron	990		10000	11100		ug/L		101	22 - 169
Manganese	210	B	1000	1230		ug/L		102	10 - 172
Nickel	1.3	J B	1000	966		ug/L		96	72 - 111
Lead	0.45	J	1000	982		ug/L		98	73 - 115
Selenium	0.27	J	1000	959		ug/L		96	72 - 148
Thallium	1.2	J	250	252		ug/L		100	69 - 117
Vanadium	0.60	J	1000	983		ug/L		98	70 - 112
Zinc	14	J B	1000	968		ug/L		95	49 - 156
Silver	0.013	J	100	102		ug/L		102	10 - 139

Lab Sample ID: 240-23368-3 MSD
Matrix: Water
Analysis Batch: 83472

Client Sample ID: GW-17358-041713-DR-118
Prep Type: Total Recoverable
Prep Batch: 83119

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	140		10000	9750		ug/L		96	63 - 128	1	20
Antimony	0.30	J B	100	97.8		ug/L		97	44 - 153	0	20
Arsenic	2.4	J	1000	995		ug/L		99	82 - 123	0	20
Barium	97	J B	1000	1090		ug/L		99	45 - 144	0	20
Beryllium	0.28	J	1000	961		ug/L		96	77 - 124	1	20
Cadmium	0.17	J	1000	1010		ug/L		101	78 - 117	0	20
Cobalt	0.32	J	1000	976		ug/L		98	67 - 114	1	20
Chromium	1.3	J B	1000	998		ug/L		100	72 - 110	1	20
Copper	1.7	J	1000	963		ug/L		96	60 - 123	0	20
Iron	990		10000	11500		ug/L		106	22 - 169	4	20
Manganese	210	B	1000	1240		ug/L		103	10 - 172	1	20
Nickel	1.3	J B	1000	971		ug/L		97	72 - 111	0	20
Lead	0.45	J	1000	985		ug/L		98	73 - 115	0	20
Selenium	0.27	J	1000	957		ug/L		96	72 - 148	0	20
Thallium	1.2	J	250	253		ug/L		101	69 - 117	0	20
Vanadium	0.60	J	1000	993		ug/L		99	70 - 112	1	20
Zinc	14	J B	1000	964		ug/L		95	49 - 156	0	20
Silver	0.013	J	100	102		ug/L		102	10 - 139	0	20

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 240-83214/1-A
Matrix: Water
Analysis Batch: 83472

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 83214

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	13.6	J	50	2.1	ug/L		04/23/13 13:01	04/25/13 02:18	1

Lab Sample ID: LCS 240-83214/2-A
Matrix: Water
Analysis Batch: 83472

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 83214

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	1000	1020		ug/L		102	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-83019/1-A
Matrix: Water
Analysis Batch: 83234

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 83019

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.12	ug/L		04/22/13 15:35	04/23/13 09:04	1

Lab Sample ID: LCS 240-83019/2-A
Matrix: Water
Analysis Batch: 83234

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 83019

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.14		ug/L		103	81 - 123

Method: SM 4500 P E - Phosphorus

Lab Sample ID: MB 240-83474/10-A
Matrix: Water
Analysis Batch: 83608

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 83474

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Phosphorus as P	0.10	U	0.10	0.033	mg/L		04/25/13 07:20	04/25/13 14:01	1

Lab Sample ID: LCS 240-83474/11-A
Matrix: Water
Analysis Batch: 83608

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 83474

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Phosphorus as P	4.48	4.42		mg/L		99	53 - 134

Surrogate Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(63-129)	(66-117)	(74-115)	(75-121)
240-23368-1	GW-17358-041713-DR-116	93	73	85	90
240-23368-2	GW-17358-041713-DR-117	93	72	85	91
240-23368-3	GW-17358-041713-DR-118	103	76	90	101
240-23368-4	TB-17358-041713	94	74	84	93
LCS 240-83178/4	Lab Control Sample	82	101	91	86
LCS 240-83213/4	Lab Control Sample	82	101	91	85
MB 240-83178/6	Method Blank	90	78	86	86
MB 240-83213/6	Method Blank	91	76	86	89

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8270C - TCL Semivolatile Compounds (OLMO4.2)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(20-110)	(10-110)	(21-110)	(21-110)	(21-110)	(24-110)
240-23368-1	GW-17358-041713-DR-116	66	78	70	77	76	55
240-23368-2	GW-17358-041713-DR-117	68	77	70	72	76	55
240-23368-3	GW-17358-041713-DR-118	68	80	74	78	80	57
LCS 240-83167/22-A	Lab Control Sample	76	81	74	87	81	61
MB 240-83167/21-A	Method Blank	71	84	66	80	81	64

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
TBP = 2,4,6-Tribromophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14 (Surr)

