



**CONESTOGA-ROVERS
& ASSOCIATES**

200 W. Allegan Street
Plainwell, Michigan 49080-1397
Telephone: (269) 685-5181 Fax: (269) 685-5223
www.CRAworld.com

TRANSMITTAL

DATE: August 7, 2013 REFERENCE NO.: 017360
PROJECT NAME: Former Grand Rapids Metal Plant
To: Ms. Darlene Stringer
MDEQ RRD - Grand Rapids District
350 Ottawa Avenue NW
Unit 10
Grand Rapids, Michigan 49503-2341

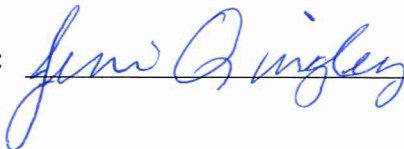
Please find enclosed: ☐ Draft ☒ Final
☒ Originals ☐ Other
☐ Prints
Sent via: ☐ Mail ☐ Same Day Courier
☒ Overnight Courier ☐ Other

QUANTITY	DESCRIPTION
2	Data Package Memorandum - 2013 Site-Wide Investigation Stage IV
	Former Grand Rapids Metal Plant, Wyoming, Michigan

☐ As Requested ☐ For Review and Comment
☒ For Your Use ☐
☐

COMMENTS:

Copy to: David Favero, RACER Trust
Completed by: Jeni Quigley
[Please Print]

Signed: 

Filing: **Correspondence File**



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200 W. Allegan Street, Suite 300
Plainwell, Michigan 49080-1397
Telephone: (269) 685-5181 Fax: (269) 685-5223
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MEMORANDUM

TO: Darlene Stringer, MDEQ
Matt Gamble, MDEQ

REF. NO.: 017360

FROM: Jeni Quigley/ds/65/Pwl.

DATE: August 6, 2013

CC: David Favero, RACER

RE: **Data Package**
2013 Site-Wide Investigation – Stage IV
Former Grand Rapids Metal Plant
Wyoming, Michigan

Conestoga-Rovers & Associates (CRA), on behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, conducted soil and groundwater investigation activities at the former Grand Rapids Metal Plant property located at 300 36th Street SW in Wyoming, Michigan (Site). The scope of work (SOW) implemented was presented in the memorandum entitled *Proposed Sample Locations, 2013 Site-Wide Investigation – Stage IV, Former Grand Rapids Metal Plant, Wyoming Michigan*, submitted to the Michigan Department of Environmental Quality (MDEQ) on February 20, 2013. The protocols utilized during the implementation of the February 20, 2013 SOW were described in the Site-Wide Investigation Work Plan (Work Plan), submitted to the MDEQ on January 7, 2011. The samples were collected during the field investigation conducted between April 30, 2013 and May 8, 2013. At the approval of the MDEQ, the Spring 2013 Semi-Annual Groundwater Monitoring activities were completed in conjunction with Stage IV of the Site-Wide Investigation. Sampling was conducted in accordance with the 2005 Groundwater Monitoring Work Plan submitted on April 12, 2005 to the Michigan Department of Environmental Quality (MDEQ) and verbally approved on April 28, 2005. This memorandum (Memorandum) has been prepared to present the "Data Package" summarizing the data collected during Stage IV of the Site-Wide Investigation field activities.

Soil and Groundwater Investigation Activities

Field activities included the advancement of soil borings, installation of monitoring wells, completion of vertical aquifer sampling (VAS), and the collection of soil, groundwater, and surface water samples for chemical analysis. Figure 1 presents the sample locations. Figure 2 presents the sample locations associated with the former Tar House. Figure 3 presents the sample locations associated with the Bulk Unload Area and the Zc-5.5 Area. Table 1 presents a sample summary. Stratigraphic soil boring logs and monitoring well construction details are included in Attachment A.

April/May 2013 Monitoring Activities

The scope of work (SOW) for the semi-annual groundwater monitoring program conducted at the Site includes: the collection and analysis of groundwater/surface water samples for Target Compound List (TCL) volatile organic compounds (VOCs) from monitoring wells and culvert locations; the collection and analysis of groundwater samples for TCL semi-volatile organic compounds (SVOCs) from monitoring wells 85-6, MW44-12, MW45-12, MW46-12, MW50-12, MW51-12, and MW52-12; the

collection and analysis of groundwater samples for Site-specific Target Analyte List (TAL) metals from monitoring wells MW31-12, MW33-12, MW34-12, MW37-12, MW38-12, MW39-12, MW44-12, MW45-12, and MW46-12; the measurement of static groundwater levels in all monitoring wells; and the measurement of light non-aqueous phase liquid (LNAPL) levels in select Site monitoring wells 85-6, MW44-12, MW45-12, MW46-12, MW50-12, MW51-12, and MW52-12.

A total of 63 groundwater samples, including quality assurance/quality control (QA/QC) samples, were collected from monitoring wells 85-1, 85-2, 85-6, 85-7, 86-3, 87-8, 87-9, 87-10, 87-11, 87-13, 88-2, 88-3, 88-4, MW1-03, MW2-03, MW5-03, MW6-03, MW7-03, MW8-04, MW9-04, MW10-04, MW11D-04, MW13-04, MW15-04, MW11S-05, MW17-06, MW27-11, MW28-12 through MW53-12, MW57-13, MW58-13, and PWDISCH. A total of three surface water samples were collected from culvert locations C-1, C-2, and C-3. All samples were collected between April 30, 2013 and May 8, 2013 for analysis of TCL VOCs. In addition, samples collected from monitoring wells 85-6, MW44-12, MW45-12, MW46-12, MW50-12, MW51-12, and MW52-12 were analyzed for TCL SVOCs, and samples collected from MW31-12, MW33-12, MW34-12, MW37-12, MW38-12, MW39-12, MW44-12, MW45-12, and MW46-12 were analyzed for Site-specific TAL metals. It should be noted that certain samples were analyzed for additional parameters as part of the on-going Site investigation; as discussed in the subsequent section. Table 1 presents a summary of the samples collected during the Spring 2013 semi-annual sampling event.

Prior to groundwater sample collection, static water levels were measured and recorded for the monitoring wells. Well caps were unlocked and removed allowing the water levels in the wells to stabilize. Static water levels and free product levels were measured to the top of each riser. Table 2 presents static water levels for April 26, 2013. No measurable thickness LNAPL was detected in monitoring wells 85-6, MW44-12, MW45-12, MW46-12, MW50-12, MW51-12, and MW52-12 during the Spring 2013 semi-annual sampling event. Figure 4 presents the approximate groundwater flow direction for April 26, 2013.

Dedicated ¼-inch diameter polyethylene tubing is utilized in each of the wells to be sampled. The bottom intake of the tubing was set in the middle of the screened interval for each of the wells. All wells were purged with a peristaltic pump using low-flow purge (LFP) techniques. Wells were purged between 100 and 200 mL per minute with continuous monitoring to confirm less than 0.3 feet of drawdown of the water level. Groundwater quality measurements were recorded in consecutive timed intervals using a YSI® and HACH® turbidity meter. Groundwater quality parameters included pH, specific conductivity, temperature, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity. Upon groundwater stabilization, based on three consecutive similar readings, groundwater samples were collected.

Water samples collected from the culvert locations C-1, C-2 and C-3 were collected using a new disposable polyethylene sampling bottle in each location.

Analytical Results

Analytical results for the soil and groundwater samples were evaluated against the Generic Residential and Non-Residential Cleanup Criteria and Screening Levels established in Part 7 of Administrative Rules, effective September 28, 2012, pursuant to Part 201, Environmental Remediation, 1994 PA 451, as amended. In addition, analytical results for polychlorinated biphenyls (PCBs) were evaluated against the High Occupancy Area Cleanup Level of 1 part per million (ppm) for bulk remediation waste (without further conditions) set forth in the Toxic Substances Control Act (TSCA). Analytical results for soil, groundwater and surface water, and VAS samples compared to the aforementioned

criteria are presented in Tables 3, 4, and 5, respectively. Figure 5 presents exceedances of the Part 201 Generic Residential and Non-Residential Cleanup Criteria in soil samples collected during the Stage IV Site-Wide Investigation, except for samples collected in the Former Tar House area. Figure 6 presents exceedances of the High Occupancy Area Cleanup Level of 1 ppm for bulk remediation waste (without further conditions) set forth in TSCA for samples collected from the Former Tar House area. Figure 7 presents exceedances of the Part 201 Generic Residential and Non-Residential Cleanup Criteria in groundwater from the data collected during the Stage IV Site-Wide Investigation and the Spring 2013 semi-annual groundwater sampling event.

A QA/QC data validation was conducted on the analytical data. Copies of analytical data and data validation memoranda summarizing the results of the data validation are presented in Attachment B and Attachment C, respectively. Based on the review of the data validation memoranda, data precision and accuracy meets all accepted standards and the data contained within this report are appropriate for use and are without significant anomalies. The detected concentrations are valid and reliable, with the qualifications noted, for the purposes of this investigation.

Samples were not collected from several locations proposed in the Work Plan due to the requirement for procurement of access agreements for the off-Site sample locations. Additionally, field conditions dictated revisions to the proposed locations. A brief list and description of variances from the Proposed Sample Locations, 2013 Site-Wide Investigation – Stage IV Sample Matrix are provided below:

<u>Location</u>	<u>Deviation</u>
MW4-03	The monitoring well protective cover was initially thought to have been removed and the well casing filled with bentonite chips. However, prior to replacing the well during a Site walk to determine locations of utilities near the former well, MW4-03 was observed to have been hidden under vegetation and the nearby location of the bentonite chips was determined to be the original VAS sample location. Therefore, no replacement monitoring well was installed.
HP28-13/ MW54-13	This monitoring well location was renamed MW49-13.
HP29-12/ MW48-12	This monitoring well location was renamed MW48-13.
SB208-13	Not installed at this time due to requirement for procurement of access agreement due to off-Site sample location.
SB209-13	Not installed at this time due to requirement for procurement of access agreement due to off-Site sample location.
SB210-13	Not installed at this time due to requirement for procurement of access agreement due to off-Site sample location.
SB211-13	Not installed at this time due to requirement for procurement of access agreement due to off-Site sample location.
SB233-13	Not installed at this time due to requirement for procurement of access agreement due to off-Site sample location.
SB234-13	Not installed at this time due to requirement for procurement of access agreement due to off-Site sample location.

- SB235-13 Not installed at this time due to requirement for procurement of access agreement due to off-Site sample location.
- SB236-13 Not installed at this time due to requirement for procurement of access agreement due to off-Site sample location.
- SB237-13 Not installed at this time due to requirement for procurement of access agreement due to off-Site sample location.
- SB238-13 Not installed at this time due to requirement for procurement of access agreement due to off-Site sample location.

Please contact David Favero at (217) 741-6235 or Jeni Quigley at (269) 685-5181 with any questions regarding this Memorandum or the enclosed information.

LIST OF FIGURES

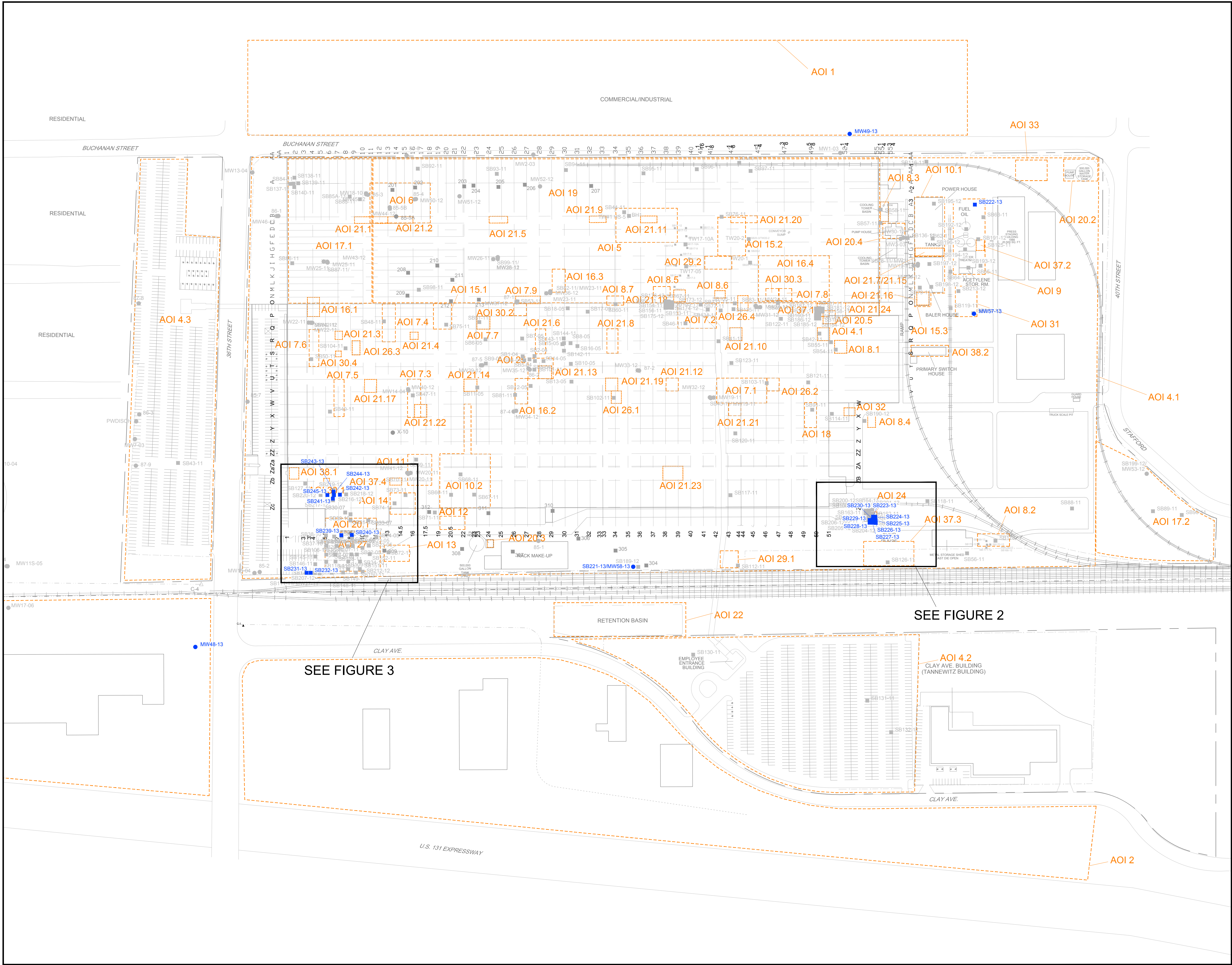
FIGURE 1	SAMPLE LOCATIONS
FIGURE 2	SAMPLE LOCATIONS - FORMER TAR HOUSE
FIGURE 3	SAMPLE LOCATIONS - BULK UNLOAD AND Zc-5.5 AREA
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LIST OF ATTACHMENTS

ATTACHMENT A	STRATIGRAPHIC SOIL BORING LOGS AND WELL CONSTRUCTION DETAILS
ATTACHMENT B	ANALYTICAL LABORATORY DATA
ATTACHMENT C	DATA VALIDATION MEMORANDA



No	Revision	Date	Initial

LEGEND

- SB222-13 STAGE IV SITE-WIDE INVESTIGATION SOIL BORING LOCATIONS
- TW20-2 HISTORICAL SAMPLE LOCATION
- MW6-03 HISTORICAL MONITORING WELL LOCATION
- MW58-13 STAGE IV SITE-WIDE INVESTIGATION SOIL BORING/MONITORING WELL LOCATION
- MW25-11 DESTROYED MONITORING WELL LOCATION
- APPROXIMATE SITE BOUNDARY
- FENCE
- RAILROAD
- COLE DRAIN
- APPROXIMATE AOI

KEY MAP

SCALE VERIFICATION

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

Approved		
DRAWING STATUS		
Status	Date	Initial

SAMPLE LOCATIONS

SITE-WIDE INVESTIGATION - STAGE IV

FORMER GRAND RAPIDS METAL PLANT

WYOMING, MICHIGAN

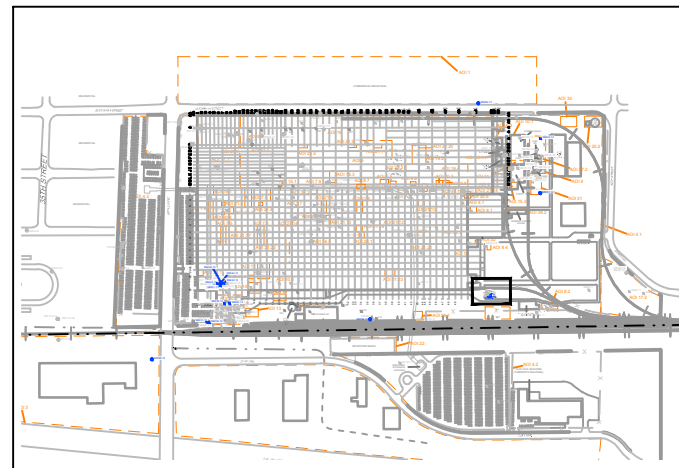
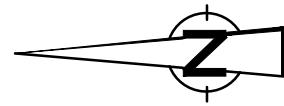
CONESTOGA-ROVERS & ASSOCIATES

Source Reference:

Project Manager:	Reviewed By:	Date:
J.Q.	E.B.	JUNE 2013

Scale:	Project N°:	Report N°:	Drawing N°:
1:140	017360-T05	MEMO065	Figure 1

017360-T05(MEMO065)GN-DE004 AUG 5/2013



KEY MAP

LEGEND

- SB222-13 STAGE IV SITE-WIDE INVESTIGATION SOIL BORING LOCATIONS
- SB205-12 HISTORICAL SAMPLE LOCATION
- — — — — APPROXIMATE SITE BOUNDARY
- - - - - FENCE
- + + + + + RAILROAD
- . - . - . COLE DRAIN
- - - - - APPROXIMATE AOI

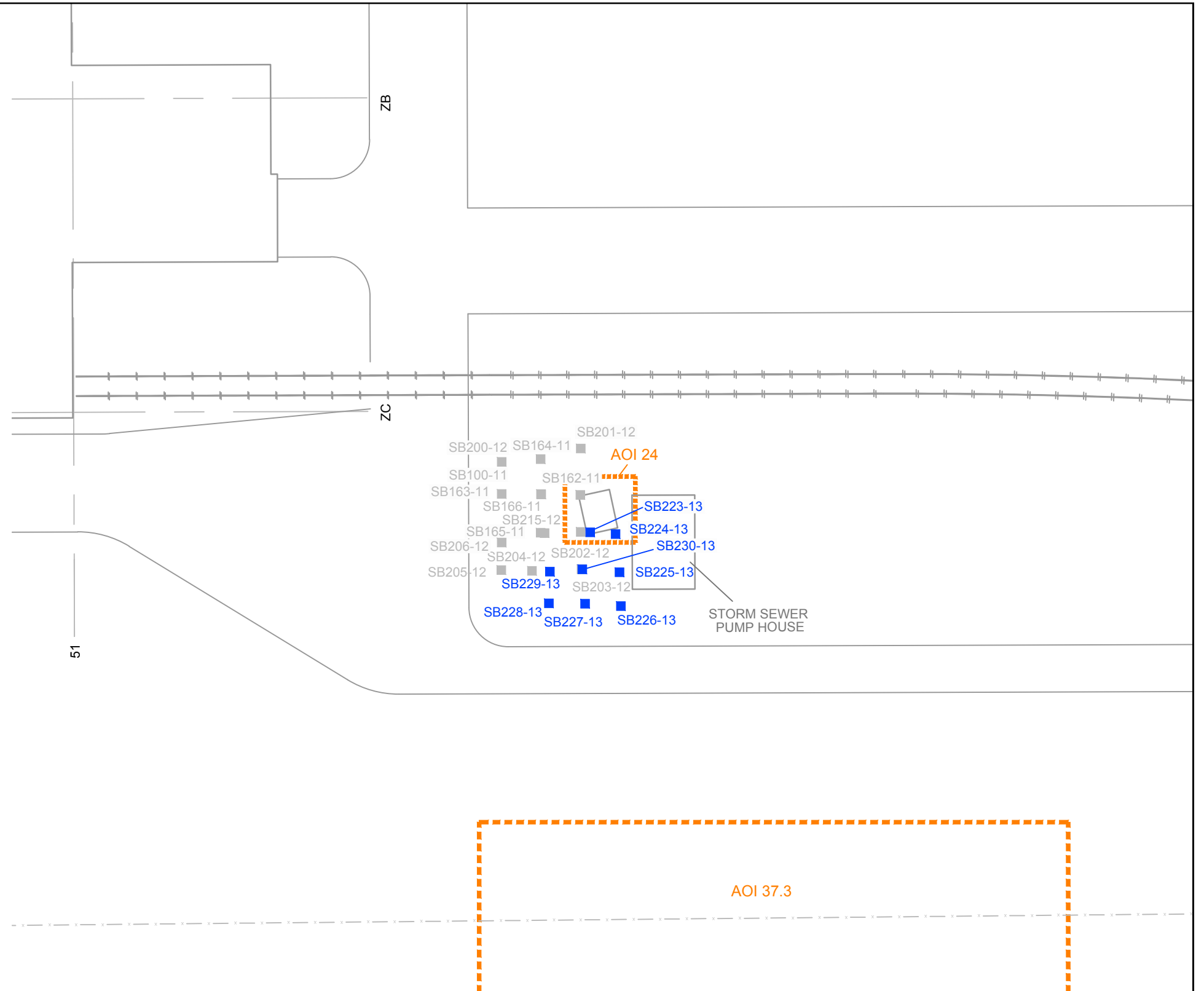
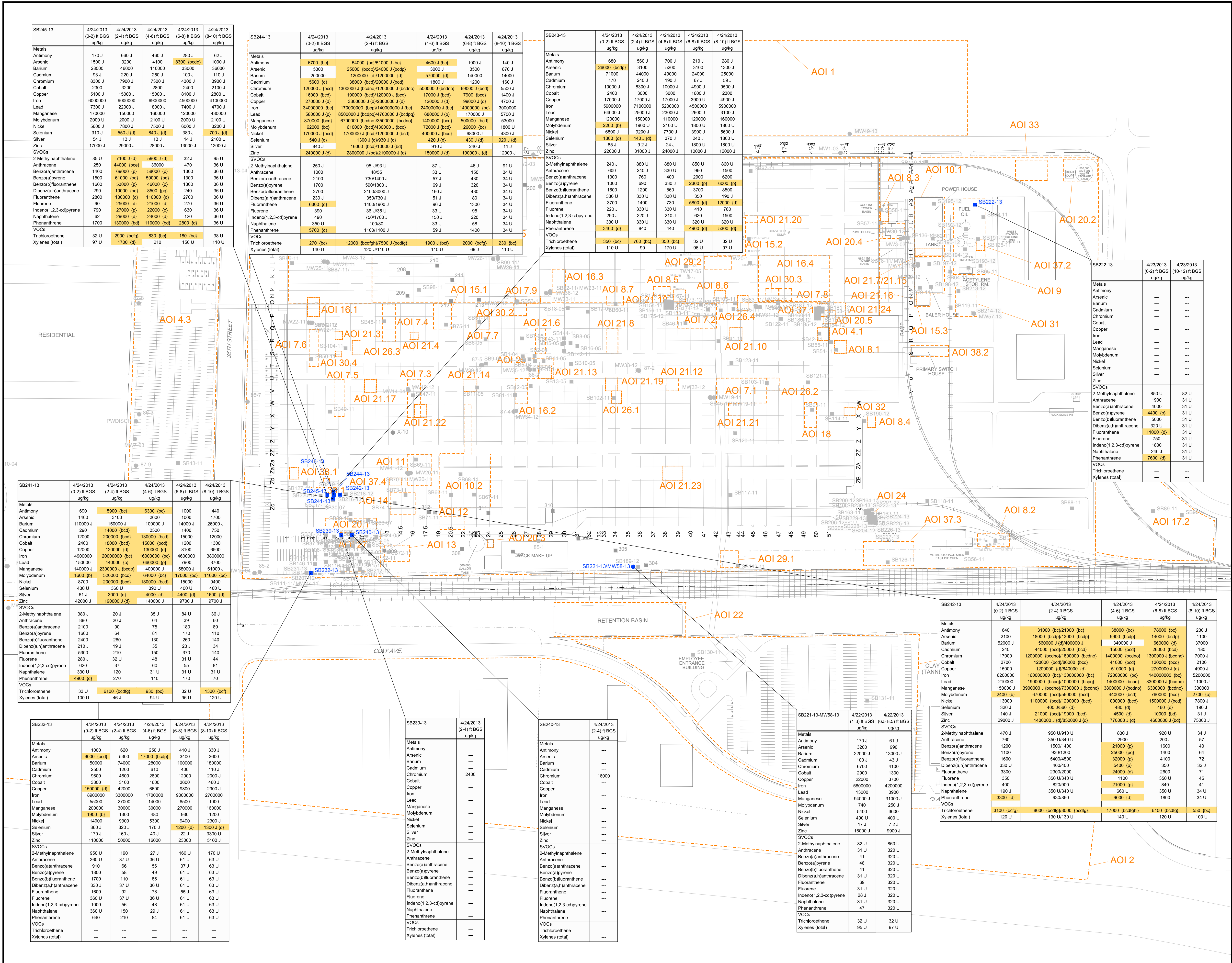


figure 2
SAMPLE LOCATIONS - FORMER TAR HOUSE
SITE-WIDE INVESTIGATION - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
Wyoming, Michigan



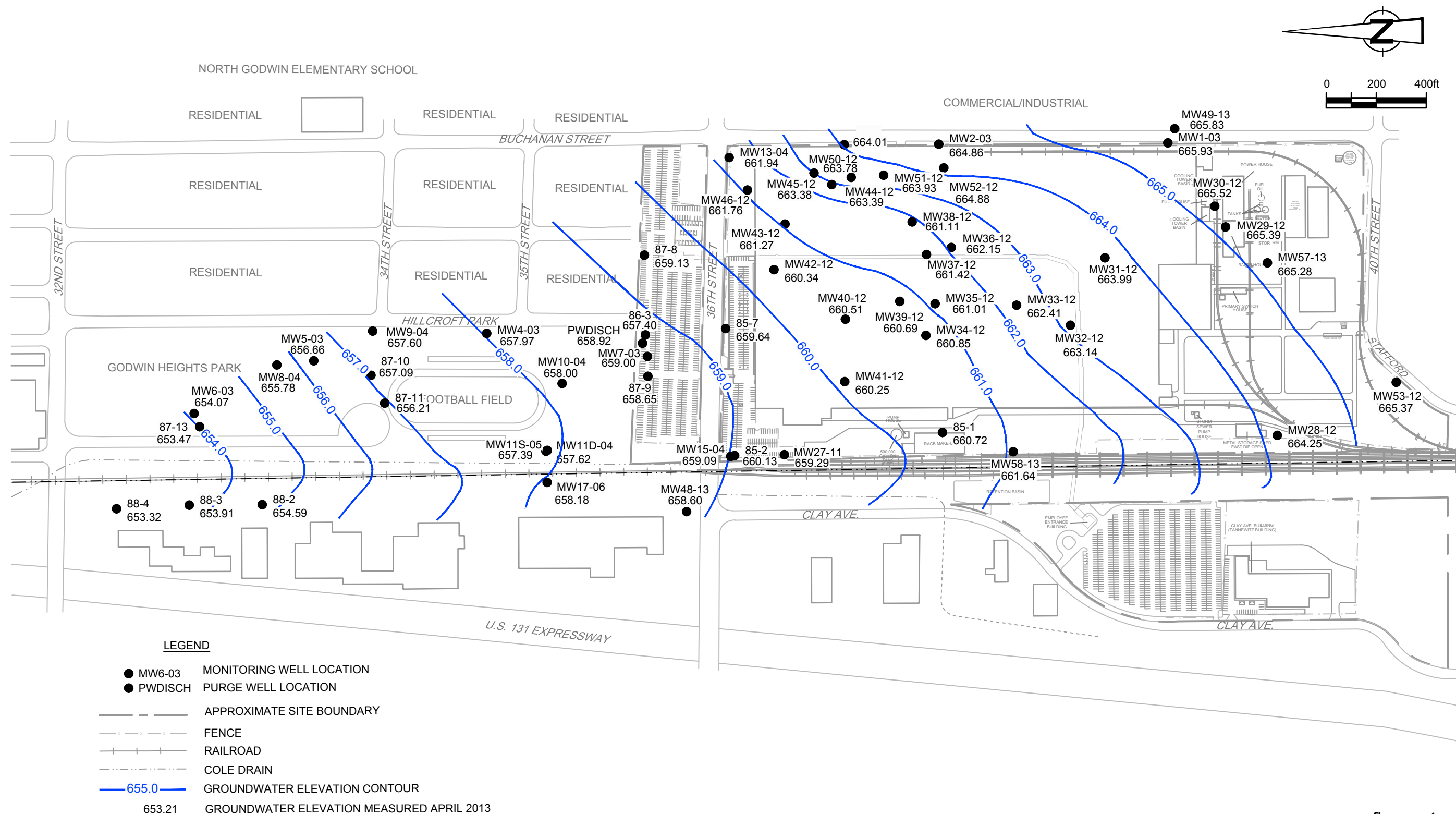
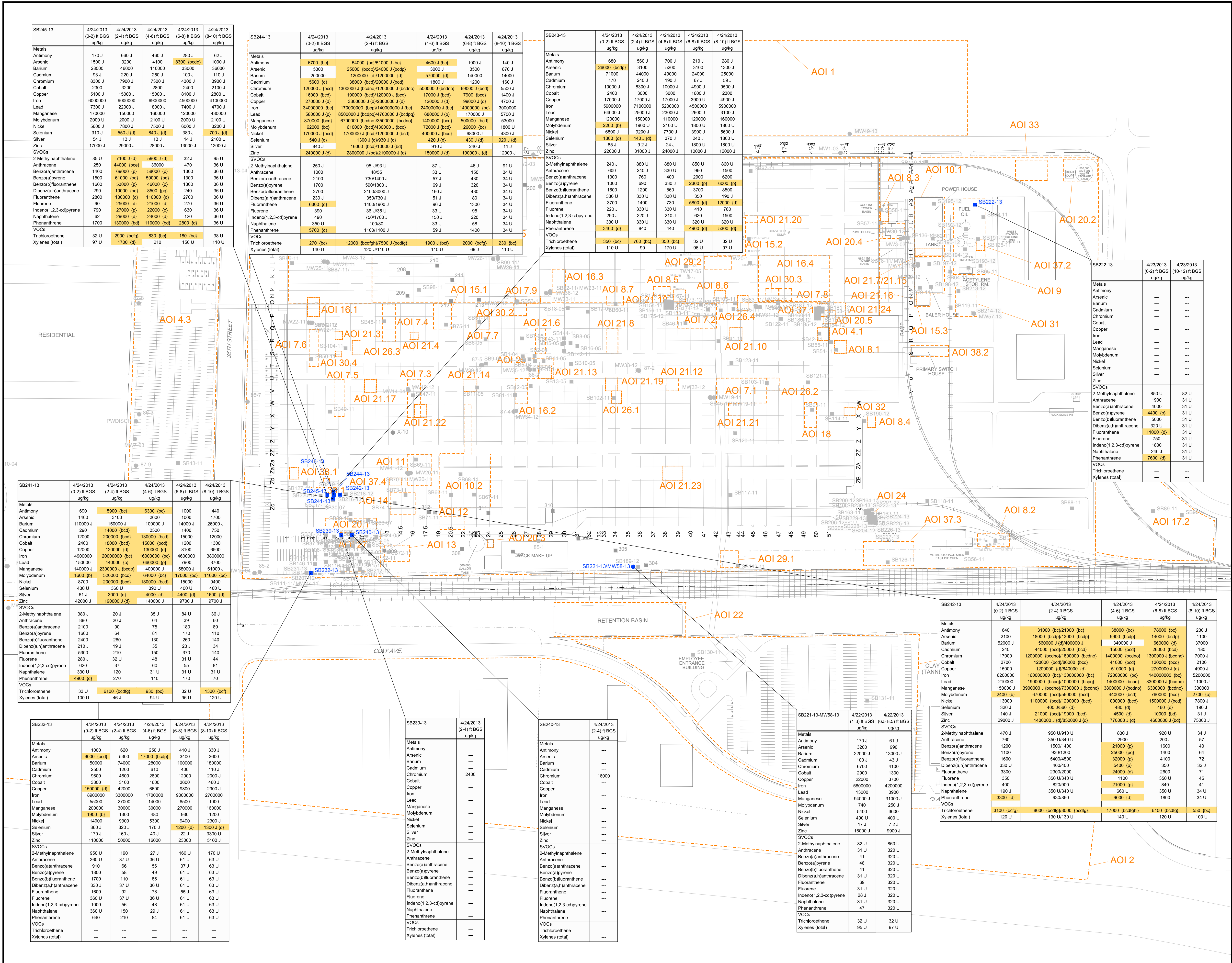
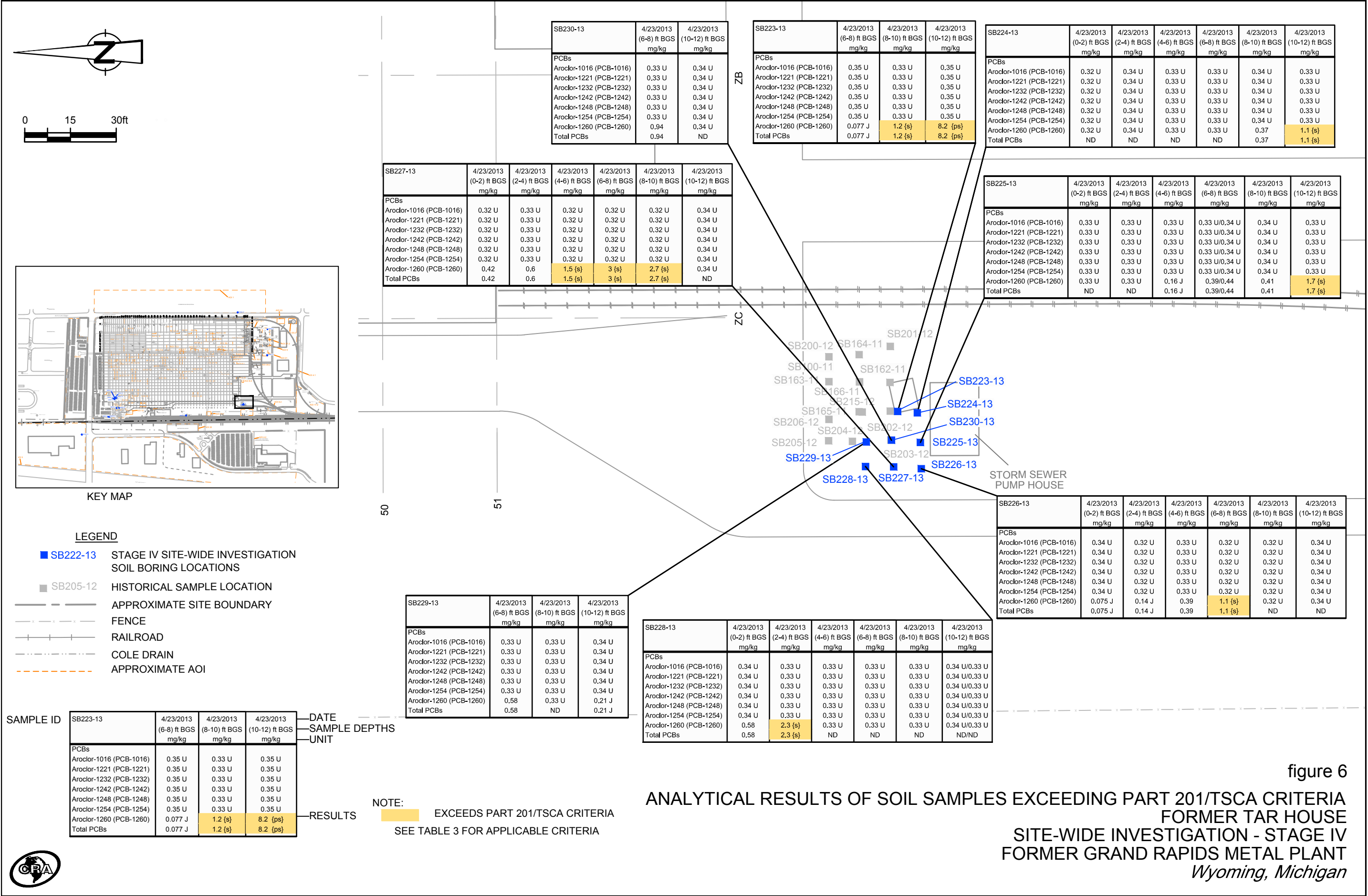


figure 4

GROUNDWATER CONTOURS - APRIL 2013
SITE-WIDE INVESTIGATION - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
Wyoming, Michigan