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX1	DCB1
Lab Sample ID	Client Sample ID	(23-136)	(10-130)
240-23368-1	GW-17358-041713-DR-116	73	43
240-23368-2	GW-17358-041713-DR-117	61	32
240-23368-3	GW-17358-041713-DR-118	76	49
LCS 240-83171/12-A	Lab Control Sample	88	76
MB 240-83171/11-A	Method Blank	67	74

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Client Sample ID: GW-17358-041713-DR-116

Lab Sample ID: 240-23368-1

Date Collected: 04/17/13 14:10

Matrix: Water

Date Received: 04/18/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	83213	04/24/13 07:08	RQ	TAL CAN
Total/NA	Prep	3520C			83167	04/23/13 10:08	AC	TAL CAN
Total/NA	Analysis	8270C		1	83500	04/25/13 17:32	JG	TAL CAN
Total/NA	Prep	3520C			83171	04/23/13 10:25	AC	TAL CAN
Total/NA	Analysis	8082		1	83421	04/24/13 18:09	LH	TAL CAN
Total Recoverable	Prep	3005A			82906	04/22/13 07:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 00:22	NJT	TAL CAN
Total/NA	Prep	7470A			83019	04/22/13 15:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	83234	04/23/13 09:39	AS	TAL CAN
Total Recoverable	Prep	3005A			83214	04/23/13 13:01	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83472	04/25/13 03:41	NJT	TAL CAN
Total/NA	Prep	365.2/365.3/365			83474	04/25/13 07:36	TH	TAL CAN
Total/NA	Analysis	SM 4500 P E		1	83608	04/25/13 14:04	TH	TAL CAN

Client Sample ID: GW-17358-041713-DR-117

Lab Sample ID: 240-23368-2

Date Collected: 04/17/13 14:30

Matrix: Water

Date Received: 04/18/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	83213	04/24/13 07:30	RQ	TAL CAN
Total/NA	Prep	3520C			83167	04/23/13 10:08	AC	TAL CAN
Total/NA	Analysis	8270C		1	83500	04/25/13 17:56	JG	TAL CAN
Total/NA	Prep	3520C			83171	04/23/13 10:25	AC	TAL CAN
Total/NA	Analysis	8082		1	83421	04/24/13 18:23	LH	TAL CAN
Total Recoverable	Prep	3005A			82906	04/22/13 07:13	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83108	04/23/13 00:30	NJT	TAL CAN
Total/NA	Prep	7470A			83019	04/22/13 15:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	83234	04/23/13 09:40	AS	TAL CAN

Client Sample ID: GW-17358-041713-DR-118

Lab Sample ID: 240-23368-3

Date Collected: 04/17/13 15:25

Matrix: Water

Date Received: 04/18/13 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	83213	04/24/13 07:52	RQ	TAL CAN
Total/NA	Prep	3520C			83167	04/23/13 10:08	AC	TAL CAN
Total/NA	Analysis	8270C		1	83500	04/25/13 18:19	JG	TAL CAN
Total/NA	Prep	3520C			83171	04/23/13 10:25	AC	TAL CAN
Total/NA	Analysis	8082		1	83421	04/24/13 18:38	LH	TAL CAN
Total/NA	Prep	7470A			83019	04/22/13 15:35	LM	TAL CAN
Total/NA	Analysis	7470A		1	83234	04/23/13 09:41	AS	TAL CAN
Total Recoverable	Prep	3005A			83119	04/23/13 08:26	LM	TAL CAN
Total Recoverable	Analysis	6020		1	83472	04/24/13 14:21	NJT	TAL CAN

Lab Chronicle

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Client Sample ID: TB-17358-041713
Date Collected: 04/17/13 00:00
Date Received: 04/18/13 09:00

Lab Sample ID: 240-23368-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	83178	04/23/13 21:08	RQ	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: Conestoga-Rovers & Associates, Inc.
Project/Site: 17358-T01-10, RACER Willow Run

TestAmerica Job ID: 240-23368-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-13
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAP	4	E87225	06-30-13
Georgia	State Program	4	N/A	06-30-13
Illinois	NELAP	5	200004	07-31-13
Kansas	NELAP	7	E-10336	01-31-14
Kentucky	State Program	4	58	06-30-13
L-A-B	DoD ELAP		L2315	07-28-13
Minnesota	NELAP	5	039-999-348	12-31-13
Nevada	State Program	9	OH-000482008A	07-31-13
New Jersey	NELAP	2	OH001	06-30-13
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAP	3	68-00340	08-31-13
Texas	NELAP	6		08-03-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAP	3	460175	09-14-13
Washington	State Program	10	C971	01-12-14
West Virginia DEP	State Program	3	210	12-31-13
Wisconsin	State Program	5	999518190	08-31-13

CHAIN OF CUSTODY RECORD

COC NO.: PL-10395
PAGE 1 OF 1
(See Reverse Side for Instructions)

CONESTOGA-ROVERS & ASSOCIATES
14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170
Phone: (734) 453-5123 Fax: (734) 453-5201

Project No/ Phase/Task Code: 17358-T01-08Y13	Laboratory Name: Test America	Lab Location: North Canton, OH	SSOW ID: 17358-T04-010
Project Name: RACER - Willow Run	Lab Contact: D. Heckler	Lab Quote No:	Cooler No: 2 coolers
Project Location: Ypsilanti, MI			Carrier: FED EX
Chemistry Contact: P. Wiseman			Airbill No:
Sampler(s): D. Rivers			Date Shipped: 4/17/13

Item	Sample Identification (Containers for each sample may be combined on one line)	Date (mm/dd/yy)	Time (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO_3)	Sulfuric Acid (H_2SO_4)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	TCL SVOCs	PCBs	Site TAL metals	Phosphorus	MS/MSD Request	Comments/ Special Instructions:
1	GW-17358-04173-DR-106	4/17/13	1410	WG	G	4	3	1	1					9	X	X	X	X	X		
2	" " " -117	"	1430	"	"	4	3	1						8	X	X	X	X			
3	" " " -118	"	1525	"	"	4	3	1						8	X	X	X	X			
4	TB-17358-04173	"	—	WQ	—		1							1	X						
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					
13																					
14																					
15																					

240-23368 Chain of Custody

TAT Required in business days (use separate COCs for different TATs):
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Total Number of Containers: 26
All Samples in Cooler must be on COC

Notes/ Special Requirements:
* END OF BATCH *

Relinquished By	Company	Date	Time	Received By	Company	Date	Time
1. D. Rivers	CRA	4/17/13	1800	1. Lance Hall	TAL	4/18/13	900
2.				2.			
3.				3.			

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT — ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE — Fully Executed Copy (CRA) YELLOW — Receiving Laboratory Copy PINK — Shipper GOLDENROD — Sampling Crew

CRA Form: COC-10A (20110804)

TestAmerica Canton Sample Receipt Form/Narrative — Login # : 23368

Canton Facility

Client CRA — Site Name RACER - Willow Rd — Cooler unpacked by: Lance Heal

Cooler Received on 4-18-13 — Opened on 4-18-13

FedEx: 1st Grd ~~Exp~~ UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # MICH Foam Box ~~Client Cooler~~ Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# 1	(CF –0 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 4G	(CF +1 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	☒ See Multiple Cooler Form
IR GUN# 5G	(CF +1 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	
IR GUN# 8	(CF +1 °C) Observed Cooler Temp._____°C	Corrected Cooler Temp._____°C	

2. Were custody seals on the outside of the cooler(s)?	If Yes Quantity_____	Yes (No)
-Were custody seals on the outside of the cooler(s) signed & dated?		Yes No (NA)
-Were custody seals on the bottle(s)?		Yes (No)
3. Shippers' packing slip attached to the cooler(s)?		(Yes) No
4. Did custody papers accompany the sample(s)?		(Yes) No
5. Were the custody papers relinquished & signed in the appropriate place?		(Yes) No
6. Did all bottles arrive in good condition (Unbroken)?		(Yes) No
7. Could all bottle labels be reconciled with the COC?		(Yes) No
8. Were correct bottle(s) used for the test(s) indicated?		(Yes) No
9. Sufficient quantity received to perform indicated analyses?		(Yes) No
10. Were sample(s) at the correct pH upon receipt?		(Yes) No NA pH Strip Lot# HC256691
11. Were VOAs on the COC?		(Yes) No
12. Were air bubbles >6 mm in any VOA vials?		Yes (No) NA
13. Was a trip blank present in the cooler(s)?		(Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

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). Preservation Lot: Nitric Acid Lot# 100110-HNO3; Sulfuric Acid Lot# 051012-H2SO4; Sodium Hydroxide and Zinc Acetate Lot# 100108-(CH3COO)2ZN/NaOH.

Time preservative was added to sample(s): _____.

TestAmerica Multiple Cooler Receipt Form/Narrative **Login # :** 23368
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
MCH	4.6	4.6c	5.6c	Wet Ice
MCH	46	4.5c	5.5c	wet ice

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
WG-17358-041713-DR-116	240-23368-D-1	Plastic 500ml - with Sulfuric Acid	<2	_____	_____
WG-17358-041713-DR-116	240-23368-E-1	Plastic 500ml - with Nitric Acid	<2	_____	_____
WG-17358-041713-DR-117	240-23368-D-2	Plastic 500ml - with Nitric Acid	<2	_____	_____
WG-17358-041713-DR-118	240-23368-D-3	Plastic 500ml - with Nitric Acid	____	_____	_____

APPENDIX D

PROPOSED DEED RESTRICTION

DECLARATION OF RESTRICTIVE COVENANT

MDEQ Reference No.: RC-RMD-111-__-__
Facility MID Number MID980587893
MDEQ Approval Date_____

This Declaration of Restrictive Covenant is made to protect public health, safety, welfare and the environment pursuant to the provisions of Part 111, Hazardous Waste Management, MCL 324.11101 et seq (Part 111) and the applicable Sections of Part 201, Environmental Remediation, MCL 324.20101 et seq (Part 201) of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended, MCL 324.101 et seq.