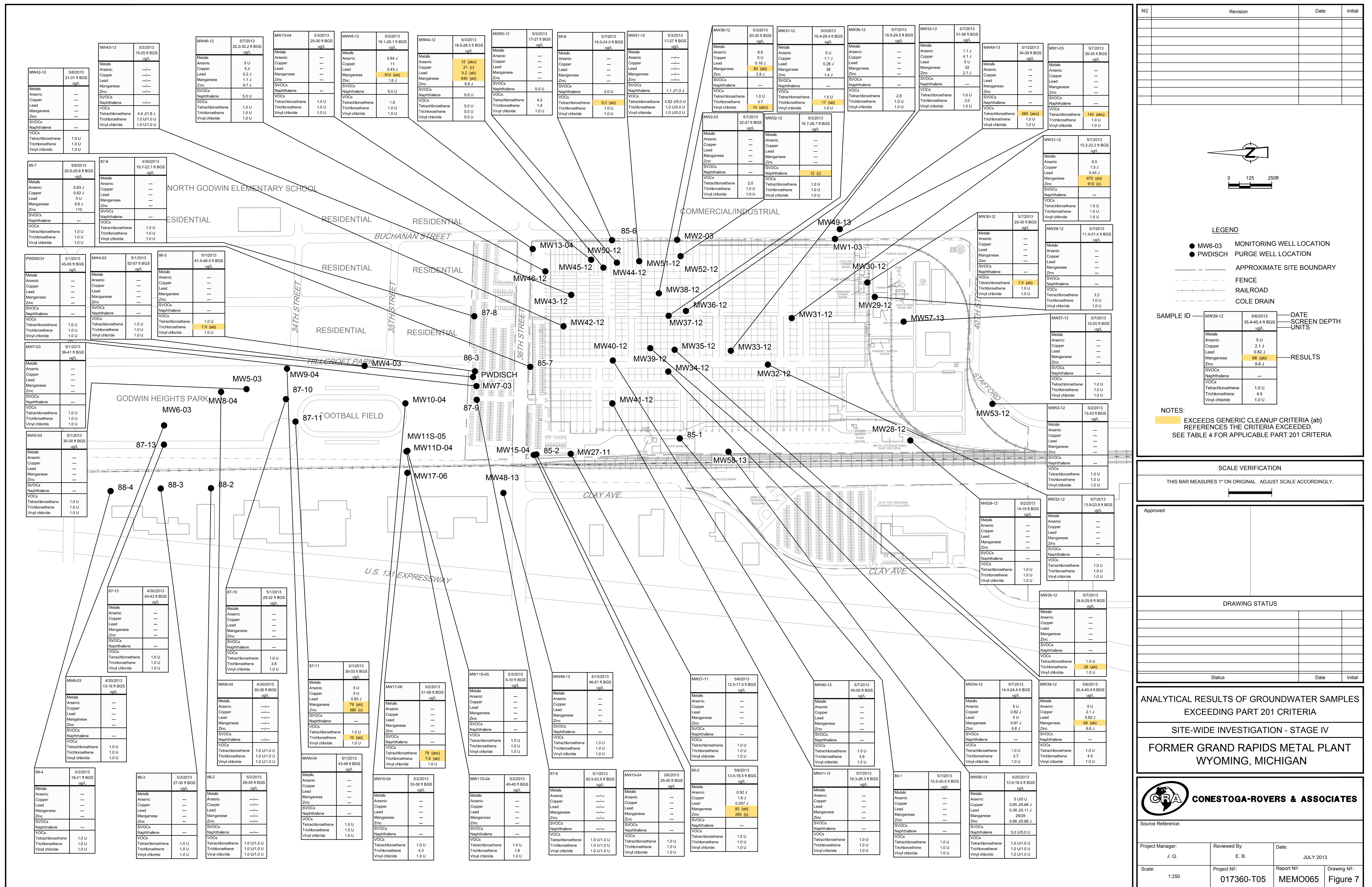


TABLE 1
SAMPLE SUMMARY
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

<u>Sample Date</u>	<u>Sample Identification</u>	<u>Sample Location</u>	<u>Matrix</u>	<u>Sample Depth</u> <u>(ft bgs)</u>	<u>QC Sample</u>	<u>Analysis</u>
4/22/2013	SO-17360-042213-DR-001	SB221-13/MW58-13	Soil	1 to 3		VOCs, PAHs, Metals
4/22/2013	SO-17360-042213-DR-002	SB221-13/MW58-13	Soil	6.5 to 8.5		VOCs, PAHs, Metals
4/23/2013	SO-17360-042313-DR-003	SB223-13	Soil	6 to 8		PCBs
4/23/2013	SO-17360-042313-DR-004	SB223-13	Soil	8 to 10		PCBs
4/23/2013	SO-17360-042313-DR-005	SB223-13	Soil	10 to 12		PCBs
4/23/2013	SO-17360-042313-DR-006	SB224-13	Soil	0 to 2		PCBs
4/23/2013	SO-17360-042313-DR-007	SB224-13	Soil	2 to 4		PCBs
4/23/2013	SO-17360-042313-DR-008	SB224-13	Soil	4 to 6		PCBs
4/23/2013	SO-17360-042313-DR-009	SB224-13	Soil	6 to 8		PCBs
4/23/2013	SO-17360-042313-DR-010	SB224-13	Soil	8 to 10		PCBs
4/23/2013	SO-17360-042313-DR-011	SB224-13	Soil	10 to 12		PCBs
4/23/2013	SO-17360-042313-DR-012	SB225-13	Soil	0 to 2		PCBs
4/23/2013	SO-17360-042313-DR-013	SB225-13	Soil	2 to 4		PCBs
4/23/2013	SO-17360-042313-DR-014	SB225-13	Soil	4 to 6		PCBs
4/23/2013	SO-17360-042313-DR-015	SB225-13	Soil	6 to 8		PCBs
4/23/2013	SO-17360-042313-DR-016	SB225-13	Soil	6 to 8	Duplicate	PCBs
4/23/2013	SO-17360-042313-DR-017	SB225-13	Soil	8 to 10		PCBs
4/23/2013	SO-17360-042313-DR-018	SB225-13	Soil	10 to 12		PCBs
4/23/2013	SO-17360-042313-DR-019	SB226-13	Soil	0 to 2		PCBs
4/23/2013	SO-17360-042313-DR-020	SB226-13	Soil	2 to 4		PCBs
4/23/2013	SO-17360-042313-DR-021	SB226-13	Soil	4 to 6		PCBs
4/23/2013	SO-17360-042313-DR-022	SB226-13	Soil	6 to 8		PCBs
4/23/2013	SO-17360-042313-DR-023	SB226-13	Soil	8 to 10		PCBs
4/23/2013	SO-17360-042313-DR-024	SB226-13	Soil	10 to 12		PCBs
4/23/2013	SO-17360-042313-DR-025	SB227-13	Soil	0 to 2	MS/MSD	PCBs
4/23/2013	SO-17360-042313-DR-026	SB227-13	Soil	2 to 4		PCBs
4/23/2013	SO-17360-042313-DR-027	SB227-13	Soil	4 to 6		PCBs
4/23/2013	SO-17360-042313-DR-028	SB227-13	Soil	6 to 8		PCBs
4/23/2013	SO-17360-042313-DR-029	SB227-13	Soil	8 to 10		PCBs
4/23/2013	SO-17360-042313-DR-030	SB227-13	Soil	10 to 12		PCBs
4/23/2013	SO-17360-042313-DR-031	SB228-13	Soil	0 to 2		PCBs
4/23/2013	SO-17360-042313-DR-032	SB228-13	Soil	2 to 4		PCBs
4/23/2013	SO-17360-042313-DR-033	SB228-13	Soil	4 to 6		PCBs
4/23/2013	SO-17360-042313-DR-034	SB228-13	Soil	6 to 8		PCBs
4/23/2013	SO-17360-042313-DR-035	SB228-13	Soil	8 to 10		PCBs
4/23/2013	SO-17360-042313-DR-036	SB228-13	Soil	10 to 12		PCBs
4/23/2013	SO-17360-042313-DR-037	SB228-13	Soil	10 to 12	Duplicate	PCBs
4/23/2013	SO-17360-042313-DR-038	SB229-13	Soil	6 to 8		PCBs
4/23/2013	SO-17360-042313-DR-039	SB229-13	Soil	8 to 10		PCBs
4/23/2013	SO-17360-042313-DR-040	SB229-13	Soil	10 to 12		PCBs
4/23/2013	SO-17360-042313-DR-041	SB230-13	Soil	6 to 8	MS/MSD	PCBs
4/23/2013	SO-17360-042313-DR-042	SB230-13	Soil	10 to 12		PCBs
4/23/2013	SO-17360-042313-DR-043	SB222-13	Soil	0 to 2		PAHs
4/23/2013	SO-17360-042313-DR-044	SB222-13	Soil	10 to 12		PAHs
4/24/2013	SO-17360-042413-DR-050	SB232-13	Soil	0 to 2		PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-051	SB232-13	Soil	2 to 4		PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-052	SB232-13	Soil	4 to 6		PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-053	SB232-13	Soil	6 to 8		PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-054	SB232-13	Soil	8 to 10		PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-055	SB239-13	Soil	2 to 4		Metals
4/24/2013	SO-17360-042413-DR-056	SB240-13	Soil	2 to 4		Metals
4/24/2013	SO-17360-042413-DR-057	SB241-13	Soil	0 to 2		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-058	SB241-13	Soil	2 to 4		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-059	SB241-13	Soil	4 to 6		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-060	SB241-13	Soil	6 to 8		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-061	SB241-13	Soil	8 to 10		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-062	SB242-13	Soil	0 to 2		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-063	SB242-13	Soil	2 to 4		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-064	SB242-13	Soil	2 to 4	Duplicate	VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-065	SB242-13	Soil	4 to 6		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-066	SB242-13	Soil	6 to 8		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-067	SB242-13	Soil	8 to 10		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-068	SB243-13	Soil	0 to 2		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-069	SB243-13	Soil	2 to 4		VOCs, PAHs, Metals, PCBs

TABLE 1
SAMPLE SUMMARY
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

<u>Sample Date</u>	<u>Sample Identification</u>	<u>Sample Location</u>	<u>Matrix</u>	<u>Sample Depth</u> <u>(ft bgs)</u>	<u>QC Sample</u>	<u>Analysis</u>
4/24/2013	SO-17360-042413-DR-070	SB243-13	Soil	4 to 6	MS/MSD	VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-071	SB243-13	Soil	6 to 8		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-072	SB243-13	Soil	8 to 10		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-073	SB244-13	Soil	0 to 2		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-074	SB244-13	Soil	2 to 4		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-075	SB244-13	Soil	2 to 4		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-076	SB244-13	Soil	4 to 6		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-077	SB244-13	Soil	6 to 8		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-078	SB244-13	Soil	8 to 10		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-079	SB245-13	Soil	0 to 2		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-080	SB245-13	Soil	2 to 4		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-081	SB245-13	Soil	4 to 6		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-082	SB245-13	Soil	6 to 8		VOCs, PAHs, Metals, PCBs
4/24/2013	SO-17360-042413-DR-083	SB245-13	Soil	8 to 10		VOCs, PAHs, Metals, PCBs
4/24/2013	Trip Blank	Trip Blank	--	-- to --	Trip Blank	VOCs
4/25/2013	GW-17360-042513-DR-084	MW57-13	Groundwater	10 to 20	MS/MSD	PAHs
4/25/2013	GW-17360-042513-DR-085	MW58-13	Groundwater	13.5 to 18.5		VOCs, PAHs, Metals
4/25/2013	GW-17360-042513-DR-086	MW58-13	Groundwater	13.5 to 18.5	Duplicate	VOCs, PAHs, Metals
4/25/2013	Trip Blank - GW	Trip Blank - GW	--	-- to --	Trip Blank	VOCs
4/30/2013	WG-17360-043013-MR-001	87-13	Groundwater	40 to 43		VOCs
4/30/2013	WG-17360-043013-MR-002	MW6-03	Groundwater	13 to 18		VOCs
4/30/2013	WG-17360-043013-MR-003	MW8-04	Groundwater	30 to 35		VOCs
4/30/2013	WG-17360-043013-MR-004	MW8-04	Groundwater	30 to 35	Duplicate	VOCs
4/30/2013	WG-17360-043013-MR-005	87-8	Groundwater	19.7 to 22.7		VOCs
5/1/2013	WG-17360-050113-MR-006	MW5-03	Groundwater	30 to 35		VOCs
5/1/2013	WG-17360-050113-MR-007	87-10	Groundwater	29 to 32		VOCs
5/1/2013	WG-17360-050113-MR-008	87-11	Groundwater	30 to 33		VOCs and Metals
5/1/2013	WS-17360-050113-MR-009	C-3	Surface Water	-- to --		VOCs
5/1/2013	WG-17360-050113-MR-010	MW9-04	Groundwater	43 to 48	MS/MSD	VOCs
5/1/2013	WG-17360-050113-MR-011	MW4-03	Groundwater	52 to 57		VOCs
5/1/2013	WS-17360-050113-MR-012	C-2	Surface Water	-- to --		VOCs
5/1/2013	WS-17360-050113-MR-013	C-1	Surface Water	-- to --		VOCs
5/1/2013	WG-17360-050113-MR-014	87-9	Groundwater	50.5 to 53.5		VOCs
5/1/2013	WG-17360-050113-MR-015	87-9	Groundwater	50.5 to 53.5	Duplicate	VOCs
5/1/2013	WG-17360-050113-MR-016	MW7-03	Groundwater	36 to 41		VOCs
5/1/2013	WG-17360-050113-MR-017	PWDISCH	Groundwater	45 to 55		VOCs
5/1/2013	WG-17360-050113-MR-018	86-3	Groundwater	41.5 to 46.5		VOCs
5/2/2013	WG-17360-050213-MR-019	MW10-04	Groundwater	33 to 38		VOCs
5/2/2013	WG-17360-050213-MR-020	MW11s-05	Groundwater	5 to 10	MS/MSD	VOCs
5/2/2013	WG-17360-050213-MR-021	MW11d-04	Groundwater	40 to 45		VOCs
5/2/2013	WG-17360-050213-MR-022	88-4	Groundwater	18 to 21		VOCs
5/2/2013	WG-17360-050213-MR-023	88-3	Groundwater	27 to 30		VOCs
5/2/2013	WG-17360-050213-MR-024	88-2	Groundwater	26 to 29		VOCs
5/2/2013	WG-17360-050213-MR-025	88-2	Groundwater	26 to 29	Duplicate	VOCs
5/2/2013	WG-17360-050213-MR-026	MW17-06	Groundwater	51 to 56		VOCs
5/2/2013	WG-17360-050213-MR-027	MW28-12	Groundwater	14 to 19		VOCs
5/2/2013	WG-17360-050213-MR-028	MW53-12	Groundwater	13 to 23		VOCs
5/3/2013	WG-17360-050313-MR-029	MW13-04	Groundwater	25 to 30		VOCs
5/3/2013	WG-17360-050313-MR-030	MW43-12	Groundwater	15 to 25		VOCs
5/3/2013	WG-17360-050313-MR-031	MW45-12	Groundwater	19.1 to 29.1		VOCs, SVOCs, and Metals
5/3/2013	WG-17360-050313-MR-032	MW44-12	Groundwater	18.5 to 28.5	MS/MSD	VOCs, SVOCs, and Metals
5/3/2013	WG-17360-050313-MR-033	MW43-12	Groundwater	15 to 25	Duplicate	VOCs
5/3/2013	WG-17360-050313-MR-034	MW50-12	Groundwater	17 to 27		VOCs and SVOCs
5/3/2013	WG-17360-050313-MR-035	MW38-12	Groundwater	20 to 30		VOCs and Metals
5/3/2013	WG-17360-050313-MR-036	MW37-12	Groundwater	19.4 to 29.4		VOCs and Metals
5/3/2013	WG-17360-050313-MR-037	MW51-12	Groundwater	17 to 27		VOCs and SVOCs
5/3/2013	WG-17360-050313-MR-038	MW51-12	Groundwater	17 to 27	Duplicate	VOCs and SVOCs
5/3/2013	WG-17360-050313-MR-039	MW52-12	Groundwater	16.7 to 26.7		VOCs and SVOCs
5/3/2013	TB-17360-050313-MR-040	Trip Blank	--	-- to --	Trip Blank	VOCs
5/3/2013	TB-17360-050313-MR-041	Trip Blank	--	-- to --	Trip Blank	VOCs
5/3/2013	TB-17360-050313-MR-042	Trip Blank	--	-- to --	Trip Blank	VOCs
5/6/2013	WG-17360-050613-EB-040	85-2	Groundwater	13.5 to 18.5		VOCs
5/6/2013	WG-17360-050613-EB-041	MW15-04	Groundwater	25 to 30		VOCs
5/6/2013	WG-17360-050613-EB-042	85-7	Groundwater	20.6 to 25.6		VOCs
5/6/2013	WG-17360-050613-EB-043	MW27-11	Groundwater	12.5 to 17.5		VOCs

TABLE 1
SAMPLE SUMMARY
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

<u>Sample Date</u>	<u>Sample Identification</u>	<u>Sample Location</u>	<u>Matrix</u>	<u>Sample Depth</u> <u>(ft bgs)</u>	<u>QC Sample</u>	<u>Analysis</u>
5/6/2013	WG-17360-050613-EB-044	MW42-12	Groundwater	21 to 31		VOCs
5/6/2013	WG-17360-050613-EB-045	MW39-12	Groundwater	35.4 to 40.4		VOCs and Metals
5/7/2013	WG-17360-050713-EB-046	MW40-12	Groundwater	45 to 50		VOCs
5/7/2013	WG-17360-050713-EB-047	MW41-12	Groundwater	18.3 to 28.3		VOCs
5/7/2013	GW-17360-050713-BW-048	MW57-13	Groundwater	10 to 20		VOCs
5/7/2013	GW-17360-050713-BW-049	MW29-12	Groundwater	11.4 to 21.4		VOCs
5/7/2013	GW-17360-050713-BW-050	MW30-12	Groundwater	25 to 30		VOCs
5/7/2013	WG-17360-050713-MR-051	MW34-12	Groundwater	14.4 to 24.4		VOCs and Metals
5/7/2013	WG-17360-050713-MR-052	MW35-12	Groundwater	24.6 to 29.6		VOCs
5/7/2013	GW-17360-050713-BW-053	85-6	Groundwater	19.5 to 24.5		VOCs and SVOCs
5/7/2013	GW-17360-050713-BW-054	MW2-03	Groundwater	22 to 27		VOCs
5/7/2013	GW-17360-050713-BW-055	MW1-03	Groundwater	30 to 35		VOCs
5/7/2013	WG-17360-050713-MR-056	MW32-12	Groundwater	13.9 to 23.9		VOCs
5/7/2013	WG-17360-050713-MR-057	MW33-12	Groundwater	31 to 36		VOCs and Metals
5/7/2013	WG-17360-050713-MR-060	MW36-12	Groundwater	19.5 to 29.5		VOCs
5/7/2013	WG-17360-050713-EB-058	85-1	Groundwater	15.5 to 20.5		VOCs
5/7/2013	WG-17360-050713-EB-059	MW31-12	Groundwater	12.2 to 22.2		VOCs and Metals
5/7/2013	WG-17360-050713-EB-061	MW46-12	Groundwater	20.2 to 30.2		VOCs, SVOCs, and Metals
5/7/2013	TB-17360-050713-EB-062	Trip Blank	--	-- to --	Trip Blank	VOCs
5/6/2013	GW-17360-050613-BW-001	VAS 48-13	Groundwater	16 to --		VOCs
5/6/2013	GW-17360-050613-BW-002	VAS 48-13	Groundwater	26 to --		VOCs
5/6/2013	GW-17360-050613-BW-003	VAS 48-13	Groundwater	36 to --		VOCs
5/6/2013	GW-17360-050613-BW-004	VAS 48-13	Groundwater	46 to --		VOCs
5/6/2013	GW-17360-050613-BW-005	VAS 48-13	Groundwater	51 to --		VOCs
5/8/2013	GW-17360-050813-BW-006	VAS 49-13	Groundwater	16 to --		VOCs
5/8/2013	GW-17360-050813-BW-007	VAS 49-13	Groundwater	26 to --		VOCs
5/8/2013	GW-17360-050813-BW-008	VAS 49-13	Groundwater	36 to --		VOCs
5/8/2013	GW-17360-050813-BW-010	VAS 49-13	Groundwater	39 to --		VOCs
5/8/2013	Trip Blank	Trip Blank	--	-- to --	Trip Blank	VOCs
5/13/2013	WG-17360-051313-EB-004	MW48-13	Groundwater	46 to 51		VOCs
5/13/2013	WG-17360-051313-EB-005	MW49-13	Groundwater	34 to 39		VOCs
5/13/2013	TB-17360-051313-EB	Trip Blank	--	-- to --		VOCs

Notes:

VOCs - Target Compound List Volatile Organic Compounds

SVOCs - Target Compound List Semi-Volatile Organic Compounds

PAHs - Polycyclic Aromatic Hydrocarbons

Metals - Antimony, Arsenic, Barium, Beryllium, Cadmium, total Chromium, Cobalt, Copper,
Lead, Manganese, Mercury, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc

PCBs - Polychlorinated Biphenyls

QC - Quality Control

MS/MSD - Matrix Spike /Matrix Spike Duplicate

**GROUNDWATER ELEVATION DATA
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

<u>Location</u>	<u>Groundwater Elevation</u> ^(1, 2)	<u>Depth Below Top of Riser</u>
85-1	660.72	14.31
85-2	660.13	11.50
85-6	664.01	15.58
85-7	659.64	18.20
86-3	658.91	16.89
87-8	659.13	17.65
87-9	658.65	14.48
87-10	657.09	10.67
87-11	656.21	10.04
87-13	653.47	10.10
88-2	654.59	11.21
88-3	653.91	10.45
88-4	653.32	7.88
MW1-03	665.93	12.75
MW2-03	664.86	15.74
MW4-03	657.97	21.15
MW5-03	656.66	19.16
MW6-03	654.07	11.32
MW7-03	659.34	15.45
MW8-04	655.78	18.54
MW9-04	657.60	20.69
MW10-04	658.00	8.29
MW11D-04	657.62	5.65
MW11S-05	657.39	6.19
MW13-04	661.94	16.32
MW15-04	659.09	12.60
MW17-06	658.18	6.53
MW27-11	659.29	12.02
MW28-12	664.25	12.29
MW29-12	665.39	10.30
MW30-12	665.52	11.14
MW31-12	663.99	11.43
MW32-12	663.14	12.63
MW33-12	662.41	16.30
MW34-12	660.85	13.73
MW35-12	661.01	16.05
MW36-12	662.15	17.84
MW37-12	661.42	18.88
MW38-12	661.11	19.40
MW39-12	660.69	18.49
MW40-12	660.51	20.75
MW41-12	660.25	17.62
MW42-12	660.34	20.60
MW43-12	661.27	14.45
MW44-12	663.39	16.10
MW45-12	663.38	15.45
MW46-12	661.76	18.49
MW48-13	658.60	12.50
MW49-13	665.83	12.95
MW50-12	663.78	16.33
MW51-12	663.93	16.51
MW52-12	664.88	14.81
MW53-12	665.37	11.87
MW57-13	665.28	12.20
MW58-13	661.62	13.59
PWDISCH	658.92	18.87

Notes:

⁽¹⁾ Groundwater elevations measured in feet above mean sea level.

⁽²⁾ Groundwater measurements collected 4/26/13, with the exception of MW48-13 and MW49-13, which were collected on 5/13/13.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Michigan Act 451, Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels: Residential and Non-Residential Generic Cleanup Criteria⁽¹⁾

		Statewide Default Background	Drinking Water Protection	Non-Residential Drinking Water Protection	Groundwater Surface Water Interface Protection ⁽²⁾	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
		a	b	c	d	e	f	g	h	i
Metals	Units									
Antimony	µg/kg	NA	4300	4300	94000	49000000	NLV	NLV	NLV	NLV
Arsenic	µg/kg	5800	4600	4600	4600	2000000	NLV	NLV	NLV	NLV
Barium	µg/kg	75000	1300000	1300000	440000	1000000000	NLV	NLV	NLV	NLV
Beryllium	µg/kg	NA	51000	51000	84000	1000000000	NLV	NLV	NLV	NLV
Cadmium	µg/kg	1200	6000	6000	3000	230000000	NLV	NLV	NLV	NLV
Chromium	µg/kg	18000	30000	30000	3300	140000000	NLV	NLV	NLV	NLV
Chromium III (trivalent)	µg/kg	18000	100000000	100000000	100000000	1000000000	NLV	NLV	NLV	NLV
Chromium VI (hexavalent)	µg/kg	NA	30000	30000	3300	140000000	NLV	NLV	NLV	NLV
Cobalt	µg/kg	6800	800	2000	2000	48000000	NLV	NLV	NLV	NLV
Copper	µg/kg	32000	580000	580000	75000	100000000	NLV	NLV	NLV	NLV
Iron	µg/kg	12000000	6000	6000	NA	1000000000	NLV	NLV	NLV	NLV
Lead	µg/kg	21000	700000	700000	2500000	ID	NLV	NLV	NLV	NLV
Lead - coarse fraction	µg/kg	21000	700000	700000	NA	ID	NLV	NLV	NLV	NLV
Lead - fine fraction	µg/kg	21000	700000	700000	NA	ID	NLV	NLV	NLV	NLV
Lead - total (calculated by fine/coarse fraction)	µg/kg	21000	700000	700000	NA	ID	NLV	NLV	NLV	NLV
Manganese	µg/kg	440000	1000	1000	26000	180000000	NLV	NLV	NLV	NLV
Mercury	µg/kg	130	1700	1700	50	47000	48000	89000	52000	62000
Molybdenum	µg/kg	NA	1500	4200	64000	19000000	NLV	NLV	NLV	NLV
Nickel	µg/kg	20000	100000	100000	76000	1000000000	NLV	NLV	NLV	NLV
Selenium	µg/kg	410	4000	4000	400	78000000	NLV	NLV	NLV	NLV
Silver	µg/kg	1000	4500	13000	100	200000000	NLV	NLV	NLV	NLV
Thallium	µg/kg	NA	2300	2300	4200	15000000	NLV	NLV	NLV	NLV
Vanadium	µg/kg	NA	72000	990000	430000	1000000000	NLV	NLV	NLV	NLV
Zinc	µg/kg	47000	2400000	5000000	170000	1000000000	NLV	NLV	NLV	NLV
Polychlorinated Biphenyls (PCBs)										
Aroclor-1016 (PCB-1016)	µg/kg	NA	NLL	NLL	NLL	NLL	3000000	16000000	240000	810000
Aroclor-1221 (PCB-1221)	µg/kg	NA	NLL	NLL	NLL	NLL	3000000	16000000	240000	810000
Aroclor-1232 (PCB-1232)	µg/kg	NA	NLL	NLL	NLL	NLL	3000000	16000000	240000	810000
Aroclor-1242 (PCB-1242)	µg/kg	NA	NLL	NLL	NLL	NLL	3000000	16000000	240000	810000
Aroclor-1248 (PCB-1248)	µg/kg	NA	NLL	NLL	NLL	NLL	3000000	16000000	240000	810000
Aroclor-1254 (PCB-1254)	µg/kg	NA	NLL	NLL	NLL	NLL	3000000	16000000	240000	810000
Aroclor-1260 (PCB-1260)	µg/kg	NA	NLL	NLL	NLL	NLL	3000000	16000000	240000	810000
Total PCBs	µg/kg	NA	NLL	NLL	NLL	NLL	3000000	16000000	240000	810000

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Michigan Act 451, Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels: Residential and Non-Residential Generic Cleanup Criteria⁽¹⁾

		Statewide Default Background	Drinking Water Protection	Non-Residential Drinking Water Protection	Groundwater Surface Water Interface Protection ⁽²⁾	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
		a	b	c	d	e	f	g	h	i
Polycyclic Aromatic Hydrocarbons (PAHs)										
2-Methylnaphthalene	µg/kg	NA	57000	170000	4200	5500000	2700000	4900000	1500000	1800000
Acenaphthene	µg/kg	NA	300000	880000	8700	970000	190000000	350000000	81000000	97000000
Acenaphthylene	µg/kg	NA	5900	17000	ID	440000	1600000	3000000	2200000	2700000
Anthracene	µg/kg	NA	41000	41000	ID	41000	1000000000	1000000000	1400000000	1600000000
Benzo(a)anthracene	µg/kg	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV
Benzo(a)pyrene	µg/kg	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV
Benzo(b)fluoranthene	µg/kg	NA	NLL	NLL	NLL	NLL	ID	ID	ID	ID
Benzo(g,h,i)perylene	µg/kg	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV
Benzo(k)fluoranthene	µg/kg	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV
Chrysene	µg/kg	NA	NLL	NLL	NLL	NLL	ID	ID	ID	ID
Dibenz(a,h)anthracene	µg/kg	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV
Fluoranthene	µg/kg	NA	730000	730000	5500	730000	1000000000	1000000000	740000000	890000000
Fluorene	µg/kg	NA	390000	890000	5300	890000	580000000	1000000000	1300000000	1500000000
Indeno(1,2,3-cd)pyrene	µg/kg	NA	NLL	NLL	NLL	NLL	NLV	NLV	NLV	NLV
Naphthalene	µg/kg	NA	35000	100000	730	2100000	250000	470000	300000	350000
Phenanthrene	µg/kg	NA	56000	160000	2100	1100000	2800000	5100000	160000	190000
Pyrene	µg/kg	NA	480000	480000	ID	480000	1000000000	1000000000	650000000	780000000
Volatile Organic Compounds (VOCs)										
1,1,1-Trichloroethane	µg/kg	NA	4000	4000	1800	460000	250000	460000	3800000	4500000
1,1,2,2-Tetrachloroethane	µg/kg	NA	170	700	1600	94000	4300	23000	10000	34000
1,1,2-Trichloroethane	µg/kg	NA	100	100	6600	420000	4600	24000	17000	57000
1,1-Dichloroethane	µg/kg	NA	18000	50000	15000	890000	230000	430000	2100000	2500000
1,1-Dichloroethene	µg/kg	NA	140	140	2600	220000	62	330	1100	3700
1,2,4-Trichlorobenzene	µg/kg	NA	4200	4200	5900	1100000	1100000	1100000	28000000	34000000
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	NA	10	10	ID	1200	220	1200	260	900
1,2-Dibromoethane ⁽⁴⁾	µg/kg	NA	20	20	110	500	670	3600	1700	5800
1,2-Dichlorobenzene	µg/kg	NA	14000	14000	280	210000	210000	210000	39000000	46000000
1,2-Dichloroethane	µg/kg	NA	100	100	7200	380000	2100	11000	6200	21000
1,2-Dichloropropane	µg/kg	NA	100	100	4600	320000	4000	7400	25000	30000
1,3-Dichlorobenzene	µg/kg	NA	170	480	680	51000	26000	48000	79000	94000
1,4-Dichlorobenzene	µg/kg	NA	1700	1700	360	140000	19000	100000	77000	260000
2-Butanone ⁽⁵⁾	µg/kg	NA	260000	760000	44000	27000000	27000000	27000000	29000000	35000000
2-Hexanone	µg/kg	NA	20000	58000	ID	2500000	990000	1800000	1100000	1300000
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	NA	36000	100000	ID	2700000	2700000	2700000	45000000	53000000
Acetone	µg/kg	NA	15000	42000	34000	110000000	110000000	110000000	130000000	160000000
Benzene	µg/kg	NA	100	100	4000	220000	1600	8400	13000	45000
Bromodichloromethane	µg/kg	NA	1600	1600	ID	280000	1200	6400	9100	31000
Bromoform	µg/kg	NA	1600	1600	ID	870000	150000	770000	900000	3100000
Bromomethane (Methyl bromide)	µg/kg	NA	200	580	700	1400000	860	1600	11000	13000
Carbon disulfide	µg/kg	NA	16000	46000	ID	280000	76000	140000	1300000	1600000

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Michigan Act 451, Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels: Residential and Non-Residential Generic Cleanup Criteria⁽¹⁾

	Statewide Default Background	Drinking Water Protection	Non-Residential Drinking Water Protection	Groundwater Surface Water Interface Protection ⁽²⁾	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
	a	b	c	d	e	f	g	h	i
<i>VOCs (continued)</i>									
Carbon tetrachloride	µg/kg	NA	100	900	92000	190	990	3500	12000
Chlorobenzene	µg/kg	NA	2000	500	260000	120000	220000	770000	920000
Chloroethane	µg/kg	NA	8600	22000	950000	950000	950000	30000000	36000000
Chloroform (Trichloromethane)	µg/kg	NA	1600	7000	1500000	7200	38000	45000	150000
Chloromethane (Methyl chloride)	µg/kg	NA	5200	ID	1100000	2300	10000	40000	120000
cis-1,2-Dichloroethene	µg/kg	NA	1400	12000	640000	22000	41000	180000	210000
cis-1,3-Dichloropropene	µg/kg	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	µg/kg	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	µg/kg	NA	1600	ID	360000	3900	21000	24000	80000
Dichlorodifluoromethane (CFC-12)	µg/kg	NA	95000	ID	1000000	900000	1700000	53000000	63000000
Ethylbenzene	µg/kg	NA	1500	360	140000	87000	140000	720000	2400000
Isopropyl benzene	µg/kg	NA	91000	3200	390000	390000	390000	1700000	2000000
Methyl acetate	µg/kg	NA	NA	NA	NA	NA	NA	NA	NA
Methyl cyclohexane	µg/kg	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert butyl ether (MTBE)	µg/kg	NA	800	140000	5900000	5900000	5900000	25000000	30000000
Methylene chloride	µg/kg	NA	100	30000	2300000	45000	240000	210000	700000
Styrene	µg/kg	NA	2700	2100	270000	250000	520000	970000	3300000
Tetrachloroethene	µg/kg	NA	100	1200	88000	11000	21000	170000	210000
Toluene	µg/kg	NA	16000	5400	250000	250000	250000	2800000	3300000
trans-1,2-Dichloroethene	µg/kg	NA	2000	30000	1400000	23000	43000	280000	330000
trans-1,3-Dichloropropene	µg/kg	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	µg/kg	NA	100	4000	440000	1000	1900	11000	14000
Trichlorofluoromethane (CFC-11)	µg/kg	NA	52000	150000	560000	560000	560000	92000000	110000000
Trifluorotrachloroethane (Freon 113)	µg/kg	NA	550000	1700	550000	550000	550000	180000000	210000000
Vinyl chloride	µg/kg	NA	40	260	20000	270	2800	4200	29000
Xylenes (total)	µg/kg	NA	5600	820	150000	150000	150000	46000000	54000000

Notes:

⁽¹⁾ Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 9/28/2012, pursuant to 1994 PA 451 as amended.

⁽²⁾ Carbonate Hardness of 344 mg/L was used to calculate Groundwater Surface Water Interface Protection Criteria

⁽³⁾ Toxic Substances Control Act (TSCA) Criterion for bulk PCB remediation waste in High Occupancy Areas (40 CFR 761.61(a)(4)(i))

⁽⁴⁾ 1,2-Dibromoethane also known as Ethylene dibromide

⁽⁵⁾ 2-Butanone also known as Methyl ethyl ketone (MEK)

⁽⁶⁾ 4-Methyl-2-pentanone also known as Methyl isobutyl ketone (MIBK)

U - Not present at or above the associated value.

J - Estimated concentration.

UJ - Estimated reporting limit.

ID - Insufficient data to develop criterion.

NA - A criterion or value is not available or, in the case of background numbers, not applicable.

NLL - Hazardous substance is not likely to leach under most soil conditions.

NLV - Hazardous substance is not likely to volatilize under most conditions.

-- Parameter was not analyzed.

 - Exceeds Generic Cleanup Criteria.

Superscript letter notes the criterion exceeded.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Michigan Act 451, Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels: Residential and Non-Residential Generic Cleanup Criteria ⁽¹⁾

		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	Toxic Substances Control Act ⁽³⁾
		j	k	l	m	n	o	p	q	r	s
Metals	Units										
Antimony	µg/kg	NLV	NLV	NLV	NLV	13000000	5900000	180000	670000	NA	NA
Arsenic	µg/kg	NLV	NLV	NLV	NLV	720000	910000	7600	37000	NA	NA
Barium	µg/kg	NLV	NLV	NLV	NLV	330000000	150000000	37000000	130000000	NA	NA
Beryllium	µg/kg	NLV	NLV	NLV	NLV	1300000	590000	410000	1600000	NA	NA
Cadmium	µg/kg	NLV	NLV	NLV	NLV	1700000	2200000	550000	2100000	NA	NA
Chromium	µg/kg	NLV	NLV	NLV	NLV	260000	240000	2500000	9200000	NA	NA
Chromium III (trivalent)	µg/kg	NLV	NLV	NLV	NLV	330000000	150000000	790000000	1000000000	NA	NA
Chromium VI (hexavalent)	µg/kg	NLV	NLV	NLV	NLV	260000	240000	2500000	9200000	NA	NA
Cobalt	µg/kg	NLV	NLV	NLV	NLV	13000000	5900000	2600000	9000000	NA	NA
Copper	µg/kg	NLV	NLV	NLV	NLV	130000000	59000000	20000000	73000000	NA	NA
Iron	µg/kg	NLV	NLV	NLV	NLV	ID	ID	160000000	580000000	NA	NA
Lead	µg/kg	NLV	NLV	NLV	NLV	100000000	44000000	400000	900000	NA	NA
Lead - coarse fraction	µg/kg	NLV	NLV	NLV	NLV	100000000	44000000	400000	900000	NA	NA
Lead - fine fraction	µg/kg	NLV	NLV	NLV	NLV	1000000000	440000000	400000	900000	NA	NA
Lead - total (calculated by fine/coarse fraction)	µg/kg	NLV	NLV	NLV	NLV	1000000000	440000000	400000	900000	NA	NA
Manganese	µg/kg	NLV	NLV	NLV	NLV	3300000	1500000	25000000	90000000	NA	NA
Mercury	µg/kg	52000	62000	52000	62000	20000000	8800000	160000	580000	NA	NA
Molybdenum	µg/kg	NLV	NLV	NLV	NLV	ID	ID	2600000	9600000	NA	NA
Nickel	µg/kg	NLV	NLV	NLV	NLV	13000000	16000000	40000000	150000000	NA	NA
Selenium	µg/kg	NLV	NLV	NLV	NLV	130000000	59000000	2600000	9600000	NA	NA
Silver	µg/kg	NLV	NLV	NLV	NLV	6700000	2900000	2500000	9000000	NA	NA
Thallium	µg/kg	NLV	NLV	NLV	NLV	130000000	5900000	35000	130000	NA	NA
Vanadium	µg/kg	NLV	NLV	NLV	NLV	ID	ID	750000	5500000	NA	NA
Zinc	µg/kg	NLV	NLV	NLV	NLV	ID	ID	170000000	630000000	NA	NA
Polychlorinated Biphenyls (PCBs)											
Aroclor-1016 (PCB-1016)	µg/kg	7900000	28000000	7900000	28000000	5200000	6500000	4000	16000	NA	1000
Aroclor-1221 (PCB-1221)	µg/kg	7900000	28000000	7900000	28000000	5200000	6500000	4000	16000	NA	1000
Aroclor-1232 (PCB-1232)	µg/kg	7900000	28000000	7900000	28000000	5200000	6500000	4000	16000	NA	1000
Aroclor-1242 (PCB-1242)	µg/kg	7900000	28000000	7900000	28000000	5200000	6500000	4000	16000	NA	1000
Aroclor-1248 (PCB-1248)	µg/kg	7900000	28000000	7900000	28000000	5200000	6500000	4000	16000	NA	1000
Aroclor-1254 (PCB-1254)	µg/kg	7900000	28000000	7900000	28000000	5200000	6500000	4000	16000	NA	1000
Aroclor-1260 (PCB-1260)	µg/kg	7900000	28000000	7900000	28000000	5200000	6500000	4000	16000	NA	1000
Total PCBs	µg/kg	7900000	28000000	7900000	28000000	5200000	6500000	4000	16000	NA	1000

TABLE 3

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SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI**

Michigan Act 451, Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels: Residential and Non-Residential Generic Cleanup Criteria ⁽¹⁾

	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	Toxic Substances Control Act ⁽³⁾
	j	k	l	m	n	o	p	q	r	s
Polycyclic Aromatic Hydrocarbons (PAHs)										
2-Methylnaphthalene	µg/kg	1500000	1800000	1500000	1800000	670000000	290000000	8100000	26000000	NA
Acenaphthene	µg/kg	81000000	97000000	81000000	97000000	14000000000	6200000000	41000000	130000000	NA
Acenaphthylene	µg/kg	2200000	2700000	2200000	2700000	2300000000	1000000000	1600000	5200000	NA
Anthracene	µg/kg	1400000000	1600000000	1400000000	1600000000	6700000000	2900000000	230000000	730000000	NA
Benzo(a)anthracene	µg/kg	NLV	NLV	NLV	NLV	ID	ID	2000	8000	NA
Benzo(a)pyrene	µg/kg	NLV	NLV	NLV	NLV	1500000	1900000	2000	8000	NA
Benzo(b)fluoranthene	µg/kg	ID	ID	ID	ID	ID	ID	20000	80000	NA
Benzo(g,h,i)perylene	µg/kg	NLV	NLV	NLV	NLV	800000000	350000000	2500000	7000000	NA
Benzo(k)fluoranthene	µg/kg	NLV	NLV	NLV	NLV	ID	ID	200000	800000	NA
Chrysene	µg/kg	ID	ID	ID	ID	ID	ID	2000000	8000000	NA
Dibenz(a,h)anthracene	µg/kg	NLV	NLV	NLV	NLV	ID	ID	2000	8000	NA
Fluoranthene	µg/kg	740000000	880000000	740000000	880000000	9300000000	4100000000	46000000	130000000	NA
Fluorene	µg/kg	130000000	150000000	130000000	150000000	9300000000	4100000000	27000000	87000000	NA
Indeno(1,2,3-cd)pyrene	µg/kg	NLV	NLV	NLV	NLV	ID	ID	20000	80000	NA
Naphthalene	µg/kg	300000	350000	300000	350000	200000000	88000000	16000000	52000000	NA
Phenanthrene	µg/kg	160000	190000	160000	190000	6700000	2900000	1600000	5200000	NA
Pyrene	µg/kg	650000000	780000000	650000000	780000000	6700000000	2900000000	29000000	84000000	NA
Volatile Organic Compounds (VOCs)										
1,1,1-Trichloroethane	µg/kg	12000000	15000000	28000000	31000000	67000000000	29000000000	460000	460000	NA
1,1,2,2-Tetrachloroethane	µg/kg	10000	34000	14000	34000	54000000	68000000	53000	240000	NA
1,1,2-Trichloroethane	µg/kg	21000	57000	44000	120000	190000000	250000000	180000	840000	NA
1,1-Dichloroethane	µg/kg	5900000	6000000	14000000	14000000	33000000000	15000000000	890000	890000	NA
1,1-Dichloroethene	µg/kg	5300	15000	13000	37000	62000000	78000000	200000	570000	NA
1,2,4-Trichlorobenzene	µg/kg	28000000	34000000	28000000	34000000	25000000000	11000000000	990000	1100000	NA
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	260	900	260	900	560000	700000	1200	1200	NA
1,2-Dibromoethane ⁽⁴⁾	µg/kg	1700	5800	3300	9800	14000000	18000000	92	430	NA
1,2-Dichlorobenzene	µg/kg	39000000	46000000	52000000	55000000	100000000000	44000000000	210000	210000	NA
1,2-Dichloroethane	µg/kg	11000	33000	26000	74000	120000000	150000000	91000	420000	NA
1,2-Dichloropropane	µg/kg	50000	51000	110000	120000	270000000	120000000	140000	550000	NA
1,3-Dichlorobenzene	µg/kg	79000	94000	110000	110000	200000000	88000000	170000	170000	NA
1,4-Dichlorobenzene	µg/kg	77000	260000	110000	340000	450000000	570000000	400000	1900000	NA
2-Butanone ⁽⁵⁾	µg/kg	29000000	35000000	35000000	36000000	67000000000	29000000000	27000000	27000000	NA
2-Hexanone	µg/kg	1100000	1300000	1400000	1500000	2700000000	1200000000	2500000	2500000	NA
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	45000000	53000000	67000000	70000000	140000000000	60000000000	2700000	2700000	NA
Acetone	µg/kg	130000000	160000000	190000000	200000000	390000000000	170000000000	23000000	73000000	NA
Benzene	µg/kg	34000	99000	79000	230000	380000000	470000000	180000	400000	NA
Bromodichloromethane	µg/kg	9700	31000	19000	57000	84000000	110000000	110000	490000	NA
Bromoform	µg/kg	900000	3100000	900000	3100000	28000000000	36000000000	820000	870000	NA
Bromomethane (Methyl bromide)	µg/kg	57000	57000	140000	140000	330000000	150000000	320000	1000000	NA
Carbon disulfide	µg/kg	7900000	8000000	19000000	19000000	47000000000	21000000000	280000	280000	NA

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FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI**

Michigan Act 451, Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels: Residential and Non-Residential Generic Cleanup Criteria ⁽¹⁾											
	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	Toxic Substances Control Act ⁽³⁾	
	j	k	l	m	n	o	p	q	r	s	
VOCs (continued)											
Carbon tetrachloride	µg/kg	12000	34000	28000	79000	130000000	170000000	96000	390000	390000	NA
Chlorobenzene	µg/kg	990000	1100000	2100000	2100000	4700000000	2100000000	260000	260000	260000	NA
Chloroethane	µg/kg	120000000	120000000	280000000	280000000	670000000000	290000000000	950000	950000	950000	NA
Chloroform (Trichloromethane)	µg/kg	120000	340000	270000	790000	1300000000	1600000000	1200000	1500000	1500000	NA
Chloromethane (Methyl chloride)	µg/kg	410000	1000000	1000000	2500000	4900000000	2600000000	1100000	1100000	1100000	NA
cis-1,2-Dichloroethene	µg/kg	420000	430000	990000	1000000	2300000000	1000000000	640000	640000	640000	NA
cis-1,3-Dichloropropene	µg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	µg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	µg/kg	24000	80000	33000	98000	130000000	160000000	110000	500000	610000	NA
Dichlorodifluoromethane (CFC-12)	µg/kg	550000000	550000000	1400000000	1400000000	3300000000000	1500000000000	1000000	1000000	1000000	NA
Ethylbenzene	µg/kg	1000000	3100000	2200000	6500000	10000000000	13000000000	140000	140000	140000	NA
Isopropyl benzene	µg/kg	1700000	2000000	2800000	3000000	5800000000	2600000000	390000	390000	390000	NA
Methyl acetate	µg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl cyclohexane	µg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert butyl ether (MTBE)	µg/kg	39000000	41000000	87000000	89000000	200000000000	88000000000	1500000	5900000	5900000	NA
Methylene chloride	µg/kg	590000	1700000	1400000	4000000	6600000000	8300000000	1300000	2300000	2300000	NA
Styrene	µg/kg	970000	3300000	1400000	4200000	5500000000	6900000000	400000	520000	520000	NA
Tetrachloroethene	µg/kg	480000	490000	1100000	1100000	2700000000	1200000000	88000	88000	88000	NA
Toluene	µg/kg	5100000	36000000	12000000	36000000	27000000000	12000000000	250000	250000	250000	NA
trans-1,2-Dichloroethene	µg/kg	830000	840000	2000000	2000000	4700000000	2100000000	1400000	1400000	1400000	NA
trans-1,3-Dichloropropene	µg/kg	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	µg/kg	25000	25000	57000	58000	130000000	59000000	500000	500000	500000	NA
Trichlorofluoromethane (CFC-11)	µg/kg	630000000	14000000000	1500000000	14000000000	3800000000000	1700000000000	560000	560000	560000	NA
Trifluorotrichloroethane (Freon 113)	µg/kg	880000000	890000000	2100000000	2100000000	5100000000000	2300000000000	550000	550000	550000	NA
Vinyl chloride	µg/kg	30000	170000	73000	420000	350000000	890000000	3800	34000	490000	NA
Xylenes (total)	µg/kg	61000000	65000000	130000000	130000000	2900000000000	1300000000000	150000	150000	150000	NA

Notes:

⁽¹⁾ Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 9/28/2012, pursuant to 1994 PA 451 as amended.

⁽²⁾ Carbonate Hardness of 344 mg/L was used to calculate Groundwater Surface Water Interface Protection Criteria

⁽³⁾ Toxic Substances Control Act (TSCA) Criterion for bulk PCB remediation waste in High Occupancy Areas (40 CFR 761.61(a)(4)(i))

⁽⁴⁾ 1,2-Dibromoethane also known as Ethylene dibromide

⁽⁵⁾ 2-Butanone also known as Methyl ethyl ketone (MEK)

⁽⁶⁾ 4-Methyl-2-pentanone also known as Methyl isobutyl ketone (MIBK)

U - Not present at or above the associated value.

J - Estimated concentration.

UJ - Estimated reporting limit.

ID - Insufficient data to develop criterion.

NA - A criterion or value is not available or, in the case of background numbers, not applicable.

NLL - Hazardous substance is not likely to leach under most soil conditions.

NLV - Hazardous substance is not likely to volatilize under most conditions.

-- Parameter was not analyzed.

 - Exceeds Generic Cleanup Criteria.

Superscript letter notes the criterion exceeded.

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB221-13/MW58-13	SB221-13/MW58-13	SB222-13	SB222-13	SB223-13	SB223-13
Sample Identification	SO-17360-042213-DR-001	SO-17360-042213-DR-002	SO-17360-042313-DR-043	SO-17360-042313-DR-044	SO-17360-042313-DR-003	SO-17360-042313-DR-004
Sample Date	4/22/2013	4/22/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(1-3) ft BGS	(6.5-8.5) ft BGS	(0-2) ft BGS	(10-12) ft BGS	(6-8) ft BGS	(8-10) ft BGS
Sample Type						

<i>Metals</i>	<i>Units</i>					
Antimony	µg/kg	170 J	61 J	-	-	-
Arsenic	µg/kg	3200	990	-	-	-
Barium	µg/kg	22000 J	13000 J	-	-	-
Beryllium	µg/kg	180	100 J	-	-	-
Cadmium	µg/kg	100 J	43 J	-	-	-
Chromium	µg/kg	6700	4100	-	-	-
Chromium III (trivalent)	µg/kg	-	-	-	-	-
Chromium VI (hexavalent)	µg/kg	-	-	-	-	-
Cobalt	µg/kg	2900	1300	-	-	-
Copper	µg/kg	22000	3700	-	-	-
Iron	µg/kg	5800000	4200000	-	-	-
Lead	µg/kg	13000	3900	-	-	-
Lead - coarse fraction	µg/kg	-	-	-	-	-
Lead - fine fraction	µg/kg	-	-	-	-	-
Lead - total (calculated by fine/coarse fraction)	µg/kg	-	-	-	-	-
Manganese	µg/kg	94000 J	31000 J	-	-	-
Mercury	µg/kg	14 J	8.5 J	-	-	-
Molybdenum	µg/kg	740	250 J	-	-	-
Nickel	µg/kg	5400	3600	-	-	-
Selenium	µg/kg	400 U	400 U	-	-	-
Silver	µg/kg	17 J	7.2 J	-	-	-
Thallium	µg/kg	400 U	400 U	-	-	-
Vanadium	µg/kg	7900	6800	-	-	-
Zinc	µg/kg	16000 J	9900 J	-	-	-
<i>Polychlorinated Biphenyls (PCBs)</i>						
Aroclor-1016 (PCB-1016)	µg/kg	-	-	-	350 U	330 U
Aroclor-1221 (PCB-1221)	µg/kg	-	-	-	350 U	330 U
Aroclor-1232 (PCB-1232)	µg/kg	-	-	-	350 U	330 U
Aroclor-1242 (PCB-1242)	µg/kg	-	-	-	350 U	330 U
Aroclor-1248 (PCB-1248)	µg/kg	-	-	-	350 U	330 U
Aroclor-1254 (PCB-1254)	µg/kg	-	-	-	350 U	330 U
Aroclor-1260 (PCB-1260)	µg/kg	-	-	-	77 J	1200*
Total PCBs	µg/kg	-	-	-	77 J	1200*

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SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI**

Sample Location	SB221-13/MW58-13	SB221-13/MW58-13	SB222-13	SB222-13	SB223-13	SB223-13
Sample Identification	SO-17360-042213-DR-001	SO-17360-042213-DR-002	SO-17360-042313-DR-043	SO-17360-042313-DR-044	SO-17360-042313-DR-003	SO-17360-042313-DR-004
Sample Date	4/22/2013	4/22/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(1-3) ft BGS	(6.5-8.5) ft BGS	(0-2) ft BGS	(10-12) ft BGS	(6-8) ft BGS	(8-10) ft BGS
Sample Type						

Polycyclic Aromatic Hydrocarbons (PAHs)

2-Methylnaphthalene	µg/kg	82 U	860 U	850 U	82 U	-	-
Acenaphthene	µg/kg	31 U	320 U	860	31 U	-	-
Acenaphthylene	µg/kg	31 U	320 U	320 U	31 U	-	-
Anthracene	µg/kg	31 U	320 U	1900	31 U	-	-
Benzo(a)anthracene	µg/kg	41	320 U	4000	31 U	-	-
Benzo(a)pyrene	µg/kg	48	320 U	4400 ^u	31 U	-	-
Benzo(b)fluoranthene	µg/kg	41	320 U	5000	31 U	-	-
Benzo(g,h,i)perylene	µg/kg	34	320 U	2000	31 U	-	-
Benzo(k)fluoranthene	µg/kg	49	320 U	2700	31 U	-	-
Chrysene	µg/kg	48	320 U	4600	31 U	-	-
Dibenz(a,h)anthracene	µg/kg	31 U	320 U	320 U	31 U	-	-
Fluoranthene	µg/kg	69	320 U	11000 ^u	31 U	-	-
Fluorene	µg/kg	31 U	320 U	750	31 U	-	-
Indeno(1,2,3-cd)pyrene	µg/kg	28 J	320 U	1800	31 U	-	-
Naphthalene	µg/kg	31 U	320 U	240 J	31 U	-	-
Phenanthrene	µg/kg	47	320 U	7600 ^u	31 U	-	-
Pyrene	µg/kg	92	320 U	10000	31 U	-	-

Volatile Organic Compounds (VOCs)

1,1,1-Trichloroethane	µg/kg	32 U	32 U	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	32 U	32 U	-	-	-	-
1,1,2-Trichloroethane	µg/kg	32 U	32 U	-	-	-	-
1,1-Dichloroethane	µg/kg	32 U	32 U	-	-	-	-
1,1-Dichloroethene	µg/kg	32 U	32 U	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	32 U	32 U	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	32 U	32 U	-	-	-	-
1,2-Dibromoethane ⁽⁴⁾	µg/kg	32 U	32 U	-	-	-	-
1,2-Dichlorobenzene	µg/kg	32 U	32 U	-	-	-	-
1,2-Dichloroethane	µg/kg	32 U	32 U	-	-	-	-
1,2-Dichloropropane	µg/kg	32 U	32 U	-	-	-	-
1,3-Dichlorobenzene	µg/kg	32 U	32 U	-	-	-	-
1,4-Dichlorobenzene	µg/kg	32 U	32 U	-	-	-	-
2-Butanone ⁽⁵⁾	µg/kg	210 U	220 U	-	-	-	-
2-Hexanone	µg/kg	32 U	32 U	-	-	-	-
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	32 U	32 U	-	-	-	-
Acetone	µg/kg	110 U	110 U	-	-	-	-
Benzene	µg/kg	32 U	32 U	-	-	-	-
Bromodichloromethane	µg/kg	32 U	32 U	-	-	-	-
Bromoform	µg/kg	32 U	32 U	-	-	-	-
Bromomethane (Methyl bromide)	µg/kg	79 U	81 U	-	-	-	-
Carbon disulfide	µg/kg	32 U	32 U	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB221-13/MW58-13	SB221-13/MW58-13	SB222-13	SB222-13	SB223-13	SB223-13
Sample Identification	SO-17360-042213-DR-001	SO-17360-042213-DR-002	SO-17360-042313-DR-043	SO-17360-042313-DR-044	SO-17360-042313-DR-003	SO-17360-042313-DR-004
Sample Date	4/22/2013	4/22/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(1-3) ft BGS	(6.5-8.5) ft BGS	(0-2) ft BGS	(10-12) ft BGS	(6-8) ft BGS	(8-10) ft BGS
Sample Type						

VOCs (continued)

Carbon tetrachloride	µg/kg	32 U	32 U	-	-	-
Chlorobenzene	µg/kg	32 U	32 U	-	-	-
Chloroethane	µg/kg	110 U	110 U	-	-	-
Chloroform (Trichloromethane)	µg/kg	32 U	32 U	-	-	-
Chloromethane (Methyl chloride)	µg/kg	110 U	110 U	-	-	-
cis-1,2-Dichloroethene	µg/kg	32 U	32 U	-	-	-
cis-1,3-Dichloropropene	µg/kg	32 U	32 U	-	-	-
Cyclohexane	µg/kg	32 U	32 U	-	-	-
Dibromochloromethane	µg/kg	32 U	32 U	-	-	-
Dichlorodifluoromethane (CFC-12)	µg/kg	32 U	32 U	-	-	-
Ethylbenzene	µg/kg	32 U	32 U	-	-	-
Isopropyl benzene	µg/kg	32 U	32 U	-	-	-
Methyl acetate	µg/kg	210 U	220 U	-	-	-
Methyl cyclohexane	µg/kg	32 U	32 U	-	-	-
Methyl tert butyl ether (MTBE)	µg/kg	32 U	32 U	-	-	-
Methylene chloride	µg/kg	32 U	32 U	-	-	-
Styrene	µg/kg	32 U	32 U	-	-	-
Tetrachloroethene	µg/kg	32 U	32 U	-	-	-
Toluene	µg/kg	32 U	19 J	-	-	-
trans-1,2-Dichloroethene	µg/kg	32 U	32 U	-	-	-
trans-1,3-Dichloropropene	µg/kg	32 U	32 U	-	-	-
Trichloroethene	µg/kg	32 U	32 U	-	-	-
Trichlorofluoromethane (CFC-11)	µg/kg	32 U	32 U	-	-	-
Trifluorotrichloroethane (Freon 113)	µg/kg	32 U	32 U	-	-	-
Vinyl chloride	µg/kg	32 U	32 U	-	-	-
Xylenes (total)	µg/kg	95 U	97 U	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB223-13	SB224-13	SB224-13	SB224-13	SB224-13	SB224-13	SB224-13	SB224-13
Sample Identification	SO-17360-042313-DR-005	SO-17360-042313-DR-006	SO-17360-042313-DR-007	SO-17360-042313-DR-008	SO-17360-042313-DR-009	SO-17360-042313-DR-010	SO-17360-042313-DR-011	SO-17360-042313-DR-011
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(10-12) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS	(10-12) ft BGS
Sample Type								
<i>Metals</i>	<i>Units</i>							
Antimony	µg/kg	-	-	-	-	-	-	-
Arsenic	µg/kg	-	-	-	-	-	-	-
Barium	µg/kg	-	-	-	-	-	-	-
Beryllium	µg/kg	-	-	-	-	-	-	-
Cadmium	µg/kg	-	-	-	-	-	-	-
Chromium	µg/kg	-	-	-	-	-	-	-
Chromium III (trivalent)	µg/kg	-	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/kg	-	-	-	-	-	-	-
Cobalt	µg/kg	-	-	-	-	-	-	-
Copper	µg/kg	-	-	-	-	-	-	-
Iron	µg/kg	-	-	-	-	-	-	-
Lead	µg/kg	-	-	-	-	-	-	-
Lead - coarse fraction	µg/kg	-	-	-	-	-	-	-
Lead - fine fraction	µg/kg	-	-	-	-	-	-	-
Lead - total (calculated by fine/coarse fraction)	µg/kg	-	-	-	-	-	-	-
Manganese	µg/kg	-	-	-	-	-	-	-
Mercury	µg/kg	-	-	-	-	-	-	-
Molybdenum	µg/kg	-	-	-	-	-	-	-
Nickel	µg/kg	-	-	-	-	-	-	-
Selenium	µg/kg	-	-	-	-	-	-	-
Silver	µg/kg	-	-	-	-	-	-	-
Thallium	µg/kg	-	-	-	-	-	-	-
Vanadium	µg/kg	-	-	-	-	-	-	-
Zinc	µg/kg	-	-	-	-	-	-	-
<i>Polychlorinated Biphenyls (PCBs)</i>								
Aroclor-1016 (PCB-1016)	µg/kg	350 U	320 U	340 U	330 U	330 U	340 U	330 U
Aroclor-1221 (PCB-1221)	µg/kg	350 U	320 U	340 U	330 U	330 U	340 U	330 U
Aroclor-1232 (PCB-1232)	µg/kg	350 U	320 U	340 U	330 U	330 U	340 U	330 U
Aroclor-1242 (PCB-1242)	µg/kg	350 U	320 U	340 U	330 U	330 U	340 U	330 U
Aroclor-1248 (PCB-1248)	µg/kg	350 U	320 U	340 U	330 U	330 U	340 U	330 U
Aroclor-1254 (PCB-1254)	µg/kg	350 U	320 U	340 U	330 U	330 U	340 U	330 U
Aroclor-1260 (PCB-1260)	µg/kg	8200 ^{PS}	320 U	340 U	330 U	330 U	370	1100 ^S
Total PCBs	µg/kg	8200 ^{PS}	ND	ND	ND	ND	370	1100 ^S

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB223-13	SB224-13	SB224-13	SB224-13	SB224-13	SB224-13	SB224-13
Sample Identification	SO-17360-042313-DR-005	SO-17360-042313-DR-006	SO-17360-042313-DR-007	SO-17360-042313-DR-008	SO-17360-042313-DR-009	SO-17360-042313-DR-010	SO-17360-042313-DR-011
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(10-12) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS
Sample Type							
<i>Polycyclic Aromatic Hydrocarbons (PAHs)</i>							
2-Methylnaphthalene	µg/kg	-	-	-	-	-	-
Acenaphthene	µg/kg	-	-	-	-	-	-
Acenaphthylene	µg/kg	-	-	-	-	-	-
Anthracene	µg/kg	-	-	-	-	-	-
Benzo(a)anthracene	µg/kg	-	-	-	-	-	-
Benzo(a)pyrene	µg/kg	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/kg	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/kg	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/kg	-	-	-	-	-	-
Chrysene	µg/kg	-	-	-	-	-	-
Dibenz(a,h)anthracene	µg/kg	-	-	-	-	-	-
Fluoranthene	µg/kg	-	-	-	-	-	-
Fluorene	µg/kg	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/kg	-	-	-	-	-	-
Naphthalene	µg/kg	-	-	-	-	-	-
Phenanthrene	µg/kg	-	-	-	-	-	-
Pyrene	µg/kg	-	-	-	-	-	-
<i>Volatile Organic Compounds (VOCs)</i>							
1,1,1-Trichloroethane	µg/kg	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	-	-	-	-	-	-
1,1-Dichloroethane	µg/kg	-	-	-	-	-	-
1,1-Dichloroethene	µg/kg	-	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	-	-	-	-	-	-
1,2-Dibromoethane ⁽⁴⁾	µg/kg	-	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	-	-	-	-	-	-
1,2-Dichloroethane	µg/kg	-	-	-	-	-	-
1,2-Dichloropropane	µg/kg	-	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	-	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	-	-	-	-	-	-
2-Butanone ⁽⁵⁾	µg/kg	-	-	-	-	-	-
2-Hexanone	µg/kg	-	-	-	-	-	-
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	-	-	-	-	-	-
Acetone	µg/kg	-	-	-	-	-	-
Benzene	µg/kg	-	-	-	-	-	-
Bromodichloromethane	µg/kg	-	-	-	-	-	-
Bromoform	µg/kg	-	-	-	-	-	-
Bromomethane (Methyl bromide)	µg/kg	-	-	-	-	-	-
Carbon disulfide	µg/kg	-	-	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB223-13	SB224-13	SB224-13	SB224-13	SB224-13	SB224-13	SB224-13
Sample Identification	SO-17360-042313-DR-005	SO-17360-042313-DR-006	SO-17360-042313-DR-007	SO-17360-042313-DR-008	SO-17360-042313-DR-009	SO-17360-042313-DR-010	SO-17360-042313-DR-011
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(10-12) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS
Sample Type							
<i>VOCs (continued)</i>							
Carbon tetrachloride	µg/kg	-	-	-	-	-	-
Chlorobenzene	µg/kg	-	-	-	-	-	-
Chloroethane	µg/kg	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/kg	-	-	-	-	-	-
Chloromethane (Methyl chloride)	µg/kg	-	-	-	-	-	-
cis-1,2-Dichloroethene	µg/kg	-	-	-	-	-	-
cis-1,3-Dichloropropene	µg/kg	-	-	-	-	-	-
Cyclohexane	µg/kg	-	-	-	-	-	-
Dibromochloromethane	µg/kg	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	µg/kg	-	-	-	-	-	-
Ethylbenzene	µg/kg	-	-	-	-	-	-
Isopropyl benzene	µg/kg	-	-	-	-	-	-
Methyl acetate	µg/kg	-	-	-	-	-	-
Methyl cyclohexane	µg/kg	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	µg/kg	-	-	-	-	-	-
Methylene chloride	µg/kg	-	-	-	-	-	-
Styrene	µg/kg	-	-	-	-	-	-
Tetrachloroethene	µg/kg	-	-	-	-	-	-
Toluene	µg/kg	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/kg	-	-	-	-	-	-
trans-1,3-Dichloropropene	µg/kg	-	-	-	-	-	-
Trichloroethene	µg/kg	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	µg/kg	-	-	-	-	-	-
Trifluorotrichloroethane (Freon 113)	µg/kg	-	-	-	-	-	-
Vinyl chloride	µg/kg	-	-	-	-	-	-
Xylenes (total)	µg/kg	-	-	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB225-13	SB225-13	SB225-13	SB225-13	SB225-13	SB225-13	SB225-13	SB225-13
Sample Identification	SO-17360-042313-DR-012	SO-17360-042313-DR-013	SO-17360-042313-DR-014	SO-17360-042313-DR-015	SO-17360-042313-DR-016	SO-17360-042313-DR-017	SO-17360-042313-DR-018	SO-17360-042313-DR-018
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(8-10) ft BGS	(10-12) ft BGS
Sample Type					Duplicate			
<i>Metals</i>	<i>Units</i>							
Antimony	µg/kg	-	-	-	-	-	-	-
Arsenic	µg/kg	-	-	-	-	-	-	-
Barium	µg/kg	-	-	-	-	-	-	-
Beryllium	µg/kg	-	-	-	-	-	-	-
Cadmium	µg/kg	-	-	-	-	-	-	-
Chromium	µg/kg	-	-	-	-	-	-	-
Chromium III (trivalent)	µg/kg	-	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/kg	-	-	-	-	-	-	-
Cobalt	µg/kg	-	-	-	-	-	-	-
Copper	µg/kg	-	-	-	-	-	-	-
Iron	µg/kg	-	-	-	-	-	-	-
Lead	µg/kg	-	-	-	-	-	-	-
Lead - coarse fraction	µg/kg	-	-	-	-	-	-	-
Lead - fine fraction	µg/kg	-	-	-	-	-	-	-
Lead - total (calculated by fine/coarse fraction)	µg/kg	-	-	-	-	-	-	-
Manganese	µg/kg	-	-	-	-	-	-	-
Mercury	µg/kg	-	-	-	-	-	-	-
Molybdenum	µg/kg	-	-	-	-	-	-	-
Nickel	µg/kg	-	-	-	-	-	-	-
Selenium	µg/kg	-	-	-	-	-	-	-
Silver	µg/kg	-	-	-	-	-	-	-
Thallium	µg/kg	-	-	-	-	-	-	-
Vanadium	µg/kg	-	-	-	-	-	-	-
Zinc	µg/kg	-	-	-	-	-	-	-
<i>Polychlorinated Biphenyls (PCBs)</i>								
Aroclor-1016 (PCB-1016)	µg/kg	330 U	330 U	330 U	330 U	340 U	340 U	330 U
Aroclor-1221 (PCB-1221)	µg/kg	330 U	330 U	330 U	330 U	340 U	340 U	330 U
Aroclor-1232 (PCB-1232)	µg/kg	330 U	330 U	330 U	330 U	340 U	340 U	330 U
Aroclor-1242 (PCB-1242)	µg/kg	330 U	330 U	330 U	330 U	340 U	340 U	330 U
Aroclor-1248 (PCB-1248)	µg/kg	330 U	330 U	330 U	330 U	340 U	340 U	330 U
Aroclor-1254 (PCB-1254)	µg/kg	330 U	330 U	330 U	330 U	340 U	340 U	330 U
Aroclor-1260 (PCB-1260)	µg/kg	330 U	330 U	160 J	390	440	410	1700 ^a
Total PCBs	µg/kg	ND	ND	160 J	390	440	410	1700 ^a