This Declaration of Restrictive Covenant ("Restrictive Covenant") is made on _____ (date) by RACER Properties LLC, the Grantor(s), the current fee title holder(s) of the property, whose address is 500 Woodward Avenue, Suite 1510, Detroit, MI 48226, for the benefit of the Grantee, State of Michigan, Department of Environment Quality ("MDEQ"), whose address is 525 West Allegan Street, PO Box 30473, Lansing, Ingham County, Michigan 48909-7926.

This Restrictive Covenant has been made to prohibit or restrict activities that could result in unacceptable exposure to environmental contamination present at the property located at 2930 Ecorse Road, in the Township of Ypsilanti, County of Washtenaw , Michigan, and legally described in Exhibit 1 (“Property”).

The Property is associated with the Willow Run Powertrain site, MID980587893 for which a corrective measure implementation plan (CMIP) submitted on _____, __, 20__ was approved by the MDEQ on _____, 20__. The corrective measures being implemented to address environmental contamination are fully described in the CMIP entitled Corrective Measure Implementation Plan Northeast Area Former Willow Run Plant submitted by Conestoga Rovers & Associates on behalf of RACER Properties LLC for the Willow Run Powertrain site.

The CMIP required the recording of this Restrictive Covenant to restrict unacceptable exposures to limited groundwater contamination associated with heavy metals located on the Property.
The land or resource use restrictions contained in this Restrictive Covenant are based upon information available to the MDEQ at the time the CMIP was approved by the MDEQ. Failure of the corrective measures to achieve and maintain the cleanup criteria, exposure controls, and requirements specified in the CMIP; future changes in the environmental condition of the Property or changes in the cleanup criteria developed under Part 201; the discovery of environmental conditions at the Property that were not accounted for in the CMIP; or use of the Property in a manner inconsistent with the restrictions described herein, may result in this Restrictive Covenant not being protective of public health, safety, and welfare, and the environment. Additional restrictions may become necessary.

Exhibit 2, attached hereto, provides a survey and a map that identifies those portions of the Property that are subject to land use or resource use restrictions as specified herein.

Summary of Corrective Measures

Chemical(s) listed in Exhibit 3 have been found in soils or groundwater at the Property in concentrations above the cleanup criteria for unrestricted residential use for relevant exposure pathways. Areas of the Property described in Exhibit 2 may contain hazardous substances in excess of the concentrations that satisfy the cleanup criteria for unrestricted residential use.
Based on site investigation information no physical corrective measures have been or will be undertaken to minimize the migration of hazardous substances, as described in the CMIP:
However, hazardous substances remain present in soils or groundwater at levels that require controls to prevent unacceptable exposures.

Definitions
"MDEQ" means the Michigan Department of Environmental Quality, its successor entities, and those persons or entities acting on its behalf.

"Owner" means at any given time the then current fee title holder(s) and the holder(s) of a life estate of the Property or any portion thereof, including the fee title holder's lessees and those persons or entities authorized to act on its behalf.

All other terms used in this document which are defined in Part 3, Definitions, of the NREPA, Part 111, Part 201, or the Part 111 and Part 201 Administrative Rules, shall have the same meaning in this document as in those statutes and rules as on the date this Restrictive Covenant is made.

NOW THEREFORE,

Declaration of Land Use or Resource Use Restrictions

The Grantor(s) as current fee title holder(s) of the Property, hereby declare(s) and covenant(s) that the Property, shall be subject to those restrictions on use described below and intends that said restrictions and covenants shall run with the land, and may be enforced in perpetuity against the Owner by the following entities: (1) the Grantor, if it is no longer owner; and (2) MDEQ.

1. Land Use Prohibitions. The Owner shall prohibit all uses of the Property that are not compatible with nonresidential land use category under MCL 324.20120a(1)(b) and generally described in the Description of Allowable Uses, attached hereto as Exhibit 4.

Part 201 cleanup criteria for land use-based response activities are located in the Government Documents Section of the State of Michigan Library, MCL 324.201201 *et seq*. effective December 2010, and MAC R 299.5701 – R 299.5727, effective December 21, 2002.

2. Activities Prohibited. The Owner shall prohibit activities on Property designated in Exhibit 2 that may result in exposures above levels established in the CMIP. These prohibited activities include:

    a. No drinking water wells may be installed or used on site.