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB225-13	SB225-13	SB225-13	SB225-13	SB225-13	SB225-13	SB225-13
Sample Identification	SO-17360-042313-DR-012	SO-17360-042313-DR-013	SO-17360-042313-DR-014	SO-17360-042313-DR-015	SO-17360-042313-DR-016	SO-17360-042313-DR-017	SO-17360-042313-DR-018
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS
Sample Type					Duplicate		
<i>Polycyclic Aromatic Hydrocarbons (PAHs)</i>							
2-Methylnaphthalene	µg/kg	-	-	-	-	-	-
Acenaphthene	µg/kg	-	-	-	-	-	-
Acenaphthylene	µg/kg	-	-	-	-	-	-
Anthracene	µg/kg	-	-	-	-	-	-
Benzo(a)anthracene	µg/kg	-	-	-	-	-	-
Benzo(a)pyrene	µg/kg	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/kg	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/kg	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/kg	-	-	-	-	-	-
Chrysene	µg/kg	-	-	-	-	-	-
Dibenz(a,h)anthracene	µg/kg	-	-	-	-	-	-
Fluoranthene	µg/kg	-	-	-	-	-	-
Fluorene	µg/kg	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/kg	-	-	-	-	-	-
Naphthalene	µg/kg	-	-	-	-	-	-
Phenanthrene	µg/kg	-	-	-	-	-	-
Pyrene	µg/kg	-	-	-	-	-	-
<i>Volatile Organic Compounds (VOCs)</i>							
1,1,1-Trichloroethane	µg/kg	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	-	-	-	-	-	-
1,1-Dichloroethane	µg/kg	-	-	-	-	-	-
1,1-Dichloroethene	µg/kg	-	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	-	-	-	-	-	-
1,2-Dibromoethane ⁽⁴⁾	µg/kg	-	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	-	-	-	-	-	-
1,2-Dichloroethane	µg/kg	-	-	-	-	-	-
1,2-Dichloropropane	µg/kg	-	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	-	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	-	-	-	-	-	-
2-Butanone ⁽⁵⁾	µg/kg	-	-	-	-	-	-
2-Hexanone	µg/kg	-	-	-	-	-	-
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	-	-	-	-	-	-
Acetone	µg/kg	-	-	-	-	-	-
Benzene	µg/kg	-	-	-	-	-	-
Bromodichloromethane	µg/kg	-	-	-	-	-	-
Bromoform	µg/kg	-	-	-	-	-	-
Bromomethane (Methyl bromide)	µg/kg	-	-	-	-	-	-
Carbon disulfide	µg/kg	-	-	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB225-13	SB225-13	SB225-13	SB225-13	SB225-13	SB225-13	SB225-13
Sample Identification	SO-17360-042313-DR-012	SO-17360-042313-DR-013	SO-17360-042313-DR-014	SO-17360-042313-DR-015	SO-17360-042313-DR-016	SO-17360-042313-DR-017	SO-17360-042313-DR-018
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS
Sample Type					Duplicate		
<i>VOCs (continued)</i>							
Carbon tetrachloride	µg/kg	-	-	-	-	-	-
Chlorobenzene	µg/kg	-	-	-	-	-	-
Chloroethane	µg/kg	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/kg	-	-	-	-	-	-
Chloromethane (Methyl chloride)	µg/kg	-	-	-	-	-	-
cis-1,2-Dichloroethene	µg/kg	-	-	-	-	-	-
cis-1,3-Dichloropropene	µg/kg	-	-	-	-	-	-
Cyclohexane	µg/kg	-	-	-	-	-	-
Dibromochloromethane	µg/kg	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	µg/kg	-	-	-	-	-	-
Ethylbenzene	µg/kg	-	-	-	-	-	-
Isopropyl benzene	µg/kg	-	-	-	-	-	-
Methyl acetate	µg/kg	-	-	-	-	-	-
Methyl cyclohexane	µg/kg	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	µg/kg	-	-	-	-	-	-
Methylene chloride	µg/kg	-	-	-	-	-	-
Styrene	µg/kg	-	-	-	-	-	-
Tetrachloroethene	µg/kg	-	-	-	-	-	-
Toluene	µg/kg	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/kg	-	-	-	-	-	-
trans-1,3-Dichloropropene	µg/kg	-	-	-	-	-	-
Trichloroethene	µg/kg	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	µg/kg	-	-	-	-	-	-
Trifluorotrichloroethane (Freon 113)	µg/kg	-	-	-	-	-	-
Vinyl chloride	µg/kg	-	-	-	-	-	-
Xylenes (total)	µg/kg	-	-	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB226-13	SB226-13	SB226-13	SB226-13	SB226-13	SB226-13	SB227-13
Sample Identification	SO-17360-042313-DR-019	SO-17360-042313-DR-020	SO-17360-042313-DR-021	SO-17360-042313-DR-022	SO-17360-042313-DR-023	SO-17360-042313-DR-024	SO-17360-042313-DR-025
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS	(0-2) ft BGS
Sample Type							
<i>Metals</i>	<i>Units</i>						
Antimony	µg/kg	-	-	-	-	-	-
Arsenic	µg/kg	-	-	-	-	-	-
Barium	µg/kg	-	-	-	-	-	-
Beryllium	µg/kg	-	-	-	-	-	-
Cadmium	µg/kg	-	-	-	-	-	-
Chromium	µg/kg	-	-	-	-	-	-
Chromium III (trivalent)	µg/kg	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/kg	-	-	-	-	-	-
Cobalt	µg/kg	-	-	-	-	-	-
Copper	µg/kg	-	-	-	-	-	-
Iron	µg/kg	-	-	-	-	-	-
Lead	µg/kg	-	-	-	-	-	-
Lead - coarse fraction	µg/kg	-	-	-	-	-	-
Lead - fine fraction	µg/kg	-	-	-	-	-	-
Lead - total (calculated by fine/coarse fraction)	µg/kg	-	-	-	-	-	-
Manganese	µg/kg	-	-	-	-	-	-
Mercury	µg/kg	-	-	-	-	-	-
Molybdenum	µg/kg	-	-	-	-	-	-
Nickel	µg/kg	-	-	-	-	-	-
Selenium	µg/kg	-	-	-	-	-	-
Silver	µg/kg	-	-	-	-	-	-
Thallium	µg/kg	-	-	-	-	-	-
Vanadium	µg/kg	-	-	-	-	-	-
Zinc	µg/kg	-	-	-	-	-	-
<i>Polychlorinated Biphenyls (PCBs)</i>							
Aroclor-1016 (PCB-1016)	µg/kg	340 U	320 U	330 U	320 U	320 U	320 U
Aroclor-1221 (PCB-1221)	µg/kg	340 U	320 U	330 U	320 U	320 U	320 U
Aroclor-1232 (PCB-1232)	µg/kg	340 U	320 U	330 U	320 U	320 U	320 U
Aroclor-1242 (PCB-1242)	µg/kg	340 U	320 U	330 U	320 U	320 U	320 U
Aroclor-1248 (PCB-1248)	µg/kg	340 U	320 U	330 U	320 U	320 U	320 U
Aroclor-1254 (PCB-1254)	µg/kg	340 U	320 U	330 U	320 U	320 U	320 U
Aroclor-1260 (PCB-1260)	µg/kg	75 J	140 J	390	1100*	340 U	420
Total PCBs	µg/kg	75 J	140 J	390	1100*	ND	420

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB226-13	SB226-13	SB226-13	SB226-13	SB226-13	SB226-13	SB227-13
Sample Identification	SO-17360-042313-DR-019	SO-17360-042313-DR-020	SO-17360-042313-DR-021	SO-17360-042313-DR-022	SO-17360-042313-DR-023	SO-17360-042313-DR-024	SO-17360-042313-DR-025
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS	(0-2) ft BGS
Sample Type							
<i>Polycyclic Aromatic Hydrocarbons (PAHs)</i>							
2-Methylnaphthalene	µg/kg	-	-	-	-	-	-
Acenaphthene	µg/kg	-	-	-	-	-	-
Acenaphthylene	µg/kg	-	-	-	-	-	-
Anthracene	µg/kg	-	-	-	-	-	-
Benzo(a)anthracene	µg/kg	-	-	-	-	-	-
Benzo(a)pyrene	µg/kg	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/kg	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/kg	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/kg	-	-	-	-	-	-
Chrysene	µg/kg	-	-	-	-	-	-
Dibenz(a,h)anthracene	µg/kg	-	-	-	-	-	-
Fluoranthene	µg/kg	-	-	-	-	-	-
Fluorene	µg/kg	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/kg	-	-	-	-	-	-
Naphthalene	µg/kg	-	-	-	-	-	-
Phenanthrene	µg/kg	-	-	-	-	-	-
Pyrene	µg/kg	-	-	-	-	-	-
<i>Volatile Organic Compounds (VOCs)</i>							
1,1,1-Trichloroethane	µg/kg	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	-	-	-	-	-	-
1,1-Dichloroethane	µg/kg	-	-	-	-	-	-
1,1-Dichloroethene	µg/kg	-	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	-	-	-	-	-	-
1,2-Dibromoethane ⁽⁴⁾	µg/kg	-	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	-	-	-	-	-	-
1,2-Dichloroethane	µg/kg	-	-	-	-	-	-
1,2-Dichloropropane	µg/kg	-	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	-	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	-	-	-	-	-	-
2-Butanone ⁽⁵⁾	µg/kg	-	-	-	-	-	-
2-Hexanone	µg/kg	-	-	-	-	-	-
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	-	-	-	-	-	-
Acetone	µg/kg	-	-	-	-	-	-
Benzene	µg/kg	-	-	-	-	-	-
Bromodichloromethane	µg/kg	-	-	-	-	-	-
Bromoform	µg/kg	-	-	-	-	-	-
Bromomethane (Methyl bromide)	µg/kg	-	-	-	-	-	-
Carbon disulfide	µg/kg	-	-	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB226-13	SB226-13	SB226-13	SB226-13	SB226-13	SB226-13	SB227-13
Sample Identification	SO-17360-042313-DR-019	SO-17360-042313-DR-020	SO-17360-042313-DR-021	SO-17360-042313-DR-022	SO-17360-042313-DR-023	SO-17360-042313-DR-024	SO-17360-042313-DR-025
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS	(0-2) ft BGS
Sample Type							
<i>VOCs (continued)</i>							
Carbon tetrachloride	µg/kg	-	-	-	-	-	-
Chlorobenzene	µg/kg	-	-	-	-	-	-
Chloroethane	µg/kg	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/kg	-	-	-	-	-	-
Chloromethane (Methyl chloride)	µg/kg	-	-	-	-	-	-
cis-1,2-Dichloroethene	µg/kg	-	-	-	-	-	-
cis-1,3-Dichloropropene	µg/kg	-	-	-	-	-	-
Cyclohexane	µg/kg	-	-	-	-	-	-
Dibromochloromethane	µg/kg	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	µg/kg	-	-	-	-	-	-
Ethylbenzene	µg/kg	-	-	-	-	-	-
Isopropyl benzene	µg/kg	-	-	-	-	-	-
Methyl acetate	µg/kg	-	-	-	-	-	-
Methyl cyclohexane	µg/kg	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	µg/kg	-	-	-	-	-	-
Methylene chloride	µg/kg	-	-	-	-	-	-
Styrene	µg/kg	-	-	-	-	-	-
Tetrachloroethene	µg/kg	-	-	-	-	-	-
Toluene	µg/kg	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/kg	-	-	-	-	-	-
trans-1,3-Dichloropropene	µg/kg	-	-	-	-	-	-
Trichloroethene	µg/kg	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	µg/kg	-	-	-	-	-	-
Trifluorotrichloroethane (Freon 113)	µg/kg	-	-	-	-	-	-
Vinyl chloride	µg/kg	-	-	-	-	-	-
Xylenes (total)	µg/kg	-	-	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB227-13	SB227-13	SB227-13	SB227-13	SB227-13	SB227-13	SB228-13	SB228-13
Sample Identification	SO-17360-042313-DR-026	SO-17360-042313-DR-027	SO-17360-042313-DR-028	SO-17360-042313-DR-029	SO-17360-042313-DR-030	SO-17360-042313-DR-031	SO-17360-042313-DR-032	SO-17360-042313-DR-032
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(2-4) ft BGS
Sample Type								

<i>Metals</i>	<i>Units</i>							
Antimony	µg/kg	-	-	-	-	-	-	-
Arsenic	µg/kg	-	-	-	-	-	-	-
Barium	µg/kg	-	-	-	-	-	-	-
Beryllium	µg/kg	-	-	-	-	-	-	-
Cadmium	µg/kg	-	-	-	-	-	-	-
Chromium	µg/kg	-	-	-	-	-	-	-
Chromium III (trivalent)	µg/kg	-	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/kg	-	-	-	-	-	-	-
Cobalt	µg/kg	-	-	-	-	-	-	-
Copper	µg/kg	-	-	-	-	-	-	-
Iron	µg/kg	-	-	-	-	-	-	-
Lead	µg/kg	-	-	-	-	-	-	-
Lead - coarse fraction	µg/kg	-	-	-	-	-	-	-
Lead - fine fraction	µg/kg	-	-	-	-	-	-	-
Lead - total (calculated by fine/coarse fraction)	µg/kg	-	-	-	-	-	-	-
Manganese	µg/kg	-	-	-	-	-	-	-
Mercury	µg/kg	-	-	-	-	-	-	-
Molybdenum	µg/kg	-	-	-	-	-	-	-
Nickel	µg/kg	-	-	-	-	-	-	-
Selenium	µg/kg	-	-	-	-	-	-	-
Silver	µg/kg	-	-	-	-	-	-	-
Thallium	µg/kg	-	-	-	-	-	-	-
Vanadium	µg/kg	-	-	-	-	-	-	-
Zinc	µg/kg	-	-	-	-	-	-	-

Polychlorinated Biphenyls (PCBs)

Aroclor-1016 (PCB-1016)	µg/kg	330 U	320 U	320 U	320 U	340 U	340 U	330 U
Aroclor-1221 (PCB-1221)	µg/kg	330 U	320 U	320 U	320 U	340 U	340 U	330 U
Aroclor-1232 (PCB-1232)	µg/kg	330 U	320 U	320 U	320 U	340 U	340 U	330 U
Aroclor-1242 (PCB-1242)	µg/kg	330 U	320 U	320 U	320 U	340 U	340 U	330 U
Aroclor-1248 (PCB-1248)	µg/kg	330 U	320 U	320 U	320 U	340 U	340 U	330 U
Aroclor-1254 (PCB-1254)	µg/kg	330 U	320 U	320 U	320 U	340 U	340 U	330 U
Aroclor-1260 (PCB-1260)	µg/kg	600	1500*	3000*	2700*	340 U	580	2300
Total PCBs	µg/kg	600	1500*	3000*	2700*	ND	580	2300

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB227-13	SB227-13	SB227-13	SB227-13	SB227-13	SB227-13	SB228-13	SB228-13
Sample Identification	SO-17360-042313-DR-026	SO-17360-042313-DR-027	SO-17360-042313-DR-028	SO-17360-042313-DR-029	SO-17360-042313-DR-030	SO-17360-042313-DR-031	SO-17360-042313-DR-032	SO-17360-042313-DR-032
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(2-4) ft BGS
Sample Type								
<i>Polycyclic Aromatic Hydrocarbons (PAHs)</i>								
2-Methylnaphthalene	µg/kg	-	-	-	-	-	-	-
Acenaphthene	µg/kg	-	-	-	-	-	-	-
Acenaphthylene	µg/kg	-	-	-	-	-	-	-
Anthracene	µg/kg	-	-	-	-	-	-	-
Benzo(a)anthracene	µg/kg	-	-	-	-	-	-	-
Benzo(a)pyrene	µg/kg	-	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/kg	-	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/kg	-	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/kg	-	-	-	-	-	-	-
Chrysene	µg/kg	-	-	-	-	-	-	-
Dibenz(a,h)anthracene	µg/kg	-	-	-	-	-	-	-
Fluoranthene	µg/kg	-	-	-	-	-	-	-
Fluorene	µg/kg	-	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/kg	-	-	-	-	-	-	-
Naphthalene	µg/kg	-	-	-	-	-	-	-
Phenanthrene	µg/kg	-	-	-	-	-	-	-
Pyrene	µg/kg	-	-	-	-	-	-	-
<i>Volatile Organic Compounds (VOCs)</i>								
1,1,1-Trichloroethane	µg/kg	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	-	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	-	-	-	-	-	-	-
1,1-Dichloroethane	µg/kg	-	-	-	-	-	-	-
1,1-Dichloroethene	µg/kg	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	-	-	-	-	-	-	-
1,2-Dibromoethane ⁽⁴⁾	µg/kg	-	-	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	-	-	-	-	-	-	-
1,2-Dichloroethane	µg/kg	-	-	-	-	-	-	-
1,2-Dichloropropane	µg/kg	-	-	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	-	-	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	-	-	-	-	-	-	-
2-Butanone ⁽⁵⁾	µg/kg	-	-	-	-	-	-	-
2-Hexanone	µg/kg	-	-	-	-	-	-	-
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	-	-	-	-	-	-	-
Acetone	µg/kg	-	-	-	-	-	-	-
Benzene	µg/kg	-	-	-	-	-	-	-
Bromodichloromethane	µg/kg	-	-	-	-	-	-	-
Bromoform	µg/kg	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	µg/kg	-	-	-	-	-	-	-
Carbon disulfide	µg/kg	-	-	-	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB227-13	SB227-13	SB227-13	SB227-13	SB227-13	SB227-13	SB228-13	SB228-13
Sample Identification	SO-17360-042313-DR-026	SO-17360-042313-DR-027	SO-17360-042313-DR-028	SO-17360-042313-DR-029	SO-17360-042313-DR-030	SO-17360-042313-DR-031	SO-17360-042313-DR-032	SO-17360-042313-DR-032
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(2-4) ft BGS
Sample Type								
<i>VOCs (continued)</i>								
Carbon tetrachloride	µg/kg	-	-	-	-	-	-	-
Chlorobenzene	µg/kg	-	-	-	-	-	-	-
Chloroethane	µg/kg	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/kg	-	-	-	-	-	-	-
Chloromethane (Methyl chloride)	µg/kg	-	-	-	-	-	-	-
cis-1,2-Dichloroethene	µg/kg	-	-	-	-	-	-	-
cis-1,3-Dichloropropene	µg/kg	-	-	-	-	-	-	-
Cyclohexane	µg/kg	-	-	-	-	-	-	-
Dibromochloromethane	µg/kg	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	µg/kg	-	-	-	-	-	-	-
Ethylbenzene	µg/kg	-	-	-	-	-	-	-
Isopropyl benzene	µg/kg	-	-	-	-	-	-	-
Methyl acetate	µg/kg	-	-	-	-	-	-	-
Methyl cyclohexane	µg/kg	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	µg/kg	-	-	-	-	-	-	-
Methylene chloride	µg/kg	-	-	-	-	-	-	-
Styrene	µg/kg	-	-	-	-	-	-	-
Tetrachloroethene	µg/kg	-	-	-	-	-	-	-
Toluene	µg/kg	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/kg	-	-	-	-	-	-	-
trans-1,3-Dichloropropene	µg/kg	-	-	-	-	-	-	-
Trichloroethene	µg/kg	-	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	µg/kg	-	-	-	-	-	-	-
Trifluorotrichloroethane (Freon 113)	µg/kg	-	-	-	-	-	-	-
Vinyl chloride	µg/kg	-	-	-	-	-	-	-
Xylenes (total)	µg/kg	-	-	-	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB228-13	SB228-13	SB228-13	SB228-13	SB228-13	SB228-13	SB229-13	SB229-13
Sample Identification	SO-17360-042313-DR-033	SO-17360-042313-DR-034	SO-17360-042313-DR-035	SO-17360-042313-DR-036	SO-17360-042313-DR-037	SO-17360-042313-DR-038	SO-17360-042313-DR-039	SO-17360-042313-DR-039
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS	(10-12) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(8-10) ft BGS
Sample Type					Duplicate			
<i>Metals</i>	<i>Units</i>							
Antimony	µg/kg	-	-	-	-	-	-	-
Arsenic	µg/kg	-	-	-	-	-	-	-
Barium	µg/kg	-	-	-	-	-	-	-
Beryllium	µg/kg	-	-	-	-	-	-	-
Cadmium	µg/kg	-	-	-	-	-	-	-
Chromium	µg/kg	-	-	-	-	-	-	-
Chromium III (trivalent)	µg/kg	-	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/kg	-	-	-	-	-	-	-
Cobalt	µg/kg	-	-	-	-	-	-	-
Copper	µg/kg	-	-	-	-	-	-	-
Iron	µg/kg	-	-	-	-	-	-	-
Lead	µg/kg	-	-	-	-	-	-	-
Lead - coarse fraction	µg/kg	-	-	-	-	-	-	-
Lead - fine fraction	µg/kg	-	-	-	-	-	-	-
Lead - total (calculated by fine/coarse fraction)	µg/kg	-	-	-	-	-	-	-
Manganese	µg/kg	-	-	-	-	-	-	-
Mercury	µg/kg	-	-	-	-	-	-	-
Molybdenum	µg/kg	-	-	-	-	-	-	-
Nickel	µg/kg	-	-	-	-	-	-	-
Selenium	µg/kg	-	-	-	-	-	-	-
Silver	µg/kg	-	-	-	-	-	-	-
Thallium	µg/kg	-	-	-	-	-	-	-
Vanadium	µg/kg	-	-	-	-	-	-	-
Zinc	µg/kg	-	-	-	-	-	-	-
<i>Polychlorinated Biphenyls (PCBs)</i>								
Aroclor-1016 (PCB-1016)	µg/kg	330 U	330 U	330 U	340 U	330 U	330 U	330 U
Aroclor-1221 (PCB-1221)	µg/kg	330 U	330 U	330 U	340 U	330 U	330 U	330 U
Aroclor-1232 (PCB-1232)	µg/kg	330 U	330 U	330 U	340 U	330 U	330 U	330 U
Aroclor-1242 (PCB-1242)	µg/kg	330 U	330 U	330 U	340 U	330 U	330 U	330 U
Aroclor-1248 (PCB-1248)	µg/kg	330 U	330 U	330 U	340 U	330 U	330 U	330 U
Aroclor-1254 (PCB-1254)	µg/kg	330 U	330 U	330 U	340 U	330 U	330 U	330 U
Aroclor-1260 (PCB-1260)	µg/kg	330 U	330 U	330 U	340 U	330 U	580	330 U
Total PCBs	µg/kg	ND	ND	ND	ND	ND	580	ND

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB228-13	SB228-13	SB228-13	SB228-13	SB228-13	SB228-13	SB229-13
Sample Identification	SO-17360-042313-DR-033	SO-17360-042313-DR-034	SO-17360-042313-DR-035	SO-17360-042313-DR-036	SO-17360-042313-DR-037	SO-17360-042313-DR-038	SO-17360-042313-DR-039
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS	(10-12) ft BGS	(6-8) ft BGS	(8-10) ft BGS
Sample Type					Duplicate		
<i>Polycyclic Aromatic Hydrocarbons (PAHs)</i>							
2-Methylnaphthalene	µg/kg	-	-	-	-	-	-
Acenaphthene	µg/kg	-	-	-	-	-	-
Acenaphthylene	µg/kg	-	-	-	-	-	-
Anthracene	µg/kg	-	-	-	-	-	-
Benzo(a)anthracene	µg/kg	-	-	-	-	-	-
Benzo(a)pyrene	µg/kg	-	-	-	-	-	-
Benzo(b)fluoranthene	µg/kg	-	-	-	-	-	-
Benzo(g,h,i)perylene	µg/kg	-	-	-	-	-	-
Benzo(k)fluoranthene	µg/kg	-	-	-	-	-	-
Chrysene	µg/kg	-	-	-	-	-	-
Dibenz(a,h)anthracene	µg/kg	-	-	-	-	-	-
Fluoranthene	µg/kg	-	-	-	-	-	-
Fluorene	µg/kg	-	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/kg	-	-	-	-	-	-
Naphthalene	µg/kg	-	-	-	-	-	-
Phenanthrene	µg/kg	-	-	-	-	-	-
Pyrene	µg/kg	-	-	-	-	-	-
<i>Volatile Organic Compounds (VOCs)</i>							
1,1,1-Trichloroethane	µg/kg	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	-	-	-	-	-	-
1,1-Dichloroethane	µg/kg	-	-	-	-	-	-
1,1-Dichloroethene	µg/kg	-	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	-	-	-	-	-	-
1,2-Dibromoethane ⁽⁴⁾	µg/kg	-	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	-	-	-	-	-	-
1,2-Dichloroethane	µg/kg	-	-	-	-	-	-
1,2-Dichloropropane	µg/kg	-	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	-	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	-	-	-	-	-	-
2-Butanone ⁽⁵⁾	µg/kg	-	-	-	-	-	-
2-Hexanone	µg/kg	-	-	-	-	-	-
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	-	-	-	-	-	-
Acetone	µg/kg	-	-	-	-	-	-
Benzene	µg/kg	-	-	-	-	-	-
Bromodichloromethane	µg/kg	-	-	-	-	-	-
Bromoform	µg/kg	-	-	-	-	-	-
Bromomethane (Methyl bromide)	µg/kg	-	-	-	-	-	-
Carbon disulfide	µg/kg	-	-	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB228-13	SB228-13	SB228-13	SB228-13	SB228-13	SB229-13	SB229-13
Sample Identification	SO-17360-042313-DR-033	SO-17360-042313-DR-034	SO-17360-042313-DR-035	SO-17360-042313-DR-036	SO-17360-042313-DR-037	SO-17360-042313-DR-038	SO-17360-042313-DR-039
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013	4/23/2013
Sample Depth	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(10-12) ft BGS	(10-12) ft BGS	(6-8) ft BGS	(8-10) ft BGS
Sample Type					Duplicate		
<i>VOCs (continued)</i>							
Carbon tetrachloride	µg/kg	-	-	-	-	-	-
Chlorobenzene	µg/kg	-	-	-	-	-	-
Chloroethane	µg/kg	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/kg	-	-	-	-	-	-
Chloromethane (Methyl chloride)	µg/kg	-	-	-	-	-	-
cis-1,2-Dichloroethene	µg/kg	-	-	-	-	-	-
cis-1,3-Dichloropropene	µg/kg	-	-	-	-	-	-
Cyclohexane	µg/kg	-	-	-	-	-	-
Dibromochloromethane	µg/kg	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	µg/kg	-	-	-	-	-	-
Ethylbenzene	µg/kg	-	-	-	-	-	-
Isopropyl benzene	µg/kg	-	-	-	-	-	-
Methyl acetate	µg/kg	-	-	-	-	-	-
Methyl cyclohexane	µg/kg	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	µg/kg	-	-	-	-	-	-
Methylene chloride	µg/kg	-	-	-	-	-	-
Styrene	µg/kg	-	-	-	-	-	-
Tetrachloroethene	µg/kg	-	-	-	-	-	-
Toluene	µg/kg	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/kg	-	-	-	-	-	-
trans-1,3-Dichloropropene	µg/kg	-	-	-	-	-	-
Trichloroethene	µg/kg	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	µg/kg	-	-	-	-	-	-
Trifluorotrichloroethane (Freon 113)	µg/kg	-	-	-	-	-	-
Vinyl chloride	µg/kg	-	-	-	-	-	-
Xylenes (total)	µg/kg	-	-	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB229-13	SB230-13	SB230-13	SB232-13	SB232-13	SB232-13	SB232-13
Sample Identification	SO-17360-042313-DR-040	SO-17360-042313-DR-041	SO-17360-042313-DR-042	SO-17360-042413-DR-050	SO-17360-042413-DR-051	SO-17360-042413-DR-052	SO-17360-042413-DR-053
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth	(10-12) ft BGS	(6-8) ft BGS	(10-12) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS
Sample Type							
<i>Metals</i>	<i>Units</i>						
Antimony	µg/kg	-	-	-	1000	620	250 J
Arsenic	µg/kg	-	-	-	6000 ^{eca}	5300	17000 ^{eca}
Barium	µg/kg	-	-	-	50000	74000	28000
Beryllium	µg/kg	-	-	-	280	500	220
Cadmium	µg/kg	-	-	-	2500	1200	610
Chromium	µg/kg	-	-	-	9600	4600	2800
Chromium III (trivalent)	µg/kg	-	-	-	9600	4600	2800
Chromium VI (hexavalent)	µg/kg	-	-	-	2400 U	2400 U	2400 U
Cobalt	µg/kg	-	-	-	3300	3100	1600
Copper	µg/kg	-	-	-	150000 ^u	42000	6600
Iron	µg/kg	-	-	-	8900000	3300000	1700000
Lead	µg/kg	-	-	-	55000	27000	14000
Lead - coarse fraction	µg/kg	-	-	-	-	-	-
Lead - fine fraction	µg/kg	-	-	-	-	-	-
Lead - total (calculated by fine/coarse fraction)	µg/kg	-	-	-	-	-	-
Manganese	µg/kg	-	-	-	200000	30000	30000
Mercury	µg/kg	-	-	-	96	31 J	20 J
Molybdenum	µg/kg	-	-	-	1900 ^u	1300	480
Nickel	µg/kg	-	-	-	14000	9300	5300
Selenium	µg/kg	-	-	-	360 J	320 J	170 J
Silver	µg/kg	-	-	-	170 J	160 J	40 J
Thallium	µg/kg	-	-	-	430 U	430 U	420 U
Vanadium	µg/kg	-	-	-	8700	5600	4100
Zinc	µg/kg	-	-	-	110000	50000	16000
<i>Polychlorinated Biphenyls (PCBs)</i>							
Aroclor-1016 (PCB-1016)	µg/kg	340 U	330 U	340 U	370 U	410 U	380 U
Aroclor-1221 (PCB-1221)	µg/kg	340 U	330 U	340 U	370 U	410 U	380 U
Aroclor-1232 (PCB-1232)	µg/kg	340 U	330 U	340 U	370 U	410 U	380 U
Aroclor-1242 (PCB-1242)	µg/kg	340 U	330 U	340 U	370 U	410 U	380 U
Aroclor-1248 (PCB-1248)	µg/kg	340 U	330 U	340 U	370 U	410 U	380 U
Aroclor-1254 (PCB-1254)	µg/kg	340 U	330 U	340 U	370 U	410 U	380 U
Aroclor-1260 (PCB-1260)	µg/kg	210 J	940	340 U	370 U	410 U	380 U
Total PCBs	µg/kg	210 J	940	ND	ND	ND	ND

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB229-13	SB230-13	SB230-13	SB232-13	SB232-13	SB232-13	SB232-13
Sample Identification	SO-17360-042313-DR-040	SO-17360-042313-DR-041	SO-17360-042313-DR-042	SO-17360-042413-DR-050	SO-17360-042413-DR-051	SO-17360-042413-DR-052	SO-17360-042413-DR-053
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth	(10-12) ft BGS	(6-8) ft BGS	(10-12) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS
Sample Type							
<i>Polycyclic Aromatic Hydrocarbons (PAHs)</i>							
2-Methylnaphthalene	µg/kg	-	-	950 U	190	27 J	160 U
Acenaphthene	µg/kg	-	-	360 U	37 U	36 U	61 U
Acenaphthylene	µg/kg	-	-	360 U	37 U	36 U	61 U
Anthracene	µg/kg	-	-	360 U	37 U	36 U	61 U
Benzo(a)anthracene	µg/kg	-	-	910	66	56	37 J
Benzo(a)pyrene	µg/kg	-	-	1300	58	49	61 U
Benzo(b)fluoranthene	µg/kg	-	-	1700	110	86	61 U
Benzo(g,h,i)perylene	µg/kg	-	-	1200	68	51	61 U
Benzo(k)fluoranthene	µg/kg	-	-	1500	68	61	61 U
Chrysene	µg/kg	-	-	1500	100	90	40 J
Dibenz(a,h)anthracene	µg/kg	-	-	330 J	37 U	36 U	61 U
Fluoranthene	µg/kg	-	-	1600	92	78	55 J
Fluorene	µg/kg	-	-	360 U	37 U	36 U	61 U
Indeno(1,2,3-cd)pyrene	µg/kg	-	-	1000	56	48	61 U
Naphthalene	µg/kg	-	-	360 U	150	29 J	61 U
Phenanthrene	µg/kg	-	-	640	210	84	61 U
Pyrene	µg/kg	-	-	2000	130	110	72
<i>Volatile Organic Compounds (VOCs)</i>							
1,1,1-Trichloroethane	µg/kg	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	-	-	-	-	-	-
1,1,2-Trichloroethane	µg/kg	-	-	-	-	-	-
1,1-Dichloroethane	µg/kg	-	-	-	-	-	-
1,1-Dichloroethene	µg/kg	-	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/kg	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	-	-	-	-	-	-
1,2-Dibromoethane ⁽⁴⁾	µg/kg	-	-	-	-	-	-
1,2-Dichlorobenzene	µg/kg	-	-	-	-	-	-
1,2-Dichloroethane	µg/kg	-	-	-	-	-	-
1,2-Dichloropropane	µg/kg	-	-	-	-	-	-
1,3-Dichlorobenzene	µg/kg	-	-	-	-	-	-
1,4-Dichlorobenzene	µg/kg	-	-	-	-	-	-
2-Butanone ⁽⁵⁾	µg/kg	-	-	-	-	-	-
2-Hexanone	µg/kg	-	-	-	-	-	-
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	-	-	-	-	-	-
Acetone	µg/kg	-	-	-	-	-	-
Benzene	µg/kg	-	-	-	-	-	-
Bromodichloromethane	µg/kg	-	-	-	-	-	-
Bromoform	µg/kg	-	-	-	-	-	-
Bromomethane (Methyl bromide)	µg/kg	-	-	-	-	-	-
Carbon disulfide	µg/kg	-	-	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB229-13	SB230-13	SB230-13	SB232-13	SB232-13	SB232-13	SB232-13
Sample Identification	SO-17360-042313-DR-040	SO-17360-042313-DR-041	SO-17360-042313-DR-042	SO-17360-042413-DR-050	SO-17360-042413-DR-051	SO-17360-042413-DR-052	SO-17360-042413-DR-053
Sample Date	4/23/2013	4/23/2013	4/23/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth	(10-12) ft BGS	(6-8) ft BGS	(10-12) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS
Sample Type							
<i>VOCs (continued)</i>							
Carbon tetrachloride	µg/kg	-	-	-	-	-	-
Chlorobenzene	µg/kg	-	-	-	-	-	-
Chloroethane	µg/kg	-	-	-	-	-	-
Chloroform (Trichloromethane)	µg/kg	-	-	-	-	-	-
Chloromethane (Methyl chloride)	µg/kg	-	-	-	-	-	-
cis-1,2-Dichloroethene	µg/kg	-	-	-	-	-	-
cis-1,3-Dichloropropene	µg/kg	-	-	-	-	-	-
Cyclohexane	µg/kg	-	-	-	-	-	-
Dibromochloromethane	µg/kg	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	µg/kg	-	-	-	-	-	-
Ethylbenzene	µg/kg	-	-	-	-	-	-
Isopropyl benzene	µg/kg	-	-	-	-	-	-
Methyl acetate	µg/kg	-	-	-	-	-	-
Methyl cyclohexane	µg/kg	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	µg/kg	-	-	-	-	-	-
Methylene chloride	µg/kg	-	-	-	-	-	-
Styrene	µg/kg	-	-	-	-	-	-
Tetrachloroethene	µg/kg	-	-	-	-	-	-
Toluene	µg/kg	-	-	-	-	-	-
trans-1,2-Dichloroethene	µg/kg	-	-	-	-	-	-
trans-1,3-Dichloropropene	µg/kg	-	-	-	-	-	-
Trichloroethene	µg/kg	-	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	µg/kg	-	-	-	-	-	-
Trifluorotrichloroethane (Freon 113)	µg/kg	-	-	-	-	-	-
Vinyl chloride	µg/kg	-	-	-	-	-	-
Xylenes (total)	µg/kg	-	-	-	-	-	-