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b. No excavation and off site transport of any saturated soils without MDEQ approval.

c. No contaminated soils may be relocated on site except as provided for under Part 201, Section 20120c, MCL 324.20120c.

3. The Owner shall not remove, disturb or damage any monitoring wells on the Property except as provided in the CMIP without MDEQ approval.

4. Contaminated Soil Management. The Owner shall manage contaminated soils, media and/or debris and all other soils located on the Property in accordance with the requirements of Part 111, Subtitle C of the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq. (RCRA), the administrative rules promulgated pursuant to Part 111 and the RCRA, and all other relevant state and federal laws, including but not limited to MCL 324.20120c.

5. Access. The Owner shall grant to the MDEQ the right to enter the Property at reasonable times for the purpose of determining and monitoring compliance with the CMIP, including the right to take samples, inspect the operation of the corrective measures and, inspect any records relating thereto, and to perform any actions necessary to maintain compliance with the Part 111 and the CMIP.

6. Notice. The Owner shall provide notice to the MDEQ of the Owner's intent to transfer any interest in the Property prior to consummating the conveyance. A conveyance of title, easement, or other interest in the Property shall not be consummated by the Owner without adequate and complete provision for compliance with the terms and conditions of this Restrictive Covenant and the applicable provisions of MCL 324.20116. The notice required to be made to the MDEQ under this Paragraph shall be made to: Chief, Office of Waste Management and Radiological Protection, P.O. Box 30241, Lansing, Michigan 48909-7741; and shall include a statement that the notice is being made pursuant to the requirements of this Restrictive Covenant. A copy of this Restrictive Covenant shall be provided to all future owners, heirs, successors, lessees, easement holders, assigns, and transferees by the person transferring the interest.

7. Term . This Restrictive Covenant shall run with the Property and shall be binding on the Owner, and all current and future successors, lessees, easement holders, their assigns, and their authorized agents, employees, or persons acting under their direction and control. This Restrictive Covenant may only be modified or rescinded with the written approval of the MDEQ.

8. Enforcement. The Grantor is entitled to enforce the restrictions and covenants is this Restrictive Covenant by specific performance or other legal action in a court of competent jurisdiction against subsequent Owners of all or part of the Property. The Grantor, on behalf of itself, and its successors in title, intends and agrees that MDEQ is entitled to enforce the restrictions and covenants in this Restrictive Covenant by specific performance or other legal action in a court of competent jurisdiction against the Grantor, as Owner, and thereafter against subsequent Owners of all or part of the Property. All remedies available hereunder shall be in addition to any and all other remedies at law or equity.

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9. Severability. If any provision of this Restrictive Covenant is held to be invalid by a court of competent jurisdiction, the invalidity of such provision shall not affect the validity of any other provisions of this Restrictive Covenant and all other provisions shall continue to remain in full force and effect.

10. Authority to Execute Restrictive Covenant. The undersigned person executing this Restrictive Covenant represents and certifies that he or she is duly authorized and has been empowered to execute and deliver this Restrictive Covenant.

IN WITNESS WHEREOF, _____ has caused this Restrictive Covenant, RC-RMD-111-__-___, to be executed on this ____day of_____, 2013.

RACER PROPERTIES LLC

By: Revitalizing Auto Communities Environmental Response Trust, Sole Member of RACER Properties LLC

By: EPLET, LLC, acting solely in its capacity as Administrative Trustee of Revitalizing Auto Communities Environmental Response Trust

By: _____
Elliott P. Laws
Managing Member of EPLET, LLC

Date: _____

* * * * * * *

STATE OF MICHIGAN)
) ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this ___day of ____, 2013, by Elliott P. Laws, not individually, but acting solely in his capacity as Managing Member of EPLET, LLC, a Delaware limited liability company, acting solely in its capacity as Administrative Trustee of Revitalizing Auto Communities Environmental Response Trust, a New York trust, acting solely in its capacity as Sole Member of RACER Properties LLC, a Delaware limited liability company, on behalf of said limited liability companies and said trust.

Notary Public _____
My commission expires: _____

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EXHIBIT 1

LEGAL DECRIPTION OF PROPERTY

[*<u>NOTE</u>: This exhibit shall contain the legal description. Exhibit 1 shall also include the parcel identification number(s) of the Property.*]

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DRAWING OF DESCRIPTION

SHOWING PROPERTY BEING CONVEYED FROM THE RACER TRUST TO THE WAYNE COUNTY AIRPORT AUTHORITY, BEING OF PART OF SECTION 12, T. 3 S., R. 7 E., YPSILANTI TOWNSHIP, WASHTENAW COUNTY, AND OF PART OF SECTION 7, T. 3 S., R. 8 E., VAN BUREN TOWNSHIP, WAYNE COUNTY, MICHIGAN.