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB232-13	SB239-13	SB240-13	SB241-13	SB241-13	SB241-13	SB241-13
Sample Identification	SO-17360-042413-DR-054	SO-17360-042413-DR-055	SO-17360-042413-DR-056	SO-17360-042413-DR-057	SO-17360-042413-DR-058	SO-17360-042413-DR-059	SO-17360-042413-DR-060
Sample Date	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth	(8-10) ft BGS	(2-4) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS
Sample Type							
<i>Metals</i>	<i>Units</i>						
Antimony	µg/kg	330 J	-	-	690	5900 ^{nc}	6300 ^{nc}
Arsenic	µg/kg	3600	-	-	1400	3100	2600
Barium	µg/kg	180000	-	-	110000 J	150000 J	100000 J
Beryllium	µg/kg	34 J	-	-	110 J	85 J	56 J
Cadmium	µg/kg	110 J	-	-	290	14000 ^{ncu}	2500
Chromium	µg/kg	2000 J	2400	16000	12000	200000 ^{ncu}	130000 ^{ncu}
Chromium III (trivalent)	µg/kg	2000	2400	16000	-	-	-
Chromium VI (hexavalent)	µg/kg	4100 U	2100 U	2100 U	-	-	-
Cobalt	µg/kg	460 J	-	-	2400	18000 ^{ncu}	15000 ^{ncu}
Copper	µg/kg	2900 J	-	-	12000	120000 ^u	130000 ^u
Iron	µg/kg	2700000	-	-	4900000	20000000 ^{nc}	16000000 ^{nc}
Lead	µg/kg	1000	-	-	150000	440000 ^p	660000 ^p
Lead - coarse fraction	µg/kg	-	1200 J	7200 J	-	-	-
Lead - fine fraction	µg/kg	-	2700 J	25000	-	-	-
Lead - total (calculated by fine/coarse fraction)	µg/kg	-	2000	9400	-	-	-
Manganese	µg/kg	160000	-	-	140000 J	2300000 J ^{ncu}	400000 J
Mercury	µg/kg	5.1 J	-	-	23 J	37 U	36 U
Molybdenum	µg/kg	1200	-	-	1600 ^u	520000 ^{ncu}	64000 ^{nc}
Nickel	µg/kg	2300 J	-	-	8700	200000 ^{ncu}	180000 ^{ncu}
Selenium	µg/kg	1300 J ^u	-	-	430 U	360 U	390 U
Silver	µg/kg	3300 U	-	-	61 J	3000 ^u	4000 ^u
Thallium	µg/kg	660 U	-	-	430 U	360 U	29 J
Vanadium	µg/kg	6200	-	-	8700	360 U	3100
Zinc	µg/kg	5100 J	-	-	42000 J	190000 J ^u	140000 J
<i>Polychlorinated Biphenyls (PCBs)</i>							
Aroclor-1016 (PCB-1016)	µg/kg	660 U	-	-	360 U	340 U	330 U
Aroclor-1221 (PCB-1221)	µg/kg	660 U	-	-	360 U	340 U	330 U
Aroclor-1232 (PCB-1232)	µg/kg	660 U	-	-	360 U	340 U	330 U
Aroclor-1242 (PCB-1242)	µg/kg	660 U	-	-	360 U	340 U	330 U
Aroclor-1248 (PCB-1248)	µg/kg	660 U	-	-	360 U	340 U	330 U
Aroclor-1254 (PCB-1254)	µg/kg	660 U	-	-	360 U	340 U	330 U
Aroclor-1260 (PCB-1260)	µg/kg	660 U	-	-	79 J	340 U	330 U
Total PCBs	µg/kg	ND	-	-	79 J	ND	ND

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB232-13		SB239-13		SB240-13		SB241-13		SB241-13		SB241-13			
Sample Identification	SO-17360-042413-DR-054		SO-17360-042413-DR-055		SO-17360-042413-DR-056		SO-17360-042413-DR-057		SO-17360-042413-DR-058		SO-17360-042413-DR-059		SO-17360-042413-DR-060	
Sample Date	4/24/2013		4/24/2013		4/24/2013		4/24/2013		4/24/2013		4/24/2013		4/24/2013	
Sample Depth	(8-10) ft BGS		(2-4) ft BGS		(2-4) ft BGS		(0-2) ft BGS		(2-4) ft BGS		(4-6) ft BGS		(6-8) ft BGS	
Sample Type														
Polycyclic Aromatic Hydrocarbons (PAHs)														
2-Methylnaphthalene	µg/kg	170 U	-	-	-	380 J	-	20 J	-	35 J	-	84 U		
Acenaphthene	µg/kg	63 U	-	-	-	530	-	32 U	-	56	-	31 U		
Acenaphthylene	µg/kg	63 U	-	-	-	330 U	-	32 U	-	31 U	-	31 U		
Anthracene	µg/kg	63 U	-	-	-	880	-	20 J	-	64	-	39		
Benzo(a)anthracene	µg/kg	63 U	-	-	-	2100	-	90	-	75	-	180		
Benzo(a)pyrene	µg/kg	63 U	-	-	-	1600	-	64	-	81	-	170		
Benzo(b)fluoranthene	µg/kg	63 U	-	-	-	2400	-	260	-	130	-	260		
Benzo(g,h,i)perylene	µg/kg	63 U	-	-	-	640	-	58	-	63	-	66		
Benzo(k)fluoranthene	µg/kg	63 U	-	-	-	1100	-	91	-	79	-	140		
Chrysene	µg/kg	63 U	-	-	-	2200	-	200	-	100	-	220		
Dibenz(a,h)anthracene	µg/kg	63 U	-	-	-	210 J	-	19 J	-	35	-	23 J		
Fluoranthene	µg/kg	63 U	-	-	-	5300	-	210	-	150	-	370		
Fluorene	µg/kg	63 U	-	-	-	280 J	-	32 U	-	48	-	31 U		
Indeno(1,2,3-cd)pyrene	µg/kg	63 U	-	-	-	620	-	37	-	60	-	55		
Naphthalene	µg/kg	63 U	-	-	-	330 U	-	120	-	31 U	-	31 U		
Phenanthrene	µg/kg	63 U	-	-	-	4900 ^a	-	270	-	110	-	170		
Pyrene	µg/kg	63 U	-	-	-	4700	-	140	-	160	-	340		
Volatile Organic Compounds (VOCs)														
1,1,1-Trichloroethane	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
1,1,2,2-Tetrachloroethane	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
1,1,2-Trichloroethane	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
1,1-Dichloroethane	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
1,1-Dichloroethene	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
1,2,4-Trichlorobenzene	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
1,2-Dibromoethane ⁽⁴⁾	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
1,2-Dichlorobenzene	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
1,2-Dichloroethane	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
1,2-Dichloropropane	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
1,3-Dichlorobenzene	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
1,4-Dichlorobenzene	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
2-Butanone ⁽⁵⁾	µg/kg	-	-	-	-	220 U	-	250 U	-	210 U	-	210 U		
2-Hexanone	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
Acetone	µg/kg	-	-	-	-	110 U	-	240	-	100 U	-	110 U		
Benzene	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
Bromodichloromethane	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
Bromoform	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		
Bromomethane (Methyl bromide)	µg/kg	-	-	-	-	83 U	-	93 U	-	79 U	-	80 U		
Carbon disulfide	µg/kg	-	-	-	-	33 U	-	37 U	-	31 U	-	32 U		

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB232-13	SB239-13	SB240-13	SB241-13	SB241-13	SB241-13	SB241-13
Sample Identification	SO-17360-042413-DR-054	SO-17360-042413-DR-055	SO-17360-042413-DR-056	SO-17360-042413-DR-057	SO-17360-042413-DR-058	SO-17360-042413-DR-059	SO-17360-042413-DR-060
Sample Date	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth	(8-10) ft BGS	(2-4) ft BGS	(2-4) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS
Sample Type							
<i>VOCs (continued)</i>							
Carbon tetrachloride	µg/kg	-	-	33 U	37 U	31 U	32 U
Chlorobenzene	µg/kg	-	-	33 U	37 U	31 U	32 U
Chloroethane	µg/kg	-	-	110 U	120 U	100 U	110 U
Chloroform (Trichloromethane)	µg/kg	-	-	33 U	37 U	31 U	32 U
Chloromethane (Methyl chloride)	µg/kg	-	-	110 U	120 U	100 U	110 U
cis-1,2-Dichloroethene	µg/kg	-	-	33 U	37 U	31 U	32 U
cis-1,3-Dichloropropene	µg/kg	-	-	33 U	37 U	31 U	32 U
Cyclohexane	µg/kg	-	-	33 U	37 U	31 U	32 U
Dibromochloromethane	µg/kg	-	-	33 U	37 U	31 U	32 U
Dichlorodifluoromethane (CFC-12)	µg/kg	-	-	33 U	37 U	31 U	32 U
Ethylbenzene	µg/kg	-	-	33 U	37 U	31 U	32 U
Isopropyl benzene	µg/kg	-	-	33 U	37 U	31 U	32 U
Methyl acetate	µg/kg	-	-	220 U	250 U	210 U	210 U
Methyl cyclohexane	µg/kg	-	-	33 U	37 U	31 U	32 U
Methyl tert butyl ether (MTBE)	µg/kg	-	-	33 U	37 U	31 U	32 U
Methylene chloride	µg/kg	-	-	33 U	37 U	31 U	32 U
Styrene	µg/kg	-	-	33 U	37 U	31 U	32 U
Tetrachloroethene	µg/kg	-	-	33 U	37 U	31 U	32 U
Toluene	µg/kg	-	-	33 U	37	31 U	32 U
trans-1,2-Dichloroethene	µg/kg	-	-	33 U	37 U	31 U	32 U
trans-1,3-Dichloropropene	µg/kg	-	-	33 U	37 U	31 U	32 U
Trichloroethene	µg/kg	-	-	33 U	6100 ^{ecol}	930 ^{ecol}	32 U
Trichlorofluoromethane (CFC-11)	µg/kg	-	-	33 U	37 U	31 U	32 U
Trifluorotrichloroethane (Freon 113)	µg/kg	-	-	33 U	37 U	31 U	32 U
Vinyl chloride	µg/kg	-	-	33 U	37 U	31 U	32 U
Xylenes (total)	µg/kg	-	-	100 U	46 J	94 U	96 U

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB241-13	SB242-13	SB242-13	SB242-13	SB242-13	SB242-13	SB242-13
Sample Identification	SO-17360-042413-DR-061	SO-17360-042413-DR-062	SO-17360-042413-DR-063	SO-17360-042413-DR-064	SO-17360-042413-DR-065	SO-17360-042413-DR-066	SO-17360-042413-DR-067
Sample Date	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth	(8-10) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS
Sample Type				Duplicate			
<i>Metals</i>	<i>Units</i>						
Antimony	µg/kg	440	640	31000 ^{nc}	21000 ^{nc}	38000 ^{nc}	78000 ^{nc}
Arsenic	µg/kg	1700	2100	18000 ^{ncap}	13000 ^{ncap}	9900 ^{ncap}	14000 ^{ncap}
Barium	µg/kg	26000 J	52000 J	560000 J ^u	400000 J	340000 J	660000 ^u
Beryllium	µg/kg	92 J	170 J	340	470	140 J	110 J
Cadmium	µg/kg	750	240	44000 ^{ncu}	25000 ^{ncu}	15000 ^{ncu}	26000 ^{ncu}
Chromium	µg/kg	12000	17000	1200000 ^{ncumu}	1800000 ^{ncumu}	1400000 ^{ncumu}	1300000 J ^{ncumu}
Chromium III (trivalent)	µg/kg	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/kg	-	-	-	-	-	-
Cobalt	µg/kg	1300	2700	120000 ^{ncu}	86000 ^{ncu}	41000 ^{ncu}	120000 ^{ncu}
Copper	µg/kg	6500	15000	1200000 ^u	840000 ^u	510000 ^u	2700000 J ^u
Iron	µg/kg	3800000	6200000	160000000 ^{nc}	130000000 ^{nc}	72000000 ^{nc}	140000000 ^{nc}
Lead	µg/kg	8700	210000	1900000 ^{ncpsj}	1000000 ^{ncpsj}	1400000 ^{ncpsj}	3300000 J ^{ncpsj}
Lead - coarse fraction	µg/kg	-	-	-	-	-	-
Lead - fine fraction	µg/kg	-	-	-	-	-	-
Lead - total (calculated by fine/coarse fraction)	µg/kg	-	-	-	-	-	-
Manganese	µg/kg	61000 J	150000 J	3900000 J ^{ncumu}	7300000 J ^{ncumu}	3800000 J ^{ncumu}	6300000 ^{ncumu}
Mercury	µg/kg	8.2 J	18 J	23 J	18 J	54	23 J
Molybdenum	µg/kg	11000 ^{nc}	2400 ^u	670000 ^{ncu}	560000 ^{ncu}	440000 ^{ncu}	760000 ^{ncu}
Nickel	µg/kg	9400	13000	1100000 ^{ncu}	1200000 ^{ncu}	1000000 ^{ncu}	1500000 J ^{ncu}
Selenium	µg/kg	400 U	320 J	400 J	560 ^u	480 ^u	460 ^u
Silver	µg/kg	1600 ^u	140 J	21000 ^{ncu}	19000 ^{ncu}	4500 ^u	10000 ^{ncu}
Thallium	µg/kg	30 J	430 U	470 U	270 J	140 J	44000 U
Vanadium	µg/kg	2500	11000	470 U	430 U	410 U	440 U
Zinc	µg/kg	9700 J	29000 J	1400000 J ^u	850000 J ^u	770000 J ^u	4600000 J ^u
<i>Polychlorinated Biphenyls (PCBs)</i>							
Aroclor-1016 (PCB-1016)	µg/kg	330 U	350 U	370 U	380 U	350 U	380 U
Aroclor-1221 (PCB-1221)	µg/kg	330 U	350 U	370 U	380 U	350 U	380 U
Aroclor-1232 (PCB-1232)	µg/kg	330 U	350 U	370 U	380 U	350 U	380 U
Aroclor-1242 (PCB-1242)	µg/kg	330 U	350 U	370 U	380 U	350 U	380 U
Aroclor-1248 (PCB-1248)	µg/kg	330 U	350 U	370 U	380 U	350 U	380 U
Aroclor-1254 (PCB-1254)	µg/kg	330 U	350 U	370 U	380 U	350 U	380 U
Aroclor-1260 (PCB-1260)	µg/kg	330 U	350 U	370 U	380 U	350 U	380 U
Total PCBs	µg/kg	ND	ND	ND	ND	ND	ND

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB241-13	SB242-13	SB242-13	SB242-13	SB242-13	SB242-13	SB242-13
Sample Identification	SO-17360-042413-DR-061	SO-17360-042413-DR-062	SO-17360-042413-DR-063	SO-17360-042413-DR-064	SO-17360-042413-DR-065	SO-17360-042413-DR-066	SO-17360-042413-DR-067
Sample Date	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth	(8-10) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS
Sample Type				Duplicate			
<i>Polycyclic Aromatic Hydrocarbons (PAHs)</i>							
2-Methylnaphthalene	µg/kg	36 J	470 J	950 U	830 J		34 J
Acenaphthene	µg/kg	46	430	350 U	340 U	1100	34 U
Acenaphthylene	µg/kg	31 U	330 U	350 U	340 U	1100	34 U
Anthracene	µg/kg	60	760	350 U	340 U	2900	57
Benzo(a)anthracene	µg/kg	89	1200	1500	1400	21000 ^P	40
Benzo(a)pyrene	µg/kg	110	1100	930	1200	25000 ^{PH}	64
Benzo(b)fluoranthene	µg/kg	140	1600	5400	4500	32000 ^P	72
Benzo(g,h,i)perylene	µg/kg	72	490	940	1000	18000	44
Benzo(k)fluoranthene	µg/kg	86	720	1400	1600	9800	71
Chrysene	µg/kg	100	1600	4100	3400	21000	67
Dibenz(a,h)anthracene	µg/kg	34	330 U	460	400	5400 ^P	32 J
Fluoranthene	µg/kg	140	3300	2300	2000	24000 ^H	71
Fluorene	µg/kg	44	350	350 U	340 U	1100	45
Indeno(1,2,3-cd)pyrene	µg/kg	81	400	820	900	21000 ^P	41
Naphthalene	µg/kg	31 U	190 J	350 U	340 U	660 U	34 U
Phenanthrene	µg/kg	70	3300 ^H	930	860	9000 ^H	34 U
Pyrene	µg/kg	170	3000	1700	1600	26000	48
<i>Volatile Organic Compounds (VOCs)</i>							
1,1,1-Trichloroethane	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
1,1,2,2-Tetrachloroethane	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
1,1,2-Trichloroethane	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
1,1-Dichloroethane	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
1,1-Dichloroethene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
1,2,4-Trichlorobenzene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
1,2-Dibromoethane ⁽⁴⁾	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
1,2-Dichlorobenzene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
1,2-Dichloroethane	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
1,2-Dichloropropane	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
1,3-Dichlorobenzene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
1,4-Dichlorobenzene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
2-Butanone ⁽⁵⁾	µg/kg	270 U	270 U	280 U	290 U	310 U	230 U
2-Hexanone	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Acetone	µg/kg	130 U	130 U	140 U	140 U	400	110 U
Benzene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Bromodichloromethane	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Bromoform	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Bromomethane (Methyl bromide)	µg/kg	100 U	100 U	110 U	110 U	120 U	85 U
Carbon disulfide	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB241-13	SB242-13	SB242-13	SB242-13	SB242-13	SB242-13	SB242-13
Sample Identification	SO-17360-042413-DR-061	SO-17360-042413-DR-062	SO-17360-042413-DR-063	SO-17360-042413-DR-064	SO-17360-042413-DR-065	SO-17360-042413-DR-066	SO-17360-042413-DR-067
Sample Date	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth	(8-10) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS
Sample Type				Duplicate			
<i>VOCs (continued)</i>							
Carbon tetrachloride	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Chlorobenzene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Chloroethane	µg/kg	130 U	130 U	140 U	140 U	160 U	110 U
Chloroform (Trichloromethane)	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Chloromethane (Methyl chloride)	µg/kg	130 U	130 U	140 U	140 U	160 U	110 U
cis-1,2-Dichloroethene	µg/kg	40 U	40 U	42 U	43 U	170	34 U
cis-1,3-Dichloropropene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Cyclohexane	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Dibromochloromethane	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Dichlorodifluoromethane (CFC-12)	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Ethylbenzene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Isopropyl benzene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Methyl acetate	µg/kg	270 U	270 U	280 U	290 U	310 U	230 U
Methyl cyclohexane	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Methyl tert butyl ether (MTBE)	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Methylene chloride	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Styrene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Tetrachloroethene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Toluene	µg/kg	40 U	22 J	42 U	43 U	31 J	34 U
trans-1,2-Dichloroethene	µg/kg	40 U	40 U	42 U	43 U	77	34 U
trans-1,3-Dichloropropene	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Trichloroethene	µg/kg	1300 ^{nc}	3100 ^{nc}	8600 ^{nc}	8000 ^{nc}	17000 ^{nc}	6100 ^{nc}
Trichlorofluoromethane (CFC-11)	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Trifluorotrichloroethane (Freon 113)	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Vinyl chloride	µg/kg	40 U	40 U	42 U	43 U	47 U	34 U
Xylenes (total)	µg/kg	120 U	120 U	130 U	130 U	140 U	100 U

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB243-13	SB243-13	SB243-13	SB243-13	SB243-13	SB243-13	SB244-13	SB244-13
Sample Identification	SO-17360-042413-DR-068	SO-17360-042413-DR-069	SO-17360-042413-DR-070	SO-17360-042413-DR-071	SO-17360-042413-DR-072	SO-17360-042413-DR-073	SO-17360-042413-DR-074	SO-17360-042413-DR-074
Sample Date	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(2-4) ft BGS
Sample Type								
<i>Metals</i>	<i>Units</i>							
Antimony	µg/kg	680	560 J	700 J	210 J	280 J	6700 ^{nc}	54000 ^{nc}
Arsenic	µg/kg	26000 ^{ncp}	3100	5200	3100	1300 J	5300	25000 ^{ncp}
Barium	µg/kg	71000	44000	49000	24000	25000	200000	1200000 ^u
Beryllium	µg/kg	350	240 J	340 J	130 J	120 J	260 J	210 J
Cadmium	µg/kg	170	240 J	190 J	67 J	59 J	5600 ^u	38000 ^{ncu}
Chromium	µg/kg	10000 J	8300 J	10000 J	4900 J	9500 J	120000 J ^{ncu}	1300000 J ^{ncmu}
Chromium III (trivalent)	µg/kg	-	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/kg	-	-	-	-	-	-	-
Cobalt	µg/kg	2400	3000	3000	1600 J	2300	16000 ^{ncu}	190000 ^{ncu}
Copper	µg/kg	17000 J	17000 J	17000 J	3900 U	4900 J	270000 J ^u	3300000 J ^u
Iron	µg/kg	5900000	7100000	5200000	4500000	5900000	34000000 ^{nc}	170000000 ^{ncp}
Lead	µg/kg	64000 J	25000 J	23000 J	2600 J	3100 J	580000 J ^p	8500000 J ^{ncpnt}
Lead - coarse fraction	µg/kg	-	-	-	-	-	-	-
Lead - fine fraction	µg/kg	-	-	-	-	-	-	-
Lead - total (calculated by fine/coarse fraction)	µg/kg	-	-	-	-	-	-	-
Manganese	µg/kg	120000	150000	110000	120000	160000	870000 ^{ncu}	6700000 ^{ncmu}
Mercury	µg/kg	35 J	13 J	11 J	7 J	8.2 J	54	19 J
Molybdenum	µg/kg	2200 ^u	1900 U	2100 U	1800 U	1800 U	62000 ^{nc}	610000 ^{ncu}
Nickel	µg/kg	6800 J	9200 J	7700 J	3900 J	5600 J	170000 J ^{ncu}	1700000 J ^{ncu}
Selenium	µg/kg	1300 ^u	440 J ^u	370 J	240 J	1800 U	540 J ^u	1300 J ^u
Silver	µg/kg	85 J	9.2 J	24 J	1800 U	1800 U	840 J	16000 ^{ncu}
Thallium	µg/kg	1000	49 J	130 J	82 J	1800 U	2100 U	130 J
Vanadium	µg/kg	9900 J	11000 J	9400 J	7500 J	10000 J	15000 J	46000 J
Zinc	µg/kg	22000 J	31000 J	24000 J	10000 J	12000 J	240000 J ^u	2800000 J ^{ncu}
<i>Polychlorinated Biphenyls (PCBs)</i>								
Aroclor-1016 (PCB-1016)	µg/kg	350 U	350 U	360 U	350 U	350 U	390 U	370 U
Aroclor-1221 (PCB-1221)	µg/kg	350 U	350 U	360 U	350 U	350 U	390 U	370 U
Aroclor-1232 (PCB-1232)	µg/kg	350 U	350 U	360 U	350 U	350 U	390 U	370 U
Aroclor-1242 (PCB-1242)	µg/kg	350 U	350 U	360 U	350 U	350 U	390 U	370 U
Aroclor-1248 (PCB-1248)	µg/kg	350 U	350 U	360 U	350 U	350 U	390 U	370 U
Aroclor-1254 (PCB-1254)	µg/kg	350 U	350 U	360 U	350 U	350 U	390 U	370 U
Aroclor-1260 (PCB-1260)	µg/kg	350 U	350 U	360 U	350 U	350 U	390 U	370 U
Total PCBs	µg/kg	ND	ND	ND	ND	ND	ND	ND

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB243-13		SB243-13		SB243-13		SB243-13		SB244-13		SB244-13			
Sample Identification	SO-17360-042413-DR-068		SO-17360-042413-DR-069		SO-17360-042413-DR-070		SO-17360-042413-DR-071		SO-17360-042413-DR-072		SO-17360-042413-DR-073		SO-17360-042413-DR-074	
Sample Date	4/24/2013		4/24/2013		4/24/2013		4/24/2013		4/24/2013		4/24/2013		4/24/2013	
Sample Depth	(0-2) ft BGS		(2-4) ft BGS		(4-6) ft BGS		(6-8) ft BGS		(8-10) ft BGS		(0-2) ft BGS		(2-4) ft BGS	
Sample Type														
Polycyclic Aromatic Hydrocarbons (PAHs)														
2-Methylnaphthalene	µg/kg	240 J	880 U	880 U	850 U	860 U	250 J	95 U						
Acenaphthene	µg/kg	410	330 U	330 U	300 J	460	610	29 J						
Acenaphthylene	µg/kg	330 U	330 U	330 U	320 U	530	350 U	36 U						
Anthracene	µg/kg	600	240 J	330 U	960	1500	1000	48						
Benzo(a)anthracene	µg/kg	1300	760	400	2900	6200	2100	730						
Benzo(a)pyrene	µg/kg	1000	690	330 J	2300 ^u	6000 ^u	1700	590						
Benzo(b)fluoranthene	µg/kg	1600	1200	560	3700	8500	2700	2100						
Benzo(g,h,i)perylene	µg/kg	340	280 J	310 J	630	1400	540	1100						
Benzo(k)fluoranthene	µg/kg	780	510	310 J	1300	3900	1300	1100						
Chrysene	µg/kg	1400	990	500	3300	8800	2400	1700						
Dibenz(a,h)anthracene	µg/kg	330 U	330 U	330 U	350	190 J	230 J	350						
Fluoranthene	µg/kg	3700	1400	730	5800 ^u	12000 ^u	6300 ^u	1400						
Fluorene	µg/kg	220 J	330 U	330 U	410	780	390	36 U						
Indeno(1,2,3-cd)pyrene	µg/kg	290 J	220 J	210 J	620	1500	490	750						
Naphthalene	µg/kg	330 U	330 U	330 U	320 U	320 U	350 U	100						
Phenanthrene	µg/kg	3400 ^u	840	440	4900 ^u	5300 ^u	5700 ^u	1100						
Pyrene	µg/kg	3300	1300	680	5100	13000	5200	1800						
Volatile Organic Compounds (VOCs)														
1,1,1-Trichloroethane	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
1,1,2,2-Tetrachloroethane	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
1,1,2-Trichloroethane	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
1,1-Dichloroethane	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
1,1-Dichloroethene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
1,2,4-Trichlorobenzene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
1,2-Dibromoethane ⁽⁴⁾	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
1,2-Dichlorobenzene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
1,2-Dichloroethane	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
1,2-Dichloropropane	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
1,3-Dichlorobenzene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
1,4-Dichlorobenzene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
2-Butanone ⁽⁵⁾	µg/kg	240 U	220 U	380 U	210 U	220 U	310 U	270 U						
2-Hexanone	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
Acetone	µg/kg	120 U	110 U	190 U	110 U	110 U	160 U	130 U						
Benzene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
Bromodichloromethane	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
Bromoform	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						
Bromomethane (Methyl bromide)	µg/kg	90 U	82 U	140 U	80 U	81 U	120 U	100 U						
Carbon disulfide	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U						

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB243-13	SB243-13	SB243-13	SB243-13	SB243-13	SB243-13	SB244-13	SB244-13
Sample Identification	SO-17360-042413-DR-068	SO-17360-042413-DR-069	SO-17360-042413-DR-070	SO-17360-042413-DR-071	SO-17360-042413-DR-072	SO-17360-042413-DR-073	SO-17360-042413-DR-074	SO-17360-042413-DR-074
Sample Date	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(0-2) ft BGS	(0-2) ft BGS	(2-4) ft BGS
Sample Type								
<i>VOCs (continued)</i>								
Carbon tetrachloride	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Chlorobenzene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Chloroethane	µg/kg	120 U	110 U	190 U	110 U	110 U	160 U	130 U
Chloroform (Trichloromethane)	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Chloromethane (Methyl chloride)	µg/kg	120 U	110 U	190 U	110 U	110 U	160 U	130 U
cis-1,2-Dichloroethene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
cis-1,3-Dichloropropene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Cyclohexane	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Dibromochloromethane	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Dichlorodifluoromethane (CFC-12)	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Ethylbenzene	µg/kg	36 U	19 J	57 U	32 U	32 U	47 U	40 U
Isopropyl benzene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Methyl acetate	µg/kg	240 U	220 U	380 U	210 U	220 U	310 U	270 U
Methyl cyclohexane	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Methyl tert butyl ether (MTBE)	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Methylene chloride	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Styrene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Tetrachloroethene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Toluene	µg/kg	36 U	71	57 U	32 U	32 U	47 U	40 U
trans-1,2-Dichloroethene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
trans-1,3-Dichloropropene	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Trichloroethene	µg/kg	350 ^{nc}	760 ^{nc}	350 ^{nc}	32 U	32 U	270 ^{nc}	12000 ^{nc}
Trichlorofluoromethane (CFC-11)	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Trifluorotrichloroethane (Freon 113)	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Vinyl chloride	µg/kg	36 U	33 U	57 U	32 U	32 U	47 U	40 U
Xylenes (total)	µg/kg	110 U	99	170 U	96 U	97 U	140 U	120 U

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB244-13	SB244-13	SB244-13	SB244-13	SB245-13	SB245-13	SB245-13
Sample Identification	SO-17360-042413-DR-075	SO-17360-042413-DR-076	SO-17360-042413-DR-077	SO-17360-042413-DR-078	SO-17360-042413-DR-079	SO-17360-042413-DR-080	SO-17360-042413-DR-081
Sample Date	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS
Sample Type	Duplicate						
Metals	Units						
Antimony	µg/kg	51000 J ^{nc}	4600 J ^{nc}	1900 J	140 J	170 J	660 J
Arsenic	µg/kg	24000 J ^{ncap}	3000 J	3500	870 J	1500 J	3200
Barium	µg/kg	1200000 ^u	570000 ^u	140000	14000	28000	46000
Beryllium	µg/kg	220 J	190 J	380 J	110 J	130 J	480 J
Cadmium	µg/kg	20000 J ^{ncu}	1800 J	1200	160 J	93 J	220 J
Chromium	µg/kg	1200000 J ^{ncum}	500000 J ^{ncum}	69000 J ^{ncu}	5500 J	8300 J	7900 J
Chromium III (trivalent)	µg/kg	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/kg	-	-	-	-	-	-
Cobalt	µg/kg	120000 J ^{ncu}	17000 J ^{ncu}	7900 ^{ncu}	1400 J	2300	3200
Copper	µg/kg	2300000 J ^u	120000 J ^u	99000 J ^u	4700 J	5100 J	15000 J
Iron	µg/kg	140000000 J ^{nc}	24000000 J ^{nc}	14000000 ^{nc}	3000000	6000000	9000000
Lead	µg/kg	4700000 J ^{ncapq}	680000 J ^p	170000 J	5700 J	7300 J	22000 J
Lead - coarse fraction	µg/kg	-	-	-	-	-	-
Lead - fine fraction	µg/kg	-	-	-	-	-	-
Lead - total (calculated by fine/coarse fraction)	µg/kg	-	-	-	-	-	-
Manganese	µg/kg	3500000 ^{ncum}	1400000 ^{ncu}	500000 ^{ncu}	53000	170000	150000
Mercury	µg/kg	13 J	8 J	12 J	9.5 J	8.9 J	23 J
Molybdenum	µg/kg	430000 J ^{ncu}	72000 J ^{ncu}	26000 ^{nc}	1800 U	2000 U	2000 U
Nickel	µg/kg	1200000 J ^{ncu}	400000 J ^{ncu}	68000 J	4300 J	5600 J	7800 J
Selenium	µg/kg	930 J ^u	420 J ^u	430 J ^u	920 J ^u	310 J	550 J ^u
Silver	µg/kg	10000 J ^{ncu}	910 J	240 J	11 J	54 J	13 J
Thallium	µg/kg	120 J	62 J	67 J	1800 U	2000 U	80 J
Vanadium	µg/kg	34000 J	9400 J	16000 J	8000 J	10000 J	12000 J
Zinc	µg/kg	2100000 J ^u	180000 J ^u	190000 J ^u	12000 J	17000 J	29000 J
Polychlorinated Biphenyls (PCBs)							
Aroclor-1016 (PCB-1016)	µg/kg	370 U	360 U	360 U	360 U	350 U	350 U
Aroclor-1221 (PCB-1221)	µg/kg	370 U	360 U	360 U	360 U	350 U	350 U
Aroclor-1232 (PCB-1232)	µg/kg	370 U	360 U	360 U	360 U	350 U	350 U
Aroclor-1242 (PCB-1242)	µg/kg	370 U	360 U	360 U	360 U	350 U	350 U
Aroclor-1248 (PCB-1248)	µg/kg	370 U	360 U	360 U	360 U	350 U	350 U
Aroclor-1254 (PCB-1254)	µg/kg	370 U	360 U	360 U	360 U	350 U	350 U
Aroclor-1260 (PCB-1260)	µg/kg	370 U	360 U	360 U	360 U	350 U	350 U
Total PCBs	µg/kg	ND	ND	ND	ND	ND	ND

TABLE 3

**SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI**

Sample Location		SB244-13	SB244-13	SB244-13	SB244-13	SB245-13	SB245-13	SB245-13
Sample Identification		SO-17360-042413-DR-075	SO-17360-042413-DR-076	SO-17360-042413-DR-077	SO-17360-042413-DR-078	SO-17360-042413-DR-079	SO-17360-042413-DR-080	SO-17360-042413-DR-081
Sample Date		4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth		(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS
Sample Type		Duplicate						
Polycyclic Aromatic Hydrocarbons (PAHs)								
2-Methylnaphthalene	µg/kg	93 U	87 U	46 J	91 U	85 U	7100 J ^u	5900 J ^u
Acenaphthene	µg/kg	21 J	33 U	33 U	34 U	32 U	2000 J	3300 U
Acenaphthylene	µg/kg	35 U	33 U	33 U	34 U	32 U	3200 U	3300 U
Anthracene	µg/kg	55	33 U	150	34 U	250	44000 ^{mc}	36000
Benzo(a)anthracene	µg/kg	1400 J	57 J	430	34 U	1400	69000 ^p	58000 ^p
Benzo(a)pyrene	µg/kg	1800 J	69 J	320	34 U	1500	61000 ^{mc}	50000 ^{mc}
Benzo(b)fluoranthene	µg/kg	3000 J	160 J	430	34 U	1600	53000 ^p	46000 ^p
Benzo(g,h,i)perylene	µg/kg	2200 J	170 J	270	34 U	910	27000	22000
Benzo(k)fluoranthene	µg/kg	2000 J	85 J	360	34 U	1200	51000	37000
Chrysene	µg/kg	2600 J	120 J	470	34 U	1700	66000	53000
Dibenz(a,h)anthracene	µg/kg	730 J	51 J	80	34 U	290	10000 ^{mc}	8500 ^{mc}
Fluoranthene	µg/kg	1900 J	96 J	1300	34 U	2800	130000 ^u	110000 ^u
Fluorene	µg/kg	35 U	33 U	95	34 U	90	25000 ^u	21000 ^u
Indeno(1,2,3-cd)pyrene	µg/kg	1700 J	150 J	220	34 U	790	27000 ^p	22000 ^p
Naphthalene	µg/kg	80	33 U	58	34 U	62	29000 ^u	24000 ^u
Phenanthrene	µg/kg	1100 J	59 J	1400	34 U	1700	130000 ^{mc}	110000 ^{mc}
Pyrene	µg/kg	1900 J	100 J	1400	34 U	3200	140000	110000
Volatile Organic Compounds (VOCs)								
1,1,1-Trichloroethane	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
1,1,2,2-Tetrachloroethane	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
1,1,2-Trichloroethane	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
1,1-Dichloroethane	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
1,1-Dichloroethene	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
1,2,4-Trichlorobenzene	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
1,2-Dibromoethane ⁽⁴⁾	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
1,2-Dichlorobenzene	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
1,2-Dichloroethane	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
1,2-Dichloropropane	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
1,3-Dichlorobenzene	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
1,4-Dichlorobenzene	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
2-Butanone ⁽⁵⁾	µg/kg	240 U	240 U	220 U	230 U	220 U	280 U	270 U
2-Hexanone	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
Acetone	µg/kg	120 U	120 U	110 U	120 U	110 U	140 U	130 U
Benzene	µg/kg	36 U	36 U	33 U	35 U	32 U	84	40 U
Bromodichloromethane	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
Bromoform	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U
Bromomethane (Methyl bromide)	µg/kg	90 U	91 U	83 U	88 U	81 U	110 U	99 U
Carbon disulfide	µg/kg	36 U	36 U	33 U	35 U	32 U	42 U	40 U

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB244-13	SB244-13	SB244-13	SB244-13	SB245-13	SB245-13	SB245-13
Sample Identification	SO-17360-042413-DR-075	SO-17360-042413-DR-076	SO-17360-042413-DR-077	SO-17360-042413-DR-078	SO-17360-042413-DR-079	SO-17360-042413-DR-080	SO-17360-042413-DR-081
Sample Date	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013	4/24/2013
Sample Depth	(2-4) ft BGS	(4-6) ft BGS	(6-8) ft BGS	(8-10) ft BGS	(0-2) ft BGS	(2-4) ft BGS	(4-6) ft BGS
Sample Type	Duplicate						
<i>VOCs (continued)</i>							
Carbon tetrachloride	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Chlorobenzene	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Chloroethane	µg/kg	120 U	120 U	110 U	110 U	140 U	130 U
Chloroform (Trichloromethane)	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Chloromethane (Methyl chloride)	µg/kg	120 U	120 U	110 U	110 U	140 U	130 U
cis-1,2-Dichloroethene	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
cis-1,3-Dichloropropene	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Cyclohexane	µg/kg	36 U	36 U	33 U	32 U	440	65
Dibromochloromethane	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Dichlorodifluoromethane (CFC-12)	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Ethylbenzene	µg/kg	36 U	36 U	33 U	32 U	230	28 J
Isopropyl benzene	µg/kg	36 U	36 U	33 U	32 U	230	24 J
Methyl acetate	µg/kg	240 U	240 U	220 U	110 J	140 J	270 U
Methyl cyclohexane	µg/kg	36 U	36 U	69	32 U	1500	210
Methyl tert butyl ether (MTBE)	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Methylene chloride	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Styrene	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Tetrachloroethene	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Toluene	µg/kg	36 U	23 J	25 J	56	650	100
trans-1,2-Dichloroethene	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
trans-1,3-Dichloropropene	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Trichloroethene	µg/kg	7500 ^{PCUG}	1900 ^{PCU}	2000 ^{PCUG}	230 ^{PC}	2900 ^{PCUG}	830 ^{PC}
Trichlorofluoromethane (CFC-11)	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Trifluorotrichloroethane (Freon 113)	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Vinyl chloride	µg/kg	36 U	36 U	33 U	32 U	42 U	40 U
Xylenes (total)	µg/kg	110 U	110 U	69 J	97 U	1700 ^{PC}	210

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	SB245-13	SB245-13
Sample Identification	SO-17360-042413-DR-082	SO-17360-042413-DR-083
Sample Date	4/24/2013	4/24/2013
Sample Depth	(6-8) ft BGS	(8-10) ft BGS
Sample Type		

<i>Metals</i>	<i>Units</i>		
Antimony	µg/kg	280 J	62 J
Arsenic	µg/kg	8300 ^{ecap}	1000 J
Barium	µg/kg	33000	36000
Beryllium	µg/kg	280 J	150 J
Cadmium	µg/kg	100 J	110 J
Chromium	µg/kg	4300 J	3900 J
Chromium III (trivalent)	µg/kg	-	-
Chromium VI (hexavalent)	µg/kg	-	-
Cobalt	µg/kg	2400	2100 J
Copper	µg/kg	8100 J	2800 U
Iron	µg/kg	4500000	4100000
Lead	µg/kg	7400 J	4700 J
Lead - coarse fraction	µg/kg	-	-
Lead - fine fraction	µg/kg	-	-
Lead - total (calculated by fine/coarse fraction)	µg/kg	-	-
Manganese	µg/kg	120000	430000
Mercury	µg/kg	8.8 J	10 J
Molybdenum	µg/kg	2000 U	2100 U
Nickel	µg/kg	6000 J	3200 J
Selenium	µg/kg	380 J	700 J ^a
Silver	µg/kg	14 J	2100 U
Thallium	µg/kg	190 J	2100 U
Vanadium	µg/kg	7300 J	6600 J
Zinc	µg/kg	13000 J	12000 J

Polychlorinated Biphenyls (PCBs)

Aroclor-1016 (PCB-1016)	µg/kg	360 U	380 U
Aroclor-1221 (PCB-1221)	µg/kg	360 U	380 U
Aroclor-1232 (PCB-1232)	µg/kg	360 U	380 U
Aroclor-1242 (PCB-1242)	µg/kg	360 U	380 U
Aroclor-1248 (PCB-1248)	µg/kg	360 U	380 U
Aroclor-1254 (PCB-1254)	µg/kg	360 U	380 U
Aroclor-1260 (PCB-1260)	µg/kg	360 U	380 U
Total PCBs	µg/kg	ND	ND

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	<i>SB245-13</i>	<i>SB245-13</i>
Sample Identification	<i>SO-17360-042413-DR-082</i>	<i>SO-17360-042413-DR-083</i>
Sample Date	<i>4/24/2013</i>	<i>4/24/2013</i>
Sample Depth	<i>(6-8) ft BGS</i>	<i>(8-10) ft BGS</i>
Sample Type		

Polycyclic Aromatic Hydrocarbons (PAHs)

2-Methylnaphthalene	µg/kg	32 J	95 U
Acenaphthene	µg/kg	33 U	36 U
Acenaphthylene	µg/kg	33 U	36 U
Anthracene	µg/kg	470	36 U
Benzo(a)anthracene	µg/kg	1300	36 U
Benzo(a)pyrene	µg/kg	1300	36 U
Benzo(b)fluoranthene	µg/kg	1300	36 U
Benzo(g,h,i)perylene	µg/kg	870	36 U
Benzo(k)fluoranthene	µg/kg	980	36 U
Chrysene	µg/kg	1600	36 U
Dibenz(a,h)anthracene	µg/kg	240	36 U
Fluoranthene	µg/kg	2700	36 U
Fluorene	µg/kg	270	36 U
Indeno(1,2,3-cd)pyrene	µg/kg	630	36 U
Naphthalene	µg/kg	120	36 U
Phenanthrene	µg/kg	2800*	36 U
Pyrene	µg/kg	3200	36 U

Volatile Organic Compounds (VOCs)

1,1,1-Trichloroethane	µg/kg	48 U	38 U
1,1,2,2-Tetrachloroethane	µg/kg	48 U	38 U
1,1,2-Trichloroethane	µg/kg	48 U	38 U
1,1-Dichloroethane	µg/kg	48 U	38 U
1,1-Dichloroethene	µg/kg	48 U	38 U
1,2,4-Trichlorobenzene	µg/kg	48 U	38 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	48 U	38 U
1,2-Dibromoethane ⁽⁴⁾	µg/kg	48 U	38 U
1,2-Dichlorobenzene	µg/kg	48 U	38 U
1,2-Dichloroethane	µg/kg	48 U	38 U
1,2-Dichloropropane	µg/kg	48 U	38 U
1,3-Dichlorobenzene	µg/kg	48 U	38 U
1,4-Dichlorobenzene	µg/kg	48 U	38 U
2-Butanone ⁽⁵⁾	µg/kg	320 U	250 U
2-Hexanone	µg/kg	48 U	38 U
4-Methyl-2-pentanone ⁽⁶⁾	µg/kg	48 U	38 U
Acetone	µg/kg	160 U	130 U
Benzene	µg/kg	48 U	38 U
Bromodichloromethane	µg/kg	48 U	38 U
Bromoform	µg/kg	48 U	38 U
Bromomethane (Methyl bromide)	µg/kg	120 U	95 U
Carbon disulfide	µg/kg	48 U	38 U

TABLE 3

SUMMARY OF ANALYTICAL RESULTS FOR SOIL SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MI

Sample Location	<i>SB245-13</i>	<i>SB245-13</i>
Sample Identification	<i>SO-17360-042413-DR-082</i>	<i>SO-17360-042413-DR-083</i>
Sample Date	<i>4/24/2013</i>	<i>4/24/2013</i>
Sample Depth	<i>(6-8) ft BGS</i>	<i>(8-10) ft BGS</i>
Sample Type		

VOCs (*continued*)

Carbon tetrachloride	µg/kg	48 U	38 U
Chlorobenzene	µg/kg	48 U	38 U
Chloroethane	µg/kg	160 U	130 U
Chloroform (Trichloromethane)	µg/kg	48 U	38 U
Chloromethane (Methyl chloride)	µg/kg	160 U	130 U
cis-1,2-Dichloroethene	µg/kg	48 U	38 U
cis-1,3-Dichloropropene	µg/kg	48 U	38 U
Cyclohexane	µg/kg	48 U	38 U
Dibromochloromethane	µg/kg	48 U	38 U
Dichlorodifluoromethane (CFC-12)	µg/kg	48 U	38 U
Ethylbenzene	µg/kg	48 U	38 U
Isopropyl benzene	µg/kg	48 U	38 U
Methyl acetate	µg/kg	320 U	250 U
Methyl cyclohexane	µg/kg	48 U	38 U
Methyl tert butyl ether (MTBE)	µg/kg	48 U	38 U
Methylene chloride	µg/kg	48 U	38 U
Styrene	µg/kg	48 U	38 U
Tetrachloroethene	µg/kg	48 U	38 U
Toluene	µg/kg	29 J	38 U
trans-1,2-Dichloroethene	µg/kg	48 U	38 U
trans-1,3-Dichloropropene	µg/kg	48 U	38 U
Trichloroethene	µg/kg	180 ^{nc}	38 U
Trichlorofluoromethane (CFC-11)	µg/kg	48 U	38 U
Trifluorotrichloroethane (Freon 113)	µg/kg	48 U	38 U
Vinyl chloride	µg/kg	48 U	38 U
Xylenes (total)	µg/kg	150 U	110 U

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Michigan Act 451, Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels: Residential and Non-Residential Generic Cleanup Criteria ⁽¹⁾

		Residential Drinking Water a	Non-Residential Drinking Water b	Groundwater Surface Water Interface ⁽²⁾ c	Residential Groundwater Volatilization to Indoor Air Inhalation d	Non-Residential Groundwater Volatilization to Indoor Air Inhalation e	Groundwater Contact f	Water Solubility g	Flammability and Explosivity Screening Levels h	Acute Inhalation Screening Levels i
<i>Volatile Organic Compounds (VOCs)</i>	<i>Units</i>									
1,1,1-Trichloroethane	µg/L	200	200	89	660000	1300000	1300000	1330000	ID	1300000
1,1,2,2-Tetrachloroethane	µg/L	8.5	35	78	12000	77000	4700	2970000	ID	ID
1,1,2-Trichloroethane	µg/L	5	5	330	17000	110000	21000	4420000	NA	ID
1,1-Dichloroethane	µg/L	880	2500	740	1000000	2300000	2400000	5060000	380000	ID
1,1-Dichloroethene	µg/L	7	7	130	200	1300	11000	2250000	97000	140000
1,2,4-Trichlorobenzene	µg/L	70	70	99	300000	300000	19000	300000	NA	300000
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	0.2	0.2	NA	220	1200	390	1230	NA	ID
1,2-Dibromoethane ⁽³⁾	µg/L	0.05	0.05	5.7	2400	15000	25	4200000	ID	ID
1,2-Dichlorobenzene	µg/L	600	600	13	160000	160000	160000	156000	NA	160000
1,2-Dichloroethane	µg/L	5	5	360	9600	59000	19000	8520000	2500000	ID
1,2-Dichloropropane	µg/L	5	5	230	16000	36000	16000	2800000	550000	2800000
1,3-Dichlorobenzene	µg/L	6.6	19	28	18000	41000	2000	111000	ID	ID
1,4-Dichlorobenzene	µg/L	75	75	17	16000	74000	6400	73800	NA	ID
2-Butanone ⁽⁴⁾	µg/L	13000	38000	2200	240000000	240000000	240000000	240000000	ID	240000000
2-Hexanone	µg/L	1000	2900	ID	4200000	8700000	5200000	16000000	NA	ID
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	1800	5200	ID	20000000	20000000	13000000	20000000	ID	20000000
Acetone	µg/L	730	2100	1700	1000000000	1000000000	31000000	1000000000	15000000	1000000000
Benzene	µg/L	5	5	200	5600	35000	11000	1750000	68000	67000
Bromodichloromethane	µg/L	80	80	ID	4800	37000	14000	6740000	ID	ID
Bromoform	µg/L	80	80	ID	470000	3100000	140000	3100000	ID	ID
Bromomethane (Methyl bromide)	µg/L	10	29	35	4000	9000	70000	14500000	ID	ID
Carbon disulfide	µg/L	800	2300	ID	250000	550000	1200000	1190000	13000	ID
Carbon tetrachloride	µg/L	5	5	45	370	2400	4600	793000	ID	96000
Chlorobenzene	µg/L	100	100	25	210000	470000	86000	472000	160000	ID
Chloroethane	µg/L	430	1700	1100	5700000	5700000	440000	5740000	110000	ID
Chloroform (Trichloromethane)	µg/L	80	80	350	28000	180000	150000	7920000	ID	ID
Chloromethane (Methyl chloride)	µg/L	260	1100	ID	8600	45000	490000	6340000	36000	210000
cis-1,2-Dichloroethene	µg/L	70	70	620	93000	210000	200000	3500000	530000	ID
cis-1,3-Dichloropropene	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	µg/L	80	80	ID	14000	110000	18000	2600000	ID	ID
Dichlorodifluoromethane (CFC-12)	µg/L	1700	4800	ID	220000	300000	300000	300000	ID	ID
Ethylbenzene	µg/L	74	74	18	110000	170000	170000	169000	43000	170000
Isopropyl benzene	µg/L	800	2300	28	56000	56000	56000	56000	29000	ID
Methyl acetate	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl cyclohexane	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert butyl ether (MTBE)	µg/L	40	40	7100	47000000	47000000	610000	46800000	ID	ID
Methylene chloride	µg/L	5	5	1500	220000	1400000	220000	17000000	ID	ID
Styrene	µg/L	100	100	80	170000	310000	9700	310000	140000	310000

TABLE 4

**SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

Michigan Act 451, Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels: Residential and Non-Residential Generic Cleanup Criteria ⁽¹⁾

	Residential Drinking Water a	Non-Residential Drinking Water b	Groundwater Surface Water Interface ⁽²⁾ c	Residential Groundwater Volatilization to Indoor Air Inhalation d	Non-Residential Groundwater Volatilization to Indoor Air Inhalation e	Groundwater Contact f	Water Solubility g	Flammability and Explosivity Screening Levels h	Acute Inhalation Screening Levels i
<i>VOCs (continued)</i>									
Tetrachloroethene	µg/L 5	5	60	25000	170000	12000	200000	ID	200000
Toluene	µg/L 790	790	270	530000	530000	530000	526000	61000	ID
trans-1,2-Dichloroethene	µg/L 100	100	1500	85000	200000	220000	6300000	230000	ID
trans-1,3-Dichloropropene	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	µg/L 5	5	200	2200	4900	22000	1100000	ID	1100000
Trichlorofluoromethane (CFC-11)	µg/L 2600	7300	NA	1100000	1100000	1100000	1100000	ID	1100000
Trifluorotrichloroethane (Freon 113)	µg/L 170000	170000	32	170000	170000	170000	170000	ID	170000
Vinyl chloride	µg/L 2	2	13	1100	13000	1000	2760000	33000	ID
Xylenes (total)	µg/L 280	280	41	190000	190000	190000	186000	70000	190000
<i>Semi-Volatile Organic Compounds (SVOCs)</i>									
2,2'-Oxybis(1-chloropropane) ⁽⁶⁾	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	µg/L 730	2100	NA	NLV	NLV	170000	1200000	ID	ID
2,4,6-Trichlorophenol	µg/L 120	470	5	NLV	NLV	10000	800000	ID	ID
2,4-Dichlorophenol	µg/L 73	210	11	NLV	NLV	48000	4500000	ID	ID
2,4-Dimethylphenol	µg/L 370	1000	380	NLV	NLV	520000	7870000	ID	ID
2,4-Dinitrophenol	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	µg/L 7.7	32	NA	NLV	NLV	8600	270000	ID	ID
2,6-Dinitrotoluene	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	µg/L 1800	5200	NA	ID	ID	6700	6740	ID	ID
2-Chlorophenol	µg/L 45	130	18	ID	ID	94000	22000000	ID	ID
2-Methylnaphthalene	µg/L 260	750	19	25000	25000	25000	24600	ID	ID
2-Methylphenol	µg/L 370	1000	30	NLV	NLV	810000	28000000	NA	ID
2-Nitroaniline	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	µg/L 20	58	ID	NLV	NLV	79000	2500000	ID	ID
3,3'-Dichlorobenzidine	µg/L 1.1	4.3	0.3	NLV	NLV	180	3110	ID	ID
3-Nitroaniline	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	µg/L 20	20	NA	NLV	NLV	9500	200000	ID	ID
4-Bromophenyl phenyl ether	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	µg/L 150	420	7.4	NLV	NLV	79000	3900000	ID	ID
4-Chloroaniline	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Methylphenol	µg/L 370	1000	30	NLV	NLV	810000	28000000	NA	ID
4-Nitroaniline	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	µg/L 1300	3800	38	4200	4200	4200	4240	ID	ID
Acenaphthylene	µg/L 52	150	ID	3900	3900	3900	3930	ID	ID
Acetophenone	µg/L 1500	4400	NA	6100000	6100000	6100000	6100000	ID	ID
Anthracene	µg/L 43	43	ID	43	43	43	43.4	ID	ID

TABLE 4

**SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

Michigan Act 451, Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels: Residential and Non-Residential Generic Cleanup Criteria ⁽¹⁾

	Residential Drinking Water a	Non-Residential Drinking Water b	Groundwater Surface Water Interface ⁽²⁾ c	Residential Groundwater Volatilization to Indoor Air Inhalation d	Non-Residential Groundwater Volatilization to Indoor Air Inhalation e	Groundwater Contact f	Water Solubility g	Flammability and Explosivity Screening Levels h	Acute Inhalation Screening Levels i
<i>SVOCs (continued)</i>									
Atrazine	µg/L 3	3	7.3	NLV	NLV	5400	70000	ID	ID
Benzaldehyde	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	µg/L 2.1	8.5	ID	NLV	NLV	9.4	9.4	ID	ID
Benzo(a)pyrene	µg/L 5	5	ID	NLV	NLV	1	1.62	ID	ID
Benzo(b)fluoranthene	µg/L 1.5	1.5	ID	ID	ID	1.5	1.5	ID	ID
Benzo(g,h,i)perylene	µg/L 1	1	NA	NLV	NLV	1	0.26	ID	ID
Benzo(k)fluoranthene	µg/L 1	1	NA	NLV	NLV	1	0.8	ID	ID
Biphenyl (1,1-Biphenyl)	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethoxy)methane	µg/L NA	NA	NA	NA	NA	NA	NA	NA	NA
bis(2-Chloroethyl)ether	µg/L 2	8.3	1	38000	210000	5700	17200000	17000000	17000000
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L 6	6	25	NLV	NLV	320	340	NA	340
Butyl benzylphthalate (BBP)	µg/L 1200	2700	67	NLV	NLV	2700	2690	ID	ID
Caprolactam	µg/L 5800	17000	NA	NLV	NLV	390000000	525000000	NA	1000000000
Carbazole	µg/L 85	350	10	NLV	NLV	7400	7480	ID	ID
Chrysene	µg/L 1.6	1.6	ID	ID	ID	1.6	1.6	ID	ID
Dibenz(a,h)anthracene	µg/L 2	2	ID	NLV	NLV	2	2.49	ID	ID
Dibenzofuran	µg/L ID	ID	4	10000	10000	ID	10000	ID	ID
Diethyl phthalate	µg/L 5500	16000	110	NLV	NLV	1100000	1080000	NA	ID
Dimethyl phthalate	µg/L 73000	210000	NA	NLV	NLV	4200000	4190000	NA	ID
Di-n-butylphthalate (DBP)	µg/L 880	2500	9.7	NLV	NLV	11000	11200	NA	ID
Di-n-octyl phthalate (DnOP)	µg/L 130	380	ID	NLV	NLV	400	3000	ID	ID
Fluoranthene	µg/L 210	210	1.6	210	210	210	206	ID	ID
Fluorene	µg/L 880	2000	12	2000	2000	2000	1980	ID	ID
Hexachlorobenzene	µg/L 1	1	0.2	440	3000	4.6	6200	ID	ID
Hexachlorobutadiene	µg/L 15	42	0.053	1600	3200	400	3230	ID	ID
Hexachlorocyclopentadiene	µg/L 50	50	ID	130	420	1600	1800	ID	ID
Hexachloroethane	µg/L 7.3	21	6.7	27000	50000	1900	50000	ID	ID
Indeno(1,2,3-cd)pyrene	µg/L 2	2	ID	NLV	NLV	2	0.022	ID	ID
Isophorone	µg/L 770	3100	1300	NLV	NLV	990000	1200000	NA	1200000
Naphthalene	µg/L 520	1500	11	31000	31000	31000	31000	NA	31000
Nitrobenzene	µg/L 3.4	9.6	180	280000	550000	11000	2090000	NA	ID
N-Nitrosodi-n-propylamine	µg/L 5	5	NA	NLV	NLV	360	9890000	ID	ID
N-Nitrosodiphenylamine	µg/L 270	1100	NA	NLV	NLV	35000	35100	ID	ID
Pentachlorophenol	µg/L 1	1	1.8	NLV	NLV	200	1850000	ID	ID
Phenanthrene	µg/L 52	150	2	1000	1000	1000	1000	ID	ID
Phenol	µg/L 4400	13000	450	NLV	NLV	29000000	82800000	NA	ID
Pyrene	µg/L 140	140	ID	140	140	140	135	ID	ID

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Michigan Act 451, Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels: Residential and Non-Residential Generic Cleanup Criteria ⁽¹⁾

		Residential Drinking Water a	Non-Residential Drinking Water b	Groundwater Surface Water Interface ⁽²⁾ c	Residential Groundwater Volatilization to Indoor Air Inhalation d	Non-Residential Groundwater Volatilization to Indoor Air Inhalation e	Groundwater Contact f	Water Solubility g	Flammability and Explosivity Screening Levels h	Acute Inhalation Screening Levels i
Metals										
Antimony	µg/L	6	6	130	NLV	NLV	68000	NA	ID	ID
Arsenic	µg/L	10	10	10	NLV	NLV	4300	NA	ID	ID
Barium	µg/L	2000	2000	670	NLV	NLV	14000000	NA	ID	ID
Beryllium	µg/L	4	4	6.7	NLV	NLV	290000	NA	ID	ID
Cadmium	µg/L	5	5	2.5	NLV	NLV	190000	NA	ID	ID
Chromium	µg/L	100	100	11	NLV	NLV	460000	NA	ID	ID
Chromium III (trivalent)	µg/L	100	100	100	NLV	NLV	290000000	NA	ID	ID
Chromium VI (hexavalent)	µg/L	100	100	11	NLV	NLV	460000	NA	ID	ID
Cobalt	µg/L	40	100	100	NLV	NLV	2400000	NA	ID	ID
Copper	µg/L	1000	1000	13	NLV	NLV	7400000	NA	ID	ID
Lead	µg/L	4	4	14	NLV	NLV	ID	NA	ID	ID
Manganese	µg/L	50	50	1300	NLV	NLV	9100000	NA	ID	ID
Mercury	µg/L	2	2	0.0013	56	56	56	56	ID	ID
Molybdenum	µg/L	73	210	3200	NLV	NLV	970000	NA	ID	ID
Nickel	µg/L	100	100	73	NLV	NLV	74000000	NA	ID	ID
Selenium	µg/L	50	50	5	NLV	NLV	970000	NA	ID	ID
Silver	µg/L	34	98	0.2	NLV	NLV	1500000	NA	ID	ID
Thallium	µg/L	2	2	3.7	NLV	NLV	13000	NA	ID	ID
Vanadium	µg/L	4.5	62	27	NLV	NLV	970000	NA	ID	ID
Zinc	µg/L	2400	5000	170	NLV	NLV	110000000	NA	ID	ID

Notes:

⁽¹⁾ Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 9/28/2012, pursuant to 1994 PA 451 as amended.

⁽²⁾ Carbonate Hardness of 344 mg/L was used to calculate Groundwater Surface Water Interface Criteria.

⁽³⁾ 1,2-Dibromoethane also known as ethylene dibromide

⁽⁴⁾ 2-butanone also known as methyl ethyl ketone (MEK)

⁽⁵⁾ 4-methyl-2-pentanone also known as methyl isobutyl ketone (MIBK)

⁽⁶⁾ 2,2'-oxybis(1-chloropropane) also known as bis(2-chloroisopropyl) ether

-- Parameter was not analyzed.

U - Not present at or above the associated value.

J - Estimated concentration.

UJ - Estimated reporting limit.

ID - Insufficient data to develop criterion.

NA - A criterion or value is not available or, in the case of background and CAS numbers, not applicable.

NLL - Hazardous substance is not likely to leach under most soil conditions.

NLV - Hazardous substance is not likely to volatilize under most conditions.

 Exceeds Generic Cleanup Criteria. Superscript letter notes the criterion exceeded.

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	85-1	85-2	85-6	85-7	86-3	87-8
Sample Identification	WG-17360-050713-EB-058	WG-17360-050613-EB-040	GW-17360-050713-BW-053	WG-17360-050613-EB-042	WG-17360-050113-MR-018	WG-17360-043013-MR-005
Sample Date	5/7/2013	5/6/2013	5/7/2013	5/6/2013	5/1/2013	4/30/2013
Sample Type						
Screen Depth	15.5-20.5 ft BGS	13.5-18.5 ft BGS	19.5-24.5 ft BGS	20.6-25.6 ft BGS	41.5-46.5 ft BGS	19.7-22.7 ft BGS
Volatile Organic Compounds (VOCs)		Units				
1,1,1-Trichloroethane	µg/L	1.0 U	3.8	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	2.0	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone ⁽⁴⁾	µg/L	25 U	25 U	25 U	25 U	25 U
2-Hexanone	µg/L	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	50 U	50 U	50 U	50 U	50 U
Acetone	µg/L	50 U	50 U	50 U	50 U	50 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.2	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	1.2	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	85-1	85-2	85-6	85-7	86-3	87-8
Sample Identification	WG-17360-050713-EB-058	WG-17360-050613-EB-040	GW-17360-050713-BW-053	WG-17360-050613-EB-042	WG-17360-050113-MR-018	WG-17360-043013-MR-005
Sample Date	5/7/2013	5/6/2013	5/7/2013	5/6/2013	5/1/2013	4/30/2013
Sample Type						
Screen Depth	15.5-20.5 ft BGS	13.5-18.5 ft BGS	19.5-24.5 ft BGS	20.6-25.6 ft BGS	41.5-46.5 ft BGS	19.7-22.7 ft BGS

VOCs (continued)

Tetrachloroethene	µg/L	1.0 U	1.0 U	5.2 ^{ab}	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	7.9 ^{ab}	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	1.5 J	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Semi-Volatile Organic Compounds (SVOCs)

2,2'-Oxybis(1-chloropropane) ⁽⁶⁾	µg/L	-	-	5.0 U	-	-	-
2,4,5-Trichlorophenol	µg/L	-	-	5.0 U	-	-	-
2,4,6-Trichlorophenol	µg/L	-	-	4.0 U	-	-	-
2,4-Dichlorophenol	µg/L	-	-	10 U	-	-	-
2,4-Dimethylphenol	µg/L	-	-	5.0 U	-	-	-
2,4-Dinitrophenol	µg/L	-	-	5.0 U	-	-	-
2,4-Dinitrotoluene	µg/L	-	-	5.0 U	-	-	-
2,6-Dinitrotoluene	µg/L	-	-	5.0 U	-	-	-
2-Chloronaphthalene	µg/L	-	-	5.0 U	-	-	-
2-Chlorophenol	µg/L	-	-	5.0 U	-	-	-
2-Methylnaphthalene	µg/L	-	-	5.0 U	-	-	-
2-Methylphenol	µg/L	-	-	5.0 U	-	-	-
2-Nitroaniline	µg/L	-	-	20 U	-	-	-
2-Nitrophenol	µg/L	-	-	5.0 U	-	-	-
3,3'-Dichlorobenzidine	µg/L	-	-	1.0 U	-	-	-
3-Nitroaniline	µg/L	-	-	20 U	-	-	-
4,6-Dinitro-2-methylphenol	µg/L	-	-	20 U	-	-	-
4-Bromophenyl phenyl ether	µg/L	-	-	5.0 U	-	-	-
4-Chloro-3-methylphenol	µg/L	-	-	5.0 U	-	-	-
4-Chloroaniline	µg/L	-	-	10 U	-	-	-
4-Chlorophenyl phenyl ether	µg/L	-	-	5.0 U	-	-	-
4-Methylphenol	µg/L	-	-	5.0 U	-	-	-
4-Nitroaniline	µg/L	-	-	20 U	-	-	-
4-Nitrophenol	µg/L	-	-	20 U	-	-	-
Acenaphthene	µg/L	-	-	5.0 U	-	-	-
Acenaphthylene	µg/L	-	-	5.0 U	-	-	-
Acetophenone	µg/L	-	-	1.0 U	-	-	-
Anthracene	µg/L	-	-	5.0 U	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	85-1	85-2	85-6	85-7	86-3	87-8
Sample Identification	WG-17360-050713-EB-058	WG-17360-050613-EB-040	GW-17360-050713-BW-053	WG-17360-050613-EB-042	WG-17360-050113-MR-018	WG-17360-043013-MR-005
Sample Date	5/7/2013	5/6/2013	5/7/2013	5/6/2013	5/1/2013	4/30/2013
Sample Type						
Screen Depth	15.5-20.5 ft BGS	13.5-18.5 ft BGS	19.5-24.5 ft BGS	20.6-25.6 ft BGS	41.5-46.5 ft BGS	19.7-22.7 ft BGS

SVOCs (continued)

Atrazine	µg/L	-	-	3.0 U	-	-	-
Benzaldehyde	µg/L	-	-	1.0 U	-	-	-
Benzo(a)anthracene	µg/L	-	-	1.0 U	-	-	-
Benzo(a)pyrene	µg/L	-	-	1.0 U	-	-	-
Benzo(b)fluoranthene	µg/L	-	-	1.0 U	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	1.0 U	-	-	-
<i>SVOCs continued</i>							
Benzo(k)fluoranthene	µg/L	-	-	1.0 U	-	-	-
Biphenyl (1,1-Biphenyl)	µg/L	-	-	5.0 U	-	-	-
bis(2-Chloroethoxy)methane	µg/L	-	-	5.0 U	-	-	-
bis(2-Chloroethyl)ether	µg/L	-	-	1.0 U	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	-	-	5.0 U	-	-	-
Butyl benzylphthalate (BBP)	µg/L	-	-	5.0 U	-	-	-
Caprolactam	µg/L	-	-	10 U	-	-	-
Carbazole	µg/L	-	-	10 U	-	-	-
Chrysene	µg/L	-	-	1.0 U	-	-	-
Dibenz(a,h)anthracene	µg/L	-	-	2.0 U	-	-	-
Dibenzofuran	µg/L	-	-	4.0 U	-	-	-
Diethyl phthalate	µg/L	-	-	5.0 U	-	-	-
Dimethyl phthalate	µg/L	-	-	5.0 U	-	-	-
Di-n-butylphthalate (DBP)	µg/L	-	-	5.0 U	-	-	-
Di-n-octyl phthalate (DnOP)	µg/L	-	-	5.0 U	-	-	-
Fluoranthene	µg/L	-	-	1.0 U	-	-	-
Fluorene	µg/L	-	-	5.0 U	-	-	-
Hexachlorobenzene	µg/L	-	-	1.0 U	-	-	-
Hexachlorobutadiene	µg/L	-	-	1.0 U	-	-	-
Hexachlorocyclopentadiene	µg/L	-	-	5.0 UJ	-	-	-
Hexachloroethane	µg/L	-	-	5.0 U	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	-	-	2.0 U	-	-	-
Isophorone	µg/L	-	-	5.0 U	-	-	-
Naphthalene	µg/L	-	-	5.0 U	-	-	-
Nitrobenzene	µg/L	-	-	3.0 U	-	-	-
N-Nitrosodi-n-propylamine	µg/L	-	-	5.0 U	-	-	-
N-Nitrosodiphenylamine	µg/L	-	-	5.0 U	-	-	-
Pentachlorophenol	µg/L	-	-	1.0 U	-	-	-
Phenanthrene	µg/L	-	-	2.0 U	-	-	-
Phenol	µg/L	-	-	5.0 U	-	-	-
Pyrene	µg/L	-	-	5.0 U	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	85-1	85-2	85-6	85-7	86-3	87-8
Sample Identification	WG-17360-050713-EB-058	WG-17360-050613-EB-040	GW-17360-050713-BW-053	WG-17360-050613-EB-042	WG-17360-050113-MR-018	WG-17360-043013-MR-005
Sample Date	5/7/2013	5/6/2013	5/7/2013	5/6/2013	5/1/2013	4/30/2013
Sample Type						
Screen Depth	15.5-20.5 ft BGS	13.5-18.5 ft BGS	19.5-24.5 ft BGS	20.6-25.6 ft BGS	41.5-46.5 ft BGS	19.7-22.7 ft BGS

Metals

Antimony	µg/L	-	0.24 J	-	0.14 J	-	-
Arsenic	µg/L	-	0.92 J	-	0.63 J	-	-
Barium	µg/L	-	100	-	64	-	-
Beryllium	µg/L	-	2 U	-	2 U	-	-
Cadmium	µg/L	-	0.066 J	-	2 U	-	-
Chromium	µg/L	-	0.67 J	-	5 U	-	-
Chromium III (trivalent)	µg/L	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/L	-	-	-	-	-	-
Cobalt	µg/L	-	0.83 J	-	0.96 J	-	-
Copper	µg/L	-	1.6 J	-	0.62 J	-	-
Lead	µg/L	-	0.057 J	-	5 U	-	-
Manganese	µg/L	-	82 ^{ab}	-	0.6 J	-	-
Mercury	µg/L	-	0.2 U	-	0.2 U	-	-
Molybdenum	µg/L	-	6.7	-	0.69 J	-	-
Nickel	µg/L	-	2.7 J	-	1.6 J	-	-
Selenium	µg/L	-	1.1 J	-	0.72 J	-	-
Silver	µg/L	-	5 U	-	5 U	-	-
Thallium	µg/L	-	5 U	-	5 U	-	-
Vanadium	µg/L	-	1.4 J	-	5 U	-	-
Zinc	µg/L	-	260 ^c	-	110	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		87-9	87-9	87-10	87-11	87-13	88-2
Sample Identification		WG-17360-050113-MR-014	WG-17360-050113-MR-015	WG-17360-050113-MR-007	WG-17360-050113-MR-008	WG-17360-043013-MR-001	WG-17360-050213-MR-024
Sample Date		5/1/2013	5/1/2013	5/1/2013	5/1/2013	4/30/2013	5/2/2013
Sample Type		Duplicate					
Screen Depth		50.5-53.5 ft BGS	50.5-53.5 ft BGS	29-32 ft BGS	30-33 ft BGS	40-43 ft BGS	26-29 ft BGS
Volatile Organic Compounds (VOCs)		Units					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone ⁽⁴⁾	µg/L	25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	1.6	1.6	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	20	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 4

**SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

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Sample Location	87-9	87-9	87-10	87-11	87-13	88-2
Sample Identification	WG-17360-050113-MR-014	WG-17360-050113-MR-015	WG-17360-050113-MR-007	WG-17360-050113-MR-008	WG-17360-043013-MR-001	WG-17360-050213-MR-024
Sample Date	5/1/2013	5/1/2013	5/1/2013	5/1/2013	4/30/2013	5/2/2013
Sample Type	Duplicate					
Screen Depth	50.5-53.5 ft BGS	50.5-53.5 ft BGS	29-32 ft BGS	30-33 ft BGS	40-43 ft BGS	26-29 ft BGS

VOCs (continued)

Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	3.8	10 ^{nb}	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Semi-Volatile Organic Compounds (SVOCs)

2,2'-Oxybis(1-chloropropane) ⁽⁶⁾	µg/L	-	-	-	-	-
2,4,5-Trichlorophenol	µg/L	-	-	-	-	-
2,4,6-Trichlorophenol	µg/L	-	-	-	-	-
2,4-Dichlorophenol	µg/L	-	-	-	-	-
2,4-Dimethylphenol	µg/L	-	-	-	-	-
2,4-Dinitrophenol	µg/L	-	-	-	-	-
2,4-Dinitrotoluene	µg/L	-	-	-	-	-
2,6-Dinitrotoluene	µg/L	-	-	-	-	-
2-Chloronaphthalene	µg/L	-	-	-	-	-
2-Chlorophenol	µg/L	-	-	-	-	-
2-Methylnaphthalene	µg/L	-	-	-	-	-
2-Methylphenol	µg/L	-	-	-	-	-
2-Nitroaniline	µg/L	-	-	-	-	-
2-Nitrophenol	µg/L	-	-	-	-	-
3,3'-Dichlorobenzidine	µg/L	-	-	-	-	-
3-Nitroaniline	µg/L	-	-	-	-	-
4,6-Dinitro-2-methylphenol	µg/L	-	-	-	-	-
4-Bromophenyl phenyl ether	µg/L	-	-	-	-	-
4-Chloro-3-methylphenol	µg/L	-	-	-	-	-
4-Chloroaniline	µg/L	-	-	-	-	-
4-Chlorophenyl phenyl ether	µg/L	-	-	-	-	-
4-Methylphenol	µg/L	-	-	-	-	-
4-Nitroaniline	µg/L	-	-	-	-	-
4-Nitrophenol	µg/L	-	-	-	-	-
Acenaphthene	µg/L	-	-	-	-	-
Acenaphthylene	µg/L	-	-	-	-	-
Acetophenone	µg/L	-	-	-	-	-
Anthracene	µg/L	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	87-9	87-9	87-10	87-11	87-13	88-2
Sample Identification	WG-17360-050113-MR-014	WG-17360-050113-MR-015	WG-17360-050113-MR-007	WG-17360-050113-MR-008	WG-17360-043013-MR-001	WG-17360-050213-MR-024
Sample Date	5/1/2013	5/1/2013	5/1/2013	5/1/2013	4/30/2013	5/2/2013
Sample Type	Duplicate					
Screen Depth	50.5-53.5 ft BGS	50.5-53.5 ft BGS	29-32 ft BGS	30-33 ft BGS	40-43 ft BGS	26-29 ft BGS

SVOCs (continued)

Atrazine	µg/L	-	-	-	-	-
Benzaldehyde	µg/L	-	-	-	-	-
Benzo(a)anthracene	µg/L	-	-	-	-	-
Benzo(a)pyrene	µg/L	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-	-
SVOCs continued						
Benzo(k)fluoranthene	µg/L	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	µg/L	-	-	-	-	-
bis(2-Chloroethoxy)methane	µg/L	-	-	-	-	-
bis(2-Chloroethyl)ether	µg/L	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	-	-	-	-	-
Butyl benzylphthalate (BBP)	µg/L	-	-	-	-	-
Caprolactam	µg/L	-	-	-	-	-
Carbazole	µg/L	-	-	-	-	-
Chrysene	µg/L	-	-	-	-	-
Dibenz(a,h)anthracene	µg/L	-	-	-	-	-
Dibenzofuran	µg/L	-	-	-	-	-
Diethyl phthalate	µg/L	-	-	-	-	-
Dimethyl phthalate	µg/L	-	-	-	-	-
Di-n-butylphthalate (DBP)	µg/L	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	µg/L	-	-	-	-	-
Fluoranthene	µg/L	-	-	-	-	-
Fluorene	µg/L	-	-	-	-	-
Hexachlorobenzene	µg/L	-	-	-	-	-
Hexachlorobutadiene	µg/L	-	-	-	-	-
Hexachlorocyclopentadiene	µg/L	-	-	-	-	-
Hexachloroethane	µg/L	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	-	-	-	-	-
Isophorone	µg/L	-	-	-	-	-
Naphthalene	µg/L	-	-	-	-	-
Nitrobenzene	µg/L	-	-	-	-	-
N-Nitrosodi-n-propylamine	µg/L	-	-	-	-	-
N-Nitrosodiphenylamine	µg/L	-	-	-	-	-
Pentachlorophenol	µg/L	-	-	-	-	-
Phenanthrene	µg/L	-	-	-	-	-
Phenol	µg/L	-	-	-	-	-
Pyrene	µg/L	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
 SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
 FORMER GRAND RAPIDS METAL PLANT
 WYOMING, MICHIGAN

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Sample Location	87-9	87-9	87-10	87-11	87-13	88-2
Sample Identification	WG-17360-050113-MR-014	WG-17360-050113-MR-015	WG-17360-050113-MR-007	WG-17360-050113-MR-008	WG-17360-043013-MR-001	WG-17360-050213-MR-024
Sample Date	5/1/2013	5/1/2013	5/1/2013	5/1/2013	4/30/2013	5/2/2013
Sample Type	Duplicate					
Screen Depth	50.5-53.5 ft BGS	50.5-53.5 ft BGS	29-32 ft BGS	30-33 ft BGS	40-43 ft BGS	26-29 ft BGS

Metals

Antimony	µg/L	-	-	-	0.12 J	-	-
Arsenic	µg/L	-	-	-	5 U	-	-
Barium	µg/L	-	-	-	110	-	-
Beryllium	µg/L	-	-	-	2 U	-	-
Cadmium	µg/L	-	-	-	0.39 J	-	-
Chromium	µg/L	-	-	-	0.36 J	-	-
Chromium III (trivalent)	µg/L	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/L	-	-	-	-	-	-
Cobalt	µg/L	-	-	-	0.36 J	-	-
Copper	µg/L	-	-	-	5 U	-	-
Lead	µg/L	-	-	-	0.83 J	-	-
Manganese	µg/L	-	-	-	79 ^{ab}	-	-
Mercury	µg/L	-	-	-	0.2 U	-	-
Molybdenum	µg/L	-	-	-	0.6 J	-	-
Nickel	µg/L	-	-	-	2 J	-	-
Selenium	µg/L	-	-	-	5 U	-	-
Silver	µg/L	-	-	-	5 U	-	-
Thallium	µg/L	-	-	-	5 U	-	-
Vanadium	µg/L	-	-	-	5 U	-	-
Zinc	µg/L	-	-	-	380 ^c	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		88-2	88-3	88-4	MW1-03	MW2-03	MW4-03
Sample Identification		WG-17360-050213-MR-025	WG-17360-050213-MR-023	WG-17360-050213-MR-022	GW-17360-050713-BW-055	GW-17360-050713-BW-054	WG-17360-050113-MR-011
Sample Date		5/2/2013	5/2/2013	5/2/2013	5/7/2013	5/7/2013	5/1/2013
Sample Type		Duplicate					
Screen Depth		26-29 ft BGS	27-30 ft BGS	18-21 ft BGS	30-35 ft BGS	22-27 ft BGS	52-57 ft BGS
Volatile Organic Compounds (VOCs)							
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone ⁽⁴⁾	µg/L	25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	88-2	88-3	88-4	MW1-03	MW2-03	MW4-03
Sample Identification	WG-17360-050213-MR-025	WG-17360-050213-MR-023	WG-17360-050213-MR-022	GW-17360-050713-BW-055	GW-17360-050713-BW-054	WG-17360-050113-MR-011
Sample Date	5/2/2013	5/2/2013	5/2/2013	5/7/2013	5/7/2013	5/1/2013
Sample Type	Duplicate					
Screen Depth	26-29 ft BGS	27-30 ft BGS	18-21 ft BGS	30-35 ft BGS	22-27 ft BGS	52-57 ft BGS

VOCs (continued)

Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	140 ^{abc}	2.0	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Semi-Volatile Organic Compounds (SVOCs)

2,2'-Oxybis(1-chloropropane) ⁽⁶⁾	µg/L	-	-	-	-	-	-
2,4,5-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4,6-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dimethylphenol	µg/L	-	-	-	-	-	-
2,4-Dinitrophenol	µg/L	-	-	-	-	-	-
2,4-Dinitrotoluene	µg/L	-	-	-	-	-	-
2,6-Dinitrotoluene	µg/L	-	-	-	-	-	-
2-Chloronaphthalene	µg/L	-	-	-	-	-	-
2-Chlorophenol	µg/L	-	-	-	-	-	-
2-Methylnaphthalene	µg/L	-	-	-	-	-	-
2-Methylphenol	µg/L	-	-	-	-	-	-
2-Nitroaniline	µg/L	-	-	-	-	-	-
2-Nitrophenol	µg/L	-	-	-	-	-	-
3,3'-Dichlorobenzidine	µg/L	-	-	-	-	-	-
3-Nitroaniline	µg/L	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	µg/L	-	-	-	-	-	-
4-Bromophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Chloro-3-methylphenol	µg/L	-	-	-	-	-	-
4-Chloroaniline	µg/L	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Methylphenol	µg/L	-	-	-	-	-	-
4-Nitroaniline	µg/L	-	-	-	-	-	-
4-Nitrophenol	µg/L	-	-	-	-	-	-
Acenaphthene	µg/L	-	-	-	-	-	-
Acenaphthylene	µg/L	-	-	-	-	-	-
Acetophenone	µg/L	-	-	-	-	-	-
Anthracene	µg/L	-	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	88-2	88-3	88-4	MW1-03	MW2-03	MW4-03
Sample Identification	WG-17360-050213-MR-025	WG-17360-050213-MR-023	WG-17360-050213-MR-022	GW-17360-050713-BW-055	GW-17360-050713-BW-054	WG-17360-050113-MR-011
Sample Date	5/2/2013	5/2/2013	5/2/2013	5/7/2013	5/7/2013	5/1/2013
Sample Type	Duplicate					
Screen Depth	26-29 ft BGS	27-30 ft BGS	18-21 ft BGS	30-35 ft BGS	22-27 ft BGS	52-57 ft BGS

SVOCs (continued)

Atrazine	µg/L	-	-	-	-	-
Benzaldehyde	µg/L	-	-	-	-	-
Benzo(a)anthracene	µg/L	-	-	-	-	-
Benzo(a)pyrene	µg/L	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-	-
<i>SVOCs continued</i>						
Benzo(k)fluoranthene	µg/L	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	µg/L	-	-	-	-	-
bis(2-Chloroethoxy)methane	µg/L	-	-	-	-	-
bis(2-Chloroethyl)ether	µg/L	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	-	-	-	-	-
Butyl benzylphthalate (BBP)	µg/L	-	-	-	-	-
Caprolactam	µg/L	-	-	-	-	-
Carbazole	µg/L	-	-	-	-	-
Chrysene	µg/L	-	-	-	-	-
Dibenz(a,h)anthracene	µg/L	-	-	-	-	-
Dibenzofuran	µg/L	-	-	-	-	-
Diethyl phthalate	µg/L	-	-	-	-	-
Dimethyl phthalate	µg/L	-	-	-	-	-
Di-n-butylphthalate (DBP)	µg/L	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	µg/L	-	-	-	-	-
Fluoranthene	µg/L	-	-	-	-	-
Fluorene	µg/L	-	-	-	-	-
Hexachlorobenzene	µg/L	-	-	-	-	-
Hexachlorobutadiene	µg/L	-	-	-	-	-
Hexachlorocyclopentadiene	µg/L	-	-	-	-	-
Hexachloroethane	µg/L	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	-	-	-	-	-
Isophorone	µg/L	-	-	-	-	-
Naphthalene	µg/L	-	-	-	-	-
Nitrobenzene	µg/L	-	-	-	-	-
N-Nitrosodi-n-propylamine	µg/L	-	-	-	-	-
N-Nitrosodiphenylamine	µg/L	-	-	-	-	-
Pentachlorophenol	µg/L	-	-	-	-	-
Phenanthrene	µg/L	-	-	-	-	-
Phenol	µg/L	-	-	-	-	-
Pyrene	µg/L	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
 SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
 FORMER GRAND RAPIDS METAL PLANT
 WYOMING, MICHIGAN

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Sample Location	88-2	88-3	88-4	MW1-03	MW2-03	MW4-03
Sample Identification	WG-17360-050213-MR-025	WG-17360-050213-MR-023	WG-17360-050213-MR-022	GW-17360-050713-BW-055	GW-17360-050713-BW-054	WG-17360-050113-MR-011
Sample Date	5/2/2013	5/2/2013	5/2/2013	5/7/2013	5/7/2013	5/1/2013
Sample Type	Duplicate					
Screen Depth	26-29 ft BGS	27-30 ft BGS	18-21 ft BGS	30-35 ft BGS	22-27 ft BGS	52-57 ft BGS

Metals

Antimony	µg/L	-	-	-	-	-
Arsenic	µg/L	-	-	-	-	-
Barium	µg/L	-	-	-	-	-
Beryllium	µg/L	-	-	-	-	-
Cadmium	µg/L	-	-	-	-	-
Chromium	µg/L	-	-	-	-	-
Chromium III (trivalent)	µg/L	-	-	-	-	-
Chromium VI (hexavalent)	µg/L	-	-	-	-	-
Cobalt	µg/L	-	-	-	-	-
Copper	µg/L	-	-	-	-	-
Lead	µg/L	-	-	-	-	-
Manganese	µg/L	-	-	-	-	-
Mercury	µg/L	-	-	-	-	-
Molybdenum	µg/L	-	-	-	-	-
Nickel	µg/L	-	-	-	-	-
Selenium	µg/L	-	-	-	-	-
Silver	µg/L	-	-	-	-	-
Thallium	µg/L	-	-	-	-	-
Vanadium	µg/L	-	-	-	-	-
Zinc	µg/L	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		MW5-03	MW6-03	MW7-03	MW8-04	MW8-04	MW9-04
Sample Identification		WG-17360-050113-MR-006	WG-17360-043013-MR-002	WG-17360-050113-MR-016	WG-17360-043013-MR-003	WG-17360-043013-MR-004	WG-17360-050113-MR-010
Sample Date		5/1/2013	4/30/2013	5/1/2013	4/30/2013	4/30/2013	5/1/2013
Sample Type						Duplicate	
Screen Depth		30-35 ft BGS	13-18 ft BGS	36-41 ft BGS	30-35 ft BGS	30-35 ft BGS	43-48 ft BGS
Volatile Organic Compounds (VOCs)							
	Units						
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone ⁽⁴⁾	µg/L	25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	31	1.0 U	1.0 U	13	13	1.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		MW5-03	MW6-03	MW7-03	MW8-04	MW8-04	MW9-04
Sample Identification		WG-17360-050113-MR-006	WG-17360-043013-MR-002	WG-17360-050113-MR-016	WG-17360-043013-MR-003	WG-17360-043013-MR-004	WG-17360-050113-MR-010
Sample Date		5/1/2013	4/30/2013	5/1/2013	4/30/2013	4/30/2013	5/1/2013
Sample Type						Duplicate	
Screen Depth		30-35 ft BGS	13-18 ft BGS	36-41 ft BGS	30-35 ft BGS	30-35 ft BGS	43-48 ft BGS
<i>VOCs (continued)</i>							
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
<i>Semi-Volatile Organic Compounds (SVOCs)</i>							
2,2'-Oxybis(1-chloropropane) ⁽⁶⁾	µg/L	-	-	-	-	-	-
2,4,5-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4,6-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dimethylphenol	µg/L	-	-	-	-	-	-
2,4-Dinitrophenol	µg/L	-	-	-	-	-	-
2,4-Dinitrotoluene	µg/L	-	-	-	-	-	-
2,6-Dinitrotoluene	µg/L	-	-	-	-	-	-
2-Chloronaphthalene	µg/L	-	-	-	-	-	-
2-Chlorophenol	µg/L	-	-	-	-	-	-
2-Methylnaphthalene	µg/L	-	-	-	-	-	-
2-Methylphenol	µg/L	-	-	-	-	-	-
2-Nitroaniline	µg/L	-	-	-	-	-	-
2-Nitrophenol	µg/L	-	-	-	-	-	-
3,3'-Dichlorobenzidine	µg/L	-	-	-	-	-	-
3-Nitroaniline	µg/L	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	µg/L	-	-	-	-	-	-
4-Bromophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Chloro-3-methylphenol	µg/L	-	-	-	-	-	-
4-Chloroaniline	µg/L	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Methylphenol	µg/L	-	-	-	-	-	-
4-Nitroaniline	µg/L	-	-	-	-	-	-
4-Nitrophenol	µg/L	-	-	-	-	-	-
Acenaphthene	µg/L	-	-	-	-	-	-
Acenaphthylene	µg/L	-	-	-	-	-	-
Acetophenone	µg/L	-	-	-	-	-	-
Anthracene	µg/L	-	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW5-03	MW6-03	MW7-03	MW8-04	MW8-04	MW9-04
Sample Identification	WG-17360-050113-MR-006	WG-17360-043013-MR-002	WG-17360-050113-MR-016	WG-17360-043013-MR-003	WG-17360-043013-MR-004	WG-17360-050113-MR-010
Sample Date	5/1/2013	4/30/2013	5/1/2013	4/30/2013	4/30/2013	5/1/2013
Sample Type					Duplicate	
Screen Depth	30-35 ft BGS	13-18 ft BGS	36-41 ft BGS	30-35 ft BGS	30-35 ft BGS	43-48 ft BGS

SVOCs (continued)

Atrazine	µg/L	-	-	-	-	-
Benzaldehyde	µg/L	-	-	-	-	-
Benzo(a)anthracene	µg/L	-	-	-	-	-
Benzo(a)pyrene	µg/L	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-	-
<i>SVOCs continued</i>						
Benzo(k)fluoranthene	µg/L	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	µg/L	-	-	-	-	-
bis(2-Chloroethoxy)methane	µg/L	-	-	-	-	-
bis(2-Chloroethyl)ether	µg/L	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	-	-	-	-	-
Butyl benzylphthalate (BBP)	µg/L	-	-	-	-	-
Caprolactam	µg/L	-	-	-	-	-
Carbazole	µg/L	-	-	-	-	-
Chrysene	µg/L	-	-	-	-	-
Dibenz(a,h)anthracene	µg/L	-	-	-	-	-
Dibenzofuran	µg/L	-	-	-	-	-
Diethyl phthalate	µg/L	-	-	-	-	-
Dimethyl phthalate	µg/L	-	-	-	-	-
Di-n-butylphthalate (DBP)	µg/L	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	µg/L	-	-	-	-	-
Fluoranthene	µg/L	-	-	-	-	-
Fluorene	µg/L	-	-	-	-	-
Hexachlorobenzene	µg/L	-	-	-	-	-
Hexachlorobutadiene	µg/L	-	-	-	-	-
Hexachlorocyclopentadiene	µg/L	-	-	-	-	-
Hexachloroethane	µg/L	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	-	-	-	-	-
Isophorone	µg/L	-	-	-	-	-
Naphthalene	µg/L	-	-	-	-	-
Nitrobenzene	µg/L	-	-	-	-	-
N-Nitrosodi-n-propylamine	µg/L	-	-	-	-	-
N-Nitrosodiphenylamine	µg/L	-	-	-	-	-
Pentachlorophenol	µg/L	-	-	-	-	-
Phenanthrene	µg/L	-	-	-	-	-
Phenol	µg/L	-	-	-	-	-
Pyrene	µg/L	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW5-03	MW6-03	MW7-03	MW8-04	MW8-04	MW9-04
Sample Identification	WG-17360-050113-MR-006	WG-17360-043013-MR-002	WG-17360-050113-MR-016	WG-17360-043013-MR-003	WG-17360-043013-MR-004	WG-17360-050113-MR-010
Sample Date	5/1/2013	4/30/2013	5/1/2013	4/30/2013	4/30/2013	5/1/2013
Sample Type					Duplicate	
Screen Depth	30-35 ft BGS	13-18 ft BGS	36-41 ft BGS	30-35 ft BGS	30-35 ft BGS	43-48 ft BGS
<i>Metals</i>						
Antimony	µg/L	-	-	-	-	-
Arsenic	µg/L	-	-	-	-	-
Barium	µg/L	-	-	-	-	-
Beryllium	µg/L	-	-	-	-	-
Cadmium	µg/L	-	-	-	-	-
Chromium	µg/L	-	-	-	-	-
Chromium III (trivalent)	µg/L	-	-	-	-	-
Chromium VI (hexavalent)	µg/L	-	-	-	-	-
Cobalt	µg/L	-	-	-	-	-
Copper	µg/L	-	-	-	-	-
Lead	µg/L	-	-	-	-	-
Manganese	µg/L	-	-	-	-	-
Mercury	µg/L	-	-	-	-	-
Molybdenum	µg/L	-	-	-	-	-
Nickel	µg/L	-	-	-	-	-
Selenium	µg/L	-	-	-	-	-
Silver	µg/L	-	-	-	-	-
Thallium	µg/L	-	-	-	-	-
Vanadium	µg/L	-	-	-	-	-
Zinc	µg/L	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		MW10-04	MW11D-04	MW11S-05	MW13-04	MW15-04	MW17-06
Sample Identification		WG-17360-050213-MR-019	WG-17360-050213-MR-021	WG-17360-050213-MR-020	WG-17360-050313-MR-029	WG-17360-050613-EB-041	WG-17360-050213-MR-026
Sample Date		5/2/2013	5/2/2013	5/2/2013	5/3/2013	5/6/2013	5/2/2013
Sample Type							
Screen Depth		33-38 ft BGS	40-45 ft BGS	5-10 ft BGS	25-30 ft BGS	25-30 ft BGS	51-56 ft BGS
Volatile Organic Compounds (VOCs)							
	Units						
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	3.7	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone ⁽⁴⁾	µg/L	25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	µg/L	50 U	50 U	50 U	50 U	3.9 J	50 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	65
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		MW10-04	MW11D-04	MW11S-05	MW13-04	MW15-04	MW17-06
Sample Identification		WG-17360-050213-MR-019	WG-17360-050213-MR-021	WG-17360-050213-MR-020	WG-17360-050313-MR-029	WG-17360-050613-EB-041	WG-17360-050213-MR-026
Sample Date		5/2/2013	5/2/2013	5/2/2013	5/3/2013	5/6/2013	5/2/2013
Sample Type							
Screen Depth		33-38 ft BGS	40-45 ft BGS	5-10 ft BGS	25-30 ft BGS	25-30 ft BGS	51-56 ft BGS
<i>VOCs (continued)</i>							
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	79 ^{abc}
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	4.3	1.8	1.0 U	1.0 U	1.0 U	7.6 ^b
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
<i>Semi-Volatile Organic Compounds (SVOCs)</i>							
2,2'-Oxybis(1-chloropropane) ⁽⁶⁾	µg/L	-	-	-	-	-	-
2,4,5-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4,6-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dimethylphenol	µg/L	-	-	-	-	-	-
2,4-Dinitrophenol	µg/L	-	-	-	-	-	-
2,4-Dinitrotoluene	µg/L	-	-	-	-	-	-
2,6-Dinitrotoluene	µg/L	-	-	-	-	-	-
2-Chloronaphthalene	µg/L	-	-	-	-	-	-
2-Chlorophenol	µg/L	-	-	-	-	-	-
2-Methylnaphthalene	µg/L	-	-	-	-	-	-
2-Methylphenol	µg/L	-	-	-	-	-	-
2-Nitroaniline	µg/L	-	-	-	-	-	-
2-Nitrophenol	µg/L	-	-	-	-	-	-
3,3'-Dichlorobenzidine	µg/L	-	-	-	-	-	-
3-Nitroaniline	µg/L	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	µg/L	-	-	-	-	-	-
4-Bromophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Chloro-3-methylphenol	µg/L	-	-	-	-	-	-
4-Chloroaniline	µg/L	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Methylphenol	µg/L	-	-	-	-	-	-
4-Nitroaniline	µg/L	-	-	-	-	-	-
4-Nitrophenol	µg/L	-	-	-	-	-	-
Acenaphthene	µg/L	-	-	-	-	-	-
Acenaphthylene	µg/L	-	-	-	-	-	-
Acetophenone	µg/L	-	-	-	-	-	-
Anthracene	µg/L	-	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW10-04	MW11D-04	MW11S-05	MW13-04	MW15-04	MW17-06
Sample Identification	WG-17360-050213-MR-019	WG-17360-050213-MR-021	WG-17360-050213-MR-020	WG-17360-050313-MR-029	WG-17360-050613-EB-041	WG-17360-050213-MR-026
Sample Date	5/2/2013	5/2/2013	5/2/2013	5/3/2013	5/6/2013	5/2/2013
Sample Type						
Screen Depth	33-38 ft BGS	40-45 ft BGS	5-10 ft BGS	25-30 ft BGS	25-30 ft BGS	51-56 ft BGS

SVOCs (continued)

Atrazine	µg/L	-	-	-	-	-
Benzaldehyde	µg/L	-	-	-	-	-
Benzo(a)anthracene	µg/L	-	-	-	-	-
Benzo(a)pyrene	µg/L	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-	-
<i>SVOCs continued</i>						
Benzo(k)fluoranthene	µg/L	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	µg/L	-	-	-	-	-
bis(2-Chloroethoxy)methane	µg/L	-	-	-	-	-
bis(2-Chloroethyl)ether	µg/L	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	-	-	-	-	-
Butyl benzylphthalate (BBP)	µg/L	-	-	-	-	-
Caprolactam	µg/L	-	-	-	-	-
Carbazole	µg/L	-	-	-	-	-
Chrysene	µg/L	-	-	-	-	-
Dibenz(a,h)anthracene	µg/L	-	-	-	-	-
Dibenzofuran	µg/L	-	-	-	-	-
Diethyl phthalate	µg/L	-	-	-	-	-
Dimethyl phthalate	µg/L	-	-	-	-	-
Di-n-butylphthalate (DBP)	µg/L	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	µg/L	-	-	-	-	-
Fluoranthene	µg/L	-	-	-	-	-
Fluorene	µg/L	-	-	-	-	-
Hexachlorobenzene	µg/L	-	-	-	-	-
Hexachlorobutadiene	µg/L	-	-	-	-	-
Hexachlorocyclopentadiene	µg/L	-	-	-	-	-
Hexachloroethane	µg/L	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	-	-	-	-	-
Isophorone	µg/L	-	-	-	-	-
Naphthalene	µg/L	-	-	-	-	-
Nitrobenzene	µg/L	-	-	-	-	-
N-Nitrosodi-n-propylamine	µg/L	-	-	-	-	-
N-Nitrosodiphenylamine	µg/L	-	-	-	-	-
Pentachlorophenol	µg/L	-	-	-	-	-
Phenanthrene	µg/L	-	-	-	-	-
Phenol	µg/L	-	-	-	-	-
Pyrene	µg/L	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
 SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
 FORMER GRAND RAPIDS METAL PLANT
 WYOMING, MICHIGAN

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Sample Location	MW10-04	MW11D-04	MW11S-05	MW13-04	MW15-04	MW17-06
Sample Identification	WG-17360-050213-MR-019	WG-17360-050213-MR-021	WG-17360-050213-MR-020	WG-17360-050313-MR-029	WG-17360-050613-EB-041	WG-17360-050213-MR-026
Sample Date	5/2/2013	5/2/2013	5/2/2013	5/3/2013	5/6/2013	5/2/2013
Sample Type						
Screen Depth	33-38 ft BGS	40-45 ft BGS	5-10 ft BGS	25-30 ft BGS	25-30 ft BGS	51-56 ft BGS
<i>Metals</i>						
Antimony	µg/L	-	-	-	-	-
Arsenic	µg/L	-	-	-	-	-
Barium	µg/L	-	-	-	-	-
Beryllium	µg/L	-	-	-	-	-
Cadmium	µg/L	-	-	-	-	-
Chromium	µg/L	-	-	-	-	-
Chromium III (trivalent)	µg/L	-	-	-	-	-
Chromium VI (hexavalent)	µg/L	-	-	-	-	-
Cobalt	µg/L	-	-	-	-	-
Copper	µg/L	-	-	-	-	-
Lead	µg/L	-	-	-	-	-
Manganese	µg/L	-	-	-	-	-
Mercury	µg/L	-	-	-	-	-
Molybdenum	µg/L	-	-	-	-	-
Nickel	µg/L	-	-	-	-	-
Selenium	µg/L	-	-	-	-	-
Silver	µg/L	-	-	-	-	-
Thallium	µg/L	-	-	-	-	-
Vanadium	µg/L	-	-	-	-	-
Zinc	µg/L	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		MW27-11	MW28-12	MW29-12	MW30-12	MW31-12	MW32-12
Sample Identification		WG-17360-050613-EB-043	WG-17360-050213-MR-027	GW-17360-050713-BW-049	GW-17360-050713-BW-050	WG-17360-050713-EB-059	WG-17360-050713-MR-056
Sample Date		5/6/2013	5/2/2013	5/7/2013	5/7/2013	5/7/2013	5/7/2013
Sample Type							
Screen Depth		12.5-17.5 ft BGS	14-19 ft BGS	11.4-21.4 ft BGS	25-30 ft BGS	12.2-22.2 ft BGS	13.9-23.9 ft BGS
Volatile Organic Compounds (VOCs)		Units					
1,1,1-Trichloroethane	µg/L	1.0	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone ⁽⁴⁾	µg/L	25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW27-11	MW28-12	MW29-12	MW30-12	MW31-12	MW32-12
Sample Identification	WG-17360-050613-EB-043	WG-17360-050213-MR-027	GW-17360-050713-BW-049	GW-17360-050713-BW-050	WG-17360-050713-EB-059	WG-17360-050713-MR-056
Sample Date	5/6/2013	5/2/2013	5/7/2013	5/7/2013	5/7/2013	5/7/2013
Sample Type						
Screen Depth	12.5-17.5 ft BGS	14-19 ft BGS	11.4-21.4 ft BGS	25-30 ft BGS	12.2-22.2 ft BGS	13.9-23.9 ft BGS

VOCs (continued)

Tetrachloroethene	µg/L	1.0 U	1.0 U	3.2	7.5 ^{ab}	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Semi-Volatile Organic Compounds (SVOCs)