MARCH 6, 2013

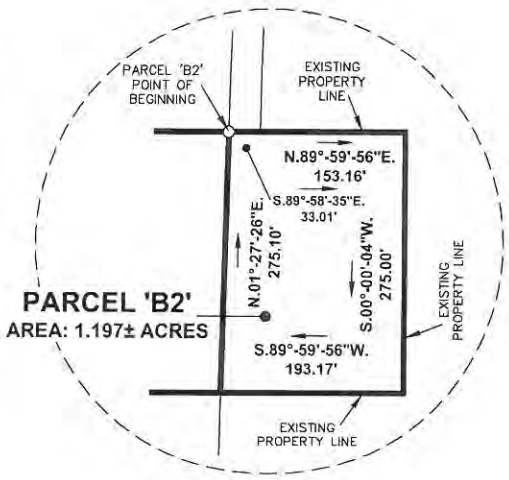
SHEET 1 OF 2 SHEETS

0' 30' 75' 150' 300' 600'

SCALE: 1"= 300'

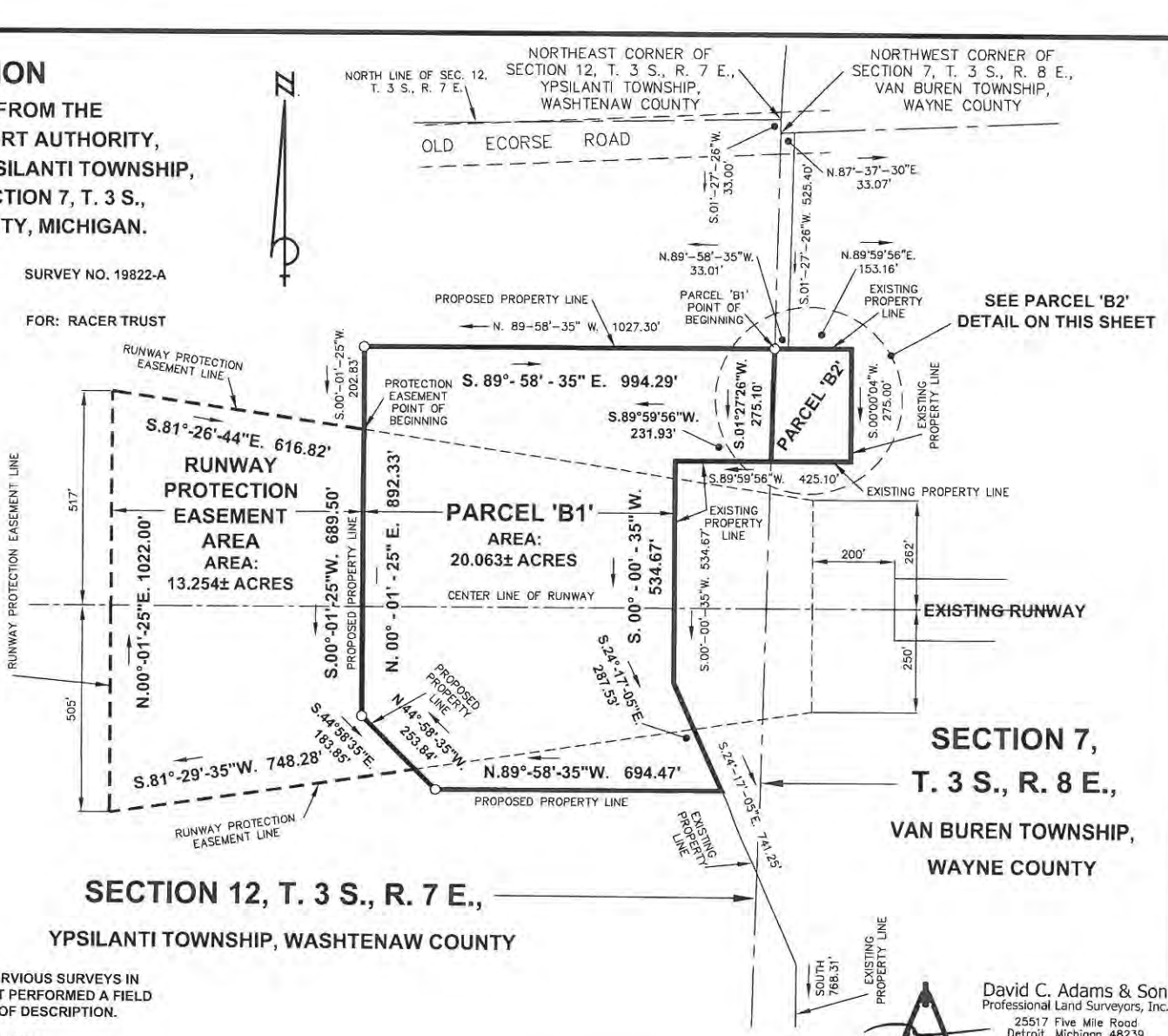
SURVEY NO. 19822-A

FOR: RACER TRUST



PARCEL 'B2' DETAIL

SCALE: NONE



DRAWING OF DESCRIPTION NOTES

THIS DRAWING OF DESCRIPTIONS HAS BEEN PREPARED FROM OUR PERVIOUS SURVEYS IN THIS AREA AND FROM AVAILABLE MUNICIPAL RECORDS. WE HAVE NOT PERFORMED A FIELD SURVEY IN CONJUNCTION WITH THE PREPARATION OF THIS DRAWING OF DESCRIPTION.

EXISTING EASEMENTS AFFECTING THESE PARCELS HAVE NOT BEEN SHOWN.

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ADAMS & SON
PROFESSIONAL SURVEYORS

PARCEL 'B1' DESCRIPTION

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RUNWAY PROTECTION EASEMENT DESCRIPTION

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EXHIBIT 2

SURVEY OF RESTRICTED AREAS OF THE PROPERTY

[NOTE: This exhibit shall include a survey of the entire Property identified in the legal description provided in Exhibit 1. The survey shall depict any permanent markers which are part of the CMIP. If the land use and resource use restrictions of this Restrictive Covenant apply to the whole Property, the initial survey is sufficient. If the land use and resource use restrictions of this Restrictive Covenant apply to discrete portions of the Property, then those areas need to be legally described, surveyed individually, and identified on the survey of the Property above. Areas of the Property that are restricted for groundwater use must be identified. All surveys must be conducted by licensed professional surveyor and shall identify and clearly delineate and graphically depict the spatial extent of all restricted areas in relation to the Property boundaries and the key features of the corrective measures. Surveys must be signed by the surveyor; be sealed with the surveyor's stamped certificate; have a basis of bearings; and certify compliance with all of the requirements of PA 132 of 1970, as amended.]]

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MARCH 6, 2013

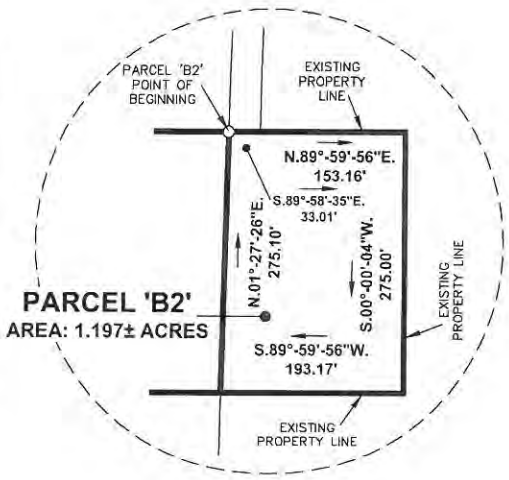
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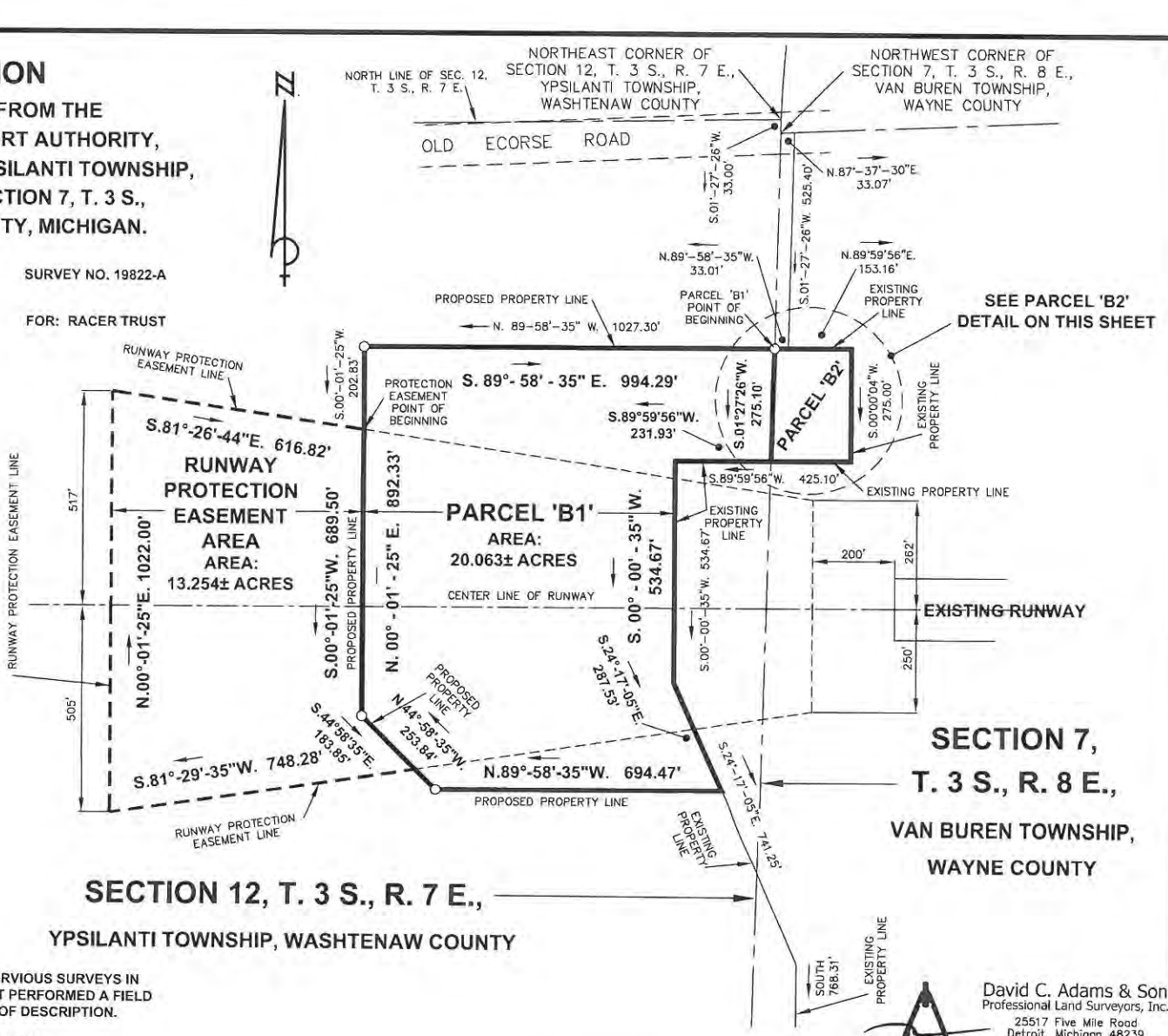
SURVEY NO. 19822-A

FOR: RACER TRUST



PARCEL 'B2' DETAIL

SCALE: NONE



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EXHIBIT 3

[HAZARDOUS WASTES / CONTAMINANTS / HAZARDOUS SUBSTANCES] ABOVE CRITERIA IN SOILS OR GROUNDWATER

[NOTE: This exhibit shall include a list of hazardous wastes or contaminants or hazardous substances which are over the applicable Part 201 criteria in soils and/or groundwater. Applicable Part 201 criteria are located in the Part 201 rules MAC R 299.5701 – R 299.5727.]

CONTAMINANTS	CAS NUMBER	APPLICABLE CRITERIA (ppb)
Aluminum	7429905	50 (DW)[1]
Iron	7439896	300 (DW) [1]
Manganese	7439965	50 (DW) [1]
Mercury	Varies	0.0013 (GSI) [1]
Vanadium	7440622	4.5 (DW) [1]
Arsenic	7440382	4.6 (DW & GSI protection)[1] 7.6 (soil direct contact)
Manganese	7439965	1,000 (DW protection) [1] 130,000 (GSI protection) [1]
Selenium	7782492	400 (GSI protection) [1]

Notes
[1] Below Site Specific Background levels
DW – drinking water
GSI - groundwater surface water interface

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EXHIBIT 4

DESCRIPTION OF ALLOWABLE USES

<u>Nonresidential Land Use:</u> This land use is characterized by any use which is not residential in nature and is primarily characterized by industrial and commercial uses. Industrial uses typically involve manufacturing operations engaged in processing and manufacturing of materials or products. Other examples of industrial uses are utility companies, industrial research and development, and petroleum bulk storage. Commercial uses include any business or income-producing use such as commercial warehouses, lumber yards, retail gas stations, auto dealerships and service stations, as well as office buildings, banks, and medical/dental offices (not including hospitals). Commercial uses also include retail businesses whose principal activity is the sale of food or merchandise within an enclosed building and personal service establishments which perform services indoors such as health clubs, barber/beauty salons, photographic studios, etc.

Any residential use is specifically prohibited from the non-residential land use category. This would include the primary use of the property for human habitation and includes structures such as single family dwellings, multiple family structures, mobile homes, condominiums, and apartment buildings. Residential use is also characterized by any use which is intended to house, educate, or provide care for children, the elderly, the infirm, or other sensitive populations, and therefore could include day care centers, educational facilities, hospitals, elder care facilities, and nursing homes. The use of any accessory building or portion of an existing building as a dwelling unit permitted for a proprietor or storekeeper and their families, located in the same building as their place of occupation, or for a watchman or caretaker is also prohibited. Any authority that allows for residential use of the Property as a legal non-conforming use is also restricted per the prohibitions contained in this restrictive covenant.

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