2,2'-Oxybis(1-chloropropane) ⁽⁶⁾	µg/L	-	-	-	-	-	-
2,4,5-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4,6-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dimethylphenol	µg/L	-	-	-	-	-	-
2,4-Dinitrophenol	µg/L	-	-	-	-	-	-
2,4-Dinitrotoluene	µg/L	-	-	-	-	-	-
2,6-Dinitrotoluene	µg/L	-	-	-	-	-	-
2-Chloronaphthalene	µg/L	-	-	-	-	-	-
2-Chlorophenol	µg/L	-	-	-	-	-	-
2-Methylnaphthalene	µg/L	-	-	-	-	-	-
2-Methylphenol	µg/L	-	-	-	-	-	-
2-Nitroaniline	µg/L	-	-	-	-	-	-
2-Nitrophenol	µg/L	-	-	-	-	-	-
3,3'-Dichlorobenzidine	µg/L	-	-	-	-	-	-
3-Nitroaniline	µg/L	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	µg/L	-	-	-	-	-	-
4-Bromophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Chloro-3-methylphenol	µg/L	-	-	-	-	-	-
4-Chloroaniline	µg/L	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Methylphenol	µg/L	-	-	-	-	-	-
4-Nitroaniline	µg/L	-	-	-	-	-	-
4-Nitrophenol	µg/L	-	-	-	-	-	-
Acenaphthene	µg/L	-	-	-	-	-	-
Acenaphthylene	µg/L	-	-	-	-	-	-
Acetophenone	µg/L	-	-	-	-	-	-
Anthracene	µg/L	-	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW27-11	MW28-12	MW29-12	MW30-12	MW31-12	MW32-12
Sample Identification	WG-17360-050613-EB-043	WG-17360-050213-MR-027	GW-17360-050713-BW-049	GW-17360-050713-BW-050	WG-17360-050713-EB-059	WG-17360-050713-MR-056
Sample Date	5/6/2013	5/2/2013	5/7/2013	5/7/2013	5/7/2013	5/7/2013
Sample Type						
Screen Depth	12.5-17.5 ft BGS	14-19 ft BGS	11.4-21.4 ft BGS	25-30 ft BGS	12.2-22.2 ft BGS	13.9-23.9 ft BGS

SVOCs (continued)

Atrazine	µg/L	-	-	-	-	-
Benzaldehyde	µg/L	-	-	-	-	-
Benzo(a)anthracene	µg/L	-	-	-	-	-
Benzo(a)pyrene	µg/L	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-	-
<i>SVOCs continued</i>						
Benzo(k)fluoranthene	µg/L	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	µg/L	-	-	-	-	-
bis(2-Chloroethoxy)methane	µg/L	-	-	-	-	-
bis(2-Chloroethyl)ether	µg/L	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	-	-	-	-	-
Butyl benzylphthalate (BBP)	µg/L	-	-	-	-	-
Caprolactam	µg/L	-	-	-	-	-
Carbazole	µg/L	-	-	-	-	-
Chrysene	µg/L	-	-	-	-	-
Dibenz(a,h)anthracene	µg/L	-	-	-	-	-
Dibenzofuran	µg/L	-	-	-	-	-
Diethyl phthalate	µg/L	-	-	-	-	-
Dimethyl phthalate	µg/L	-	-	-	-	-
Di-n-butylphthalate (DBP)	µg/L	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	µg/L	-	-	-	-	-
Fluoranthene	µg/L	-	-	-	-	-
Fluorene	µg/L	-	-	-	-	-
Hexachlorobenzene	µg/L	-	-	-	-	-
Hexachlorobutadiene	µg/L	-	-	-	-	-
Hexachlorocyclopentadiene	µg/L	-	-	-	-	-
Hexachloroethane	µg/L	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	-	-	-	-	-
Isophorone	µg/L	-	-	-	-	-
Naphthalene	µg/L	-	-	-	-	-
Nitrobenzene	µg/L	-	-	-	-	-
N-Nitrosodi-n-propylamine	µg/L	-	-	-	-	-
N-Nitrosodiphenylamine	µg/L	-	-	-	-	-
Pentachlorophenol	µg/L	-	-	-	-	-
Phenanthrene	µg/L	-	-	-	-	-
Phenol	µg/L	-	-	-	-	-
Pyrene	µg/L	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
 SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
 FORMER GRAND RAPIDS METAL PLANT
 WYOMING, MICHIGAN

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Sample Location	MW27-11	MW28-12	MW29-12	MW30-12	MW31-12	MW32-12
Sample Identification	WG-17360-050613-EB-043	WG-17360-050213-MR-027	GW-17360-050713-BW-049	GW-17360-050713-BW-050	WG-17360-050713-EB-059	WG-17360-050713-MR-056
Sample Date	5/6/2013	5/2/2013	5/7/2013	5/7/2013	5/7/2013	5/7/2013
Sample Type						
Screen Depth	12.5-17.5 ft BGS	14-19 ft BGS	11.4-21.4 ft BGS	25-30 ft BGS	12.2-22.2 ft BGS	13.9-23.9 ft BGS

Metals

Antimony	µg/L	-	-	-	-	0.052 J	-
Arsenic	µg/L	-	-	-	-	9.5	-
Barium	µg/L	-	-	-	-	83	-
Beryllium	µg/L	-	-	-	-	2 U	-
Cadmium	µg/L	-	-	-	-	0.18 J	-
Chromium	µg/L	-	-	-	-	0.44 J	-
Chromium III (trivalent)	µg/L	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/L	-	-	-	-	-	-
Cobalt	µg/L	-	-	-	-	1.7 J	-
Copper	µg/L	-	-	-	-	1.5 J	-
Lead	µg/L	-	-	-	-	0.45 J	-
Manganese	µg/L	-	-	-	-	670 ^{bb}	-
Mercury	µg/L	-	-	-	-	0.2 U	-
Molybdenum	µg/L	-	-	-	-	0.31 J	-
Nickel	µg/L	-	-	-	-	1.9 J	-
Selenium	µg/L	-	-	-	-	5 U	-
Silver	µg/L	-	-	-	-	5 U	-
Thallium	µg/L	-	-	-	-	5 U	-
Vanadium	µg/L	-	-	-	-	5 U	-
Zinc	µg/L	-	-	-	-	610 ^c	-

TABLE 4

**SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

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Sample Location		MW33-12	MW34-12	MW35-12	MW36-12	MW37-12	MW38-12
Sample Identification		WG-17360-050713-MR-057	WG-17360-050713-MR-051	WG-17360-050713-MR-052	WG-17360-050713-MR-060	WG-17360-050313-MR-036	WG-17360-050313-MR-035
Sample Date		5/7/2013	5/7/2013	5/7/2013	5/7/2013	5/3/2013	5/3/2013
Sample Type							
Screen Depth		31-36 ft BGS	14.4-24.4 ft BGS	24.6-29.6 ft BGS	19.5-29.5 ft BGS	19.4-29.4 ft BGS	20-30 ft BGS
Volatile Organic Compounds (VOCs)							
	Units						
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone ⁽⁴⁾	µg/L	25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.6	1.0 U	1.0 U	1.0 U	1.0 U	9.3
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		MW33-12	MW34-12	MW35-12	MW36-12	MW37-12	MW38-12
Sample Identification		WG-17360-050713-MR-057	WG-17360-050713-MR-051	WG-17360-050713-MR-052	WG-17360-050713-MR-060	WG-17360-050313-MR-036	WG-17360-050313-MR-035
Sample Date		5/7/2013	5/7/2013	5/7/2013	5/7/2013	5/3/2013	5/3/2013
Sample Type							
Screen Depth		31-36 ft BGS	14.4-24.4 ft BGS	24.6-29.6 ft BGS	19.5-29.5 ft BGS	19.4-29.4 ft BGS	20-30 ft BGS
<i>VOCs (continued)</i>							
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	2.8	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	3.0	3.7	29 ^{ab}	1.0 U	17 ^{ab}	3.7
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	14 ^{abc}
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Semi-Volatile Organic Compounds (SVOCs)

2,2'-Oxybis(1-chloropropane) ⁽⁶⁾	µg/L	-	-	-	-	-	-
2,4,5-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4,6-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dimethylphenol	µg/L	-	-	-	-	-	-
2,4-Dinitrophenol	µg/L	-	-	-	-	-	-
2,4-Dinitrotoluene	µg/L	-	-	-	-	-	-
2,6-Dinitrotoluene	µg/L	-	-	-	-	-	-
2-Chloronaphthalene	µg/L	-	-	-	-	-	-
2-Chlorophenol	µg/L	-	-	-	-	-	-
2-Methylnaphthalene	µg/L	-	-	-	-	-	-
2-Methylphenol	µg/L	-	-	-	-	-	-
2-Nitroaniline	µg/L	-	-	-	-	-	-
2-Nitrophenol	µg/L	-	-	-	-	-	-
3,3'-Dichlorobenzidine	µg/L	-	-	-	-	-	-
3-Nitroaniline	µg/L	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	µg/L	-	-	-	-	-	-
4-Bromophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Chloro-3-methylphenol	µg/L	-	-	-	-	-	-
4-Chloroaniline	µg/L	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Methylphenol	µg/L	-	-	-	-	-	-
4-Nitroaniline	µg/L	-	-	-	-	-	-
4-Nitrophenol	µg/L	-	-	-	-	-	-
Acenaphthene	µg/L	-	-	-	-	-	-
Acenaphthylene	µg/L	-	-	-	-	-	-
Acetophenone	µg/L	-	-	-	-	-	-
Anthracene	µg/L	-	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW33-12	MW34-12	MW35-12	MW36-12	MW37-12	MW38-12
Sample Identification	WG-17360-050713-MR-057	WG-17360-050713-MR-051	WG-17360-050713-MR-052	WG-17360-050713-MR-060	WG-17360-050313-MR-036	WG-17360-050313-MR-035
Sample Date	5/7/2013	5/7/2013	5/7/2013	5/7/2013	5/3/2013	5/3/2013
Sample Type						
Screen Depth	31-36 ft BGS	14.4-24.4 ft BGS	24.6-29.6 ft BGS	19.5-29.5 ft BGS	19.4-29.4 ft BGS	20-30 ft BGS

SVOCs (continued)

Atrazine	µg/L	-	-	-	-	-
Benzaldehyde	µg/L	-	-	-	-	-
Benzo(a)anthracene	µg/L	-	-	-	-	-
Benzo(a)pyrene	µg/L	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-	-
<i>SVOCs continued</i>						
Benzo(k)fluoranthene	µg/L	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	µg/L	-	-	-	-	-
bis(2-Chloroethoxy)methane	µg/L	-	-	-	-	-
bis(2-Chloroethyl)ether	µg/L	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	-	-	-	-	-
Butyl benzylphthalate (BBP)	µg/L	-	-	-	-	-
Caprolactam	µg/L	-	-	-	-	-
Carbazole	µg/L	-	-	-	-	-
Chrysene	µg/L	-	-	-	-	-
Dibenz(a,h)anthracene	µg/L	-	-	-	-	-
Dibenzofuran	µg/L	-	-	-	-	-
Diethyl phthalate	µg/L	-	-	-	-	-
Dimethyl phthalate	µg/L	-	-	-	-	-
Di-n-butylphthalate (DBP)	µg/L	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	µg/L	-	-	-	-	-
Fluoranthene	µg/L	-	-	-	-	-
Fluorene	µg/L	-	-	-	-	-
Hexachlorobenzene	µg/L	-	-	-	-	-
Hexachlorobutadiene	µg/L	-	-	-	-	-
Hexachlorocyclopentadiene	µg/L	-	-	-	-	-
Hexachloroethane	µg/L	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	-	-	-	-	-
Isophorone	µg/L	-	-	-	-	-
Naphthalene	µg/L	-	-	-	-	-
Nitrobenzene	µg/L	-	-	-	-	-
N-Nitrosodi-n-propylamine	µg/L	-	-	-	-	-
N-Nitrosodiphenylamine	µg/L	-	-	-	-	-
Pentachlorophenol	µg/L	-	-	-	-	-
Phenanthrene	µg/L	-	-	-	-	-
Phenol	µg/L	-	-	-	-	-
Pyrene	µg/L	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
 SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
 FORMER GRAND RAPIDS METAL PLANT
 WYOMING, MICHIGAN

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Sample Location		MW33-12	MW34-12	MW35-12	MW36-12	MW37-12	MW38-12
Sample Identification		WG-17360-050713-MR-057	WG-17360-050713-MR-051	WG-17360-050713-MR-052	WG-17360-050713-MR-060	WG-17360-050313-MR-036	WG-17360-050313-MR-035
Sample Date		5/7/2013	5/7/2013	5/7/2013	5/7/2013	5/3/2013	5/3/2013
Sample Type							
Screen Depth		31-36 ft BGS	14.4-24.4 ft BGS	24.6-29.6 ft BGS	19.5-29.5 ft BGS	19.4-29.4 ft BGS	20-30 ft BGS
<i>Metals</i>							
Antimony	µg/L	0.11 J	0.15 J	-	-	0.11 J	0.11 J
Arsenic	µg/L	1.1 J	5 U	-	-	5 U	6.6
Barium	µg/L	51	39	-	-	80	140
Beryllium	µg/L	2 U	2 U	-	-	2 U	2 U
Cadmium	µg/L	0.06 J	2 U	-	-	0.053 J	0.075 J
Chromium	µg/L	5 U	1.1 J	-	-	2.7 J	0.43 J
Chromium III (trivalent)	µg/L	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/L	-	-	-	-	-	-
Cobalt	µg/L	8.6	0.9 J	-	-	2.3 J	0.29 J
Copper	µg/L	4.1 J	0.82 J	-	-	1.1 J	5 U
Lead	µg/L	5 U	5 U	-	-	0.28 J	0.18 J
Manganese	µg/L	32	0.97 J	-	-	38	83 ^{3b}
Mercury	µg/L	0.2 U	0.2 U	-	-	0.2 U	0.2 U
Molybdenum	µg/L	0.71 J	27	-	-	0.37 J	0.82 J
Nickel	µg/L	5.7	2.1 J	-	-	6.1	1.3 J
Selenium	µg/L	5 U	2 J	-	-	2.2 J	0.87 J
Silver	µg/L	5 U	5 U	-	-	5 U	0.057 J
Thallium	µg/L	5 U	5 U	-	-	5 U	5 U
Vanadium	µg/L	5 U	0.78 J	-	-	5 U	5 U
Zinc	µg/L	2.7 J	6.6 J	-	-	1.4 J	2.8 J

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		MW39-12	MW40-12	MW41-12	MW42-12	MW43-12	MW43-12
Sample Identification		WG-17360-050613-EB-045	WG-17360-050713-EB-046	WG-17360-050713-EB-047	WG-17360-050613-EB-044	WG-17360-050313-MR-030	WG-17360-050313-MR-033
Sample Date		5/6/2013	5/7/2013	5/7/2013	5/6/2013	5/3/2013	5/3/2013
Sample Type							Duplicate
Screen Depth		35.4-40.4 ft BGS	45-50 ft BGS	18.3-28.3 ft BGS	21-31 ft BGS	15-25 ft BGS	15-25 ft BGS
Volatile Organic Compounds (VOCs)		Units					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone ⁽⁴⁾	µg/L	25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	µg/L	3.8 J	50 U	50 U	4.6 J	50 U	50 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW39-12	MW40-12	MW41-12	MW42-12	MW43-12	MW43-12
Sample Identification	WG-17360-050613-EB-045	WG-17360-050713-EB-046	WG-17360-050713-EB-047	WG-17360-050613-EB-044	WG-17360-050313-MR-030	WG-17360-050313-MR-033
Sample Date	5/6/2013	5/7/2013	5/7/2013	5/6/2013	5/3/2013	5/3/2013
Sample Type						Duplicate
Screen Depth	35.4-40.4 ft BGS	45-50 ft BGS	18.3-28.3 ft BGS	21-31 ft BGS	15-25 ft BGS	15-25 ft BGS

VOCs (continued)

Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.8 J	4.4 J
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	4.5	3.9	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Semi-Volatile Organic Compounds (SVOCs)

2,2'-Oxybis(1-chloropropane) ⁽⁶⁾	µg/L	-	-	-	-	-	-
2,4,5-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4,6-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dimethylphenol	µg/L	-	-	-	-	-	-
2,4-Dinitrophenol	µg/L	-	-	-	-	-	-
2,4-Dinitrotoluene	µg/L	-	-	-	-	-	-
2,6-Dinitrotoluene	µg/L	-	-	-	-	-	-
2-Chloronaphthalene	µg/L	-	-	-	-	-	-
2-Chlorophenol	µg/L	-	-	-	-	-	-
2-Methylnaphthalene	µg/L	-	-	-	-	-	-
2-Methylphenol	µg/L	-	-	-	-	-	-
2-Nitroaniline	µg/L	-	-	-	-	-	-
2-Nitrophenol	µg/L	-	-	-	-	-	-
3,3'-Dichlorobenzidine	µg/L	-	-	-	-	-	-
3-Nitroaniline	µg/L	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	µg/L	-	-	-	-	-	-
4-Bromophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Chloro-3-methylphenol	µg/L	-	-	-	-	-	-
4-Chloroaniline	µg/L	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Methylphenol	µg/L	-	-	-	-	-	-
4-Nitroaniline	µg/L	-	-	-	-	-	-
4-Nitrophenol	µg/L	-	-	-	-	-	-
Acenaphthene	µg/L	-	-	-	-	-	-
Acenaphthylene	µg/L	-	-	-	-	-	-
Acetophenone	µg/L	-	-	-	-	-	-
Anthracene	µg/L	-	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW39-12	MW40-12	MW41-12	MW42-12	MW43-12	MW43-12
Sample Identification	WG-17360-050613-EB-045	WG-17360-050713-EB-046	WG-17360-050713-EB-047	WG-17360-050613-EB-044	WG-17360-050313-MR-030	WG-17360-050313-MR-033
Sample Date	5/6/2013	5/7/2013	5/7/2013	5/6/2013	5/3/2013	5/3/2013
Sample Type						Duplicate
Screen Depth	35.4-40.4 ft BGS	45-50 ft BGS	18.3-28.3 ft BGS	21-31 ft BGS	15-25 ft BGS	15-25 ft BGS

SVOCs (continued)

Atrazine	µg/L	-	-	-	-	-
Benzaldehyde	µg/L	-	-	-	-	-
Benzo(a)anthracene	µg/L	-	-	-	-	-
Benzo(a)pyrene	µg/L	-	-	-	-	-
Benzo(b)fluoranthene	µg/L	-	-	-	-	-
Benzo(g,h,i)perylene	µg/L	-	-	-	-	-
<i>SVOCs continued</i>						
Benzo(k)fluoranthene	µg/L	-	-	-	-	-
Biphenyl (1,1-Biphenyl)	µg/L	-	-	-	-	-
bis(2-Chloroethoxy)methane	µg/L	-	-	-	-	-
bis(2-Chloroethyl)ether	µg/L	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	-	-	-	-	-
Butyl benzylphthalate (BBP)	µg/L	-	-	-	-	-
Caprolactam	µg/L	-	-	-	-	-
Carbazole	µg/L	-	-	-	-	-
Chrysene	µg/L	-	-	-	-	-
Dibenz(a,h)anthracene	µg/L	-	-	-	-	-
Dibenzofuran	µg/L	-	-	-	-	-
Diethyl phthalate	µg/L	-	-	-	-	-
Dimethyl phthalate	µg/L	-	-	-	-	-
Di-n-butylphthalate (DBP)	µg/L	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	µg/L	-	-	-	-	-
Fluoranthene	µg/L	-	-	-	-	-
Fluorene	µg/L	-	-	-	-	-
Hexachlorobenzene	µg/L	-	-	-	-	-
Hexachlorobutadiene	µg/L	-	-	-	-	-
Hexachlorocyclopentadiene	µg/L	-	-	-	-	-
Hexachloroethane	µg/L	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	-	-	-	-	-
Isophorone	µg/L	-	-	-	-	-
Naphthalene	µg/L	-	-	-	-	-
Nitrobenzene	µg/L	-	-	-	-	-
N-Nitrosodi-n-propylamine	µg/L	-	-	-	-	-
N-Nitrosodiphenylamine	µg/L	-	-	-	-	-
Pentachlorophenol	µg/L	-	-	-	-	-
Phenanthrene	µg/L	-	-	-	-	-
Phenol	µg/L	-	-	-	-	-
Pyrene	µg/L	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
 SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
 FORMER GRAND RAPIDS METAL PLANT
 WYOMING, MICHIGAN

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Sample Location	MW39-12	MW40-12	MW41-12	MW42-12	MW43-12	MW43-12
Sample Identification	WG-17360-050613-EB-045	WG-17360-050713-EB-046	WG-17360-050713-EB-047	WG-17360-050613-EB-044	WG-17360-050313-MR-030	WG-17360-050313-MR-033
Sample Date	5/6/2013	5/7/2013	5/7/2013	5/6/2013	5/3/2013	5/3/2013
Sample Type						Duplicate
Screen Depth	35.4-40.4 ft BGS	45-50 ft BGS	18.3-28.3 ft BGS	21-31 ft BGS	15-25 ft BGS	15-25 ft BGS

Metals

Antimony	µg/L	0.14 J	-	-	-	-
Arsenic	µg/L	5 U	-	-	-	-
Barium	µg/L	72	-	-	-	-
Beryllium	µg/L	2 U	-	-	-	-
Cadmium	µg/L	0.062 J	-	-	-	-
Chromium	µg/L	1.3 J	-	-	-	-
Chromium III (trivalent)	µg/L	-	-	-	-	-
Chromium VI (hexavalent)	µg/L	-	-	-	-	-
Cobalt	µg/L	5.2	-	-	-	-
Copper	µg/L	2.1 J	-	-	-	-
Lead	µg/L	0.82 J	-	-	-	-
Manganese	µg/L	68 ^{ab}	-	-	-	-
Mercury	µg/L	0.2 U	-	-	-	-
Molybdenum	µg/L	3.4 J	-	-	-	-
Nickel	µg/L	4.8 J	-	-	-	-
Selenium	µg/L	5 U	-	-	-	-
Silver	µg/L	5 U	-	-	-	-
Thallium	µg/L	5 U	-	-	-	-
Vanadium	µg/L	0.44 J	-	-	-	-
Zinc	µg/L	9.6 J	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		MW44-12	MW45-12	MW46-12	MW48-13	MW49-13	MW50-12
Sample Identification		WG-17360-050313-MR-032	WG-17360-050313-MR-031	WG-17360-050713-EB-061	WG-17360-051313-EB-004	WG-17360-051313-EB-005	WG-17360-050313-MR-034
Sample Date		5/3/2013	5/3/2013	5/7/2013	5/13/2013	5/13/2013	5/3/2013
Sample Type							
Screen Depth		18.5-28.5 ft BGS	19.1-29.1 ft BGS	20.2-30.2 ft BGS	46-51 ft BGS	34-39 ft BGS	17-27 ft BGS
Volatile Organic Compounds (VOCs)		Units					
1,1,1-Trichloroethane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone ⁽⁴⁾	µg/L	120 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	µg/L	250 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	15 J	50 U	50 U	50 U	50 U	50 U
Acetone	µg/L	250 U	50 U	50 U	50 U	50 U	50 U
Benzene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	25 UJ	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	2.3	1.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	50 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	25 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW44-12	MW45-12	MW46-12	MW48-13	MW49-13	MW50-12
Sample Identification	WG-17360-050313-MR-032	WG-17360-050313-MR-031	WG-17360-050713-EB-061	WG-17360-051313-EB-004	WG-17360-051313-EB-005	WG-17360-050313-MR-034
Sample Date	5/3/2013	5/3/2013	5/7/2013	5/13/2013	5/13/2013	5/3/2013
Sample Type						
Screen Depth	18.5-28.5 ft BGS	19.1-29.1 ft BGS	20.2-30.2 ft BGS	46-51 ft BGS	34-39 ft BGS	17-27 ft BGS

VOCs (continued)

Tetrachloroethene	µg/L	5.0 U	1.9	1.0 U	1.0 U	260 ^{abc}	4.2
Toluene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4
Trichlorofluoromethane (CFC-11)	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrchloroethane (Freon 113)	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	15 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U

Semi-Volatile Organic Compounds (SVOCs)

2,2'-Oxybis(1-chloropropane) ⁽⁶⁾	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
2,4,6-Trichlorophenol	µg/L	4.0 U	4.0 U	4.0 U	-	-	4.0 U
2,4-Dichlorophenol	µg/L	10 U	10 U	10 U	-	-	10 U
2,4-Dimethylphenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
2,4-Dinitrophenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
2,4-Dinitrotoluene	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
2,6-Dinitrotoluene	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
2-Chloronaphthalene	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
2-Methylnaphthalene	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
2-Methylphenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
2-Nitroaniline	µg/L	20 U	20 U	20 U	-	-	20 U
2-Nitrophenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
3,3'-Dichlorobenzidine	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
3-Nitroaniline	µg/L	20 U	20 U	20 U	-	-	20 U
4,6-Dinitro-2-methylphenol	µg/L	20 U	20 U	20 U	-	-	20 U
4-Bromophenyl phenyl ether	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
4-Chloro-3-methylphenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
4-Chloroaniline	µg/L	10 U	10 U	10 U	-	-	10 U
4-Chlorophenyl phenyl ether	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
4-Methylphenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
4-Nitroaniline	µg/L	20 U	20 U	20 U	-	-	20 U
4-Nitrophenol	µg/L	20 U	20 U	20 U	-	-	20 U
Acenaphthene	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Acenaphthylene	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Acetophenone	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
Anthracene	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW44-12	MW45-12	MW46-12	MW48-13	MW49-13	MW50-12
Sample Identification	WG-17360-050313-MR-032	WG-17360-050313-MR-031	WG-17360-050713-EB-061	WG-17360-051313-EB-004	WG-17360-051313-EB-005	WG-17360-050313-MR-034
Sample Date	5/3/2013	5/3/2013	5/7/2013	5/13/2013	5/13/2013	5/3/2013
Sample Type						
Screen Depth	18.5-28.5 ft BGS	19.1-29.1 ft BGS	20.2-30.2 ft BGS	46-51 ft BGS	34-39 ft BGS	17-27 ft BGS

SVOCs (continued)

Atrazine	µg/L	3.0 U	3.0 U	3.0 U	-	-	3.0 U
Benzaldehyde	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
Benzo(a)anthracene	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
Benzo(a)pyrene	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
Benzo(b)fluoranthene	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
Benzo(g,h,i)perylene	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
<i>SVOCs continued</i>							
Benzo(k)fluoranthene	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
Biphenyl (1,1-Biphenyl)	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
bis(2-Chloroethoxy)methane	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
bis(2-Chloroethyl)ether	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Butyl benzylphthalate (BBP)	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Caprolactam	µg/L	10 U	10 U	10 U	-	-	10 U
Carbazole	µg/L	10 U	10 U	10 U	-	-	10 U
Chrysene	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
Dibenz(a,h)anthracene	µg/L	2.0 U	2.0 U	2.0 U	-	-	2.0 U
Dibenzofuran	µg/L	4.0 U	4.0 U	4.0 U	-	-	4.0 U
Diethyl phthalate	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Dimethyl phthalate	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Di-n-butylphthalate (DBP)	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Di-n-octyl phthalate (DnOP)	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Fluoranthene	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
Fluorene	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Hexachlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
Hexachlorobutadiene	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
Hexachlorocyclopentadiene	µg/L	5.0 U	5.0 U	5.0 UJ	-	-	5.0 U
Hexachloroethane	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Indeno(1,2,3-cd)pyrene	µg/L	2.0 U	2.0 U	2.0 U	-	-	2.0 U
Isophorone	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Naphthalene	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Nitrobenzene	µg/L	3.0 U	3.0 U	3.0 U	-	-	3.0 U
N-Nitrosodi-n-propylamine	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
N-Nitrosodiphenylamine	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Pentachlorophenol	µg/L	1.0 U	1.0 U	1.0 U	-	-	1.0 U
Phenanthrene	µg/L	2.0 U	2.0 U	2.0 U	-	-	2.0 U
Phenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U
Pyrene	µg/L	5.0 U	5.0 U	5.0 U	-	-	5.0 U

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW44-12	MW45-12	MW46-12	MW48-13	MW49-13	MW50-12
Sample Identification	WG-17360-050313-MR-032	WG-17360-050313-MR-031	WG-17360-050713-EB-061	WG-17360-051313-EB-004	WG-17360-051313-EB-005	WG-17360-050313-MR-034
Sample Date	5/3/2013	5/3/2013	5/7/2013	5/13/2013	5/13/2013	5/3/2013
Sample Type						
Screen Depth	18.5-28.5 ft BGS	19.1-29.1 ft BGS	20.2-30.2 ft BGS	46-51 ft BGS	34-39 ft BGS	17-27 ft BGS

Metals

Antimony	µg/L	0.75 J	0.16 J	0.16 J	-	-	-
Arsenic	µg/L	12 ^{ak}	0.64 J	5 U	-	-	-
Barium	µg/L	42	55	23	-	-	-
Beryllium	µg/L	2 U	2 U	2 U	-	-	-
Cadmium	µg/L	0.28 J	0.061 J	0.46 J	-	-	-
Chromium	µg/L	0.43 J	5 U	0.83 J	-	-	-
Chromium III (trivalent)	µg/L	-	-	20 U	-	-	-
Chromium VI (hexavalent)	µg/L	-	-	5 U	-	-	-
Cobalt	µg/L	5.7	2.9 J	4.8 J	-	-	-
Copper	µg/L	21 ^c	11	5.3	-	-	-
Lead	µg/L	5.2 ^{ab}	0.43 J	0.2 J	-	-	-
Manganese	µg/L	640 ^{ab}	910 ^{ab}	1.1 J	-	-	-
Mercury	µg/L	0.2 U	0.2 U	0.2 U	-	-	-
Molybdenum	µg/L	27	1.4 J	0.9 J	-	-	-
Nickel	µg/L	19	8.7	10	-	-	-
Selenium	µg/L	1.2 J	2.9 J	3 J	-	-	-
Silver	µg/L	5 U	5 U	5 U	-	-	-
Thallium	µg/L	5 U	5 U	5 U	-	-	-
Vanadium	µg/L	0.65 J	0.18 J	5 U	-	-	-
Zinc	µg/L	6.8 J	1.8 J	8.7 J	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		MW51-12	MW51-12	MW52-12	MW53-12	MW57-13	MW57-13
Sample Identification		WG-17360-050313-MR-037	WG-17360-050313-MR-038	WG-17360-050313-MR-039	WG-17360-050213-MR-028	GW-17360-042513-DR-084	GW-17360-050713-BW-048
Sample Date		5/3/2013	5/3/2013	5/3/2013	5/2/2013	4/25/2013	5/7/2013
Sample Type		Duplicate					
Screen Depth		17-27 ft BGS	17-27 ft BGS	16.7-26.7 ft BGS	13-23 ft BGS	10-20 ft BGS	10-20 ft BGS
Volatile Organic Compounds (VOCs)		Units					
1,1,1-Trichloroethane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
1,1,2-Trichloroethane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
1,1-Dichloroethane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
1,1-Dichloroethene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
1,2,4-Trichlorobenzene	µg/L	25 U	5.0 U	5.0 U	5.0 U	-	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
1,2-Dichlorobenzene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
1,2-Dichloroethane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
1,2-Dichloropropane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
1,3-Dichlorobenzene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
1,4-Dichlorobenzene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
2-Butanone ⁽⁴⁾	µg/L	120 U	30	14 J	25 U	-	25 U
2-Hexanone	µg/L	250 U	50 U	50 U	50 U	-	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	250 U	50 U	50 U	50 U	-	50 U
Acetone	µg/L	28 J	64	50 U	50 U	-	50 U
Benzene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Bromodichloromethane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Bromoform	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Bromomethane (Methyl bromide)	µg/L	25 U	5.0 U	5.0 U	5.0 U	-	5.0 U
Carbon disulfide	µg/L	25 U	5.0 U	5.0 U	5.0 U	-	5.0 U
Carbon tetrachloride	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Chlorobenzene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Chloroethane	µg/L	25 U	5.0 U	5.0 U	5.0 U	-	5.0 U
Chloroform (Trichloromethane)	µg/L	5.0 U	1.0 U	1.0 U	3.0	-	1.0 U
Chloromethane (Methyl chloride)	µg/L	25 U	1.6 J	5.0 U	5.0 U	-	5.0 U
cis-1,2-Dichloroethene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
cis-1,3-Dichloropropene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Cyclohexane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Dibromochloromethane	µg/L	25 U	5.0 U	5.0 U	5.0 U	-	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	25 U	5.0 U	5.0 U	5.0 U	-	5.0 U
Ethylbenzene	µg/L	5.0 U	0.50 J	1.8	1.0 U	-	1.0 U
Isopropyl benzene	µg/L	25 U	5.0 U	2.0 J	5.0 U	-	5.0 U
Methyl acetate	µg/L	50 U	10 U	10 U	10 U	-	10 U
Methyl cyclohexane	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	25 U	5.0 U	5.0 U	5.0 U	-	5.0 U
Methylene chloride	µg/L	25 U	5.0 U	5.0 U	5.0 U	-	5.0 U
Styrene	µg/L	5.0 U	1.0 U	3.2	1.0 U	-	1.0 U

TABLE 4

**SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN**

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Sample Location		MW51-12	MW51-12	MW52-12	MW53-12	MW57-13	MW57-13
Sample Identification		WG-17360-050313-MR-037	WG-17360-050313-MR-038	WG-17360-050313-MR-039	WG-17360-050213-MR-028	GW-17360-042513-DR-084	GW-17360-050713-BW-048
Sample Date		5/3/2013	5/3/2013	5/3/2013	5/2/2013	4/25/2013	5/7/2013
Sample Type			Duplicate				
Screen Depth		17-27 ft BGS	17-27 ft BGS	16.7-26.7 ft BGS	13-23 ft BGS	10-20 ft BGS	10-20 ft BGS
<i>VOCs (continued)</i>							
Tetrachloroethene	µg/L	5.0 U	0.82 J	1.0 U	1.0 U	-	1.0 U
Toluene	µg/L	5.0 U	1.0 U	0.50 J	1.0 U	-	1.0 U
trans-1,2-Dichloroethene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
trans-1,3-Dichloropropene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Trichloroethene	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Vinyl chloride	µg/L	5.0 U	1.0 U	1.0 U	1.0 U	-	1.0 U
Xylenes (total)	µg/L	15 U	3.0 U	2.1 J	3.0 U	-	3.0 U
<i>Semi-Volatile Organic Compounds (SVOCs)</i>							
2,2'-Oxybis(1-chloropropane) ⁽⁶⁾	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
2,4,5-Trichlorophenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
2,4,6-Trichlorophenol	µg/L	4.0 U	4.0 U	4.0 U	-	-	-
2,4-Dichlorophenol	µg/L	10 U	10 U	10 U	-	-	-
2,4-Dimethylphenol	µg/L	5.0 U	5.0 U	2.6 J	-	-	-
2,4-Dinitrophenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
2,4-Dinitrotoluene	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
2,6-Dinitrotoluene	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
2-Chloronaphthalene	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
2-Chlorophenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
2-Methylnaphthalene	µg/L	5.0 U	5.0 U	0.72 J	-	5.0 U	-
2-Methylphenol	µg/L	5.0 U	5.0 U	1.7 J	-	-	-
2-Nitroaniline	µg/L	20 U	20 U	20 U	-	-	-
2-Nitrophenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
3,3'-Dichlorobenzidine	µg/L	1.0 U	1.0 U	1.0 U	-	-	-
3-Nitroaniline	µg/L	20 U	20 U	20 U	-	-	-
4,6-Dinitro-2-methylphenol	µg/L	20 U	20 U	20 U	-	-	-
4-Bromophenyl phenyl ether	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
4-Chloro-3-methylphenol	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
4-Chloroaniline	µg/L	10 U	10 U	10 U	-	-	-
4-Chlorophenyl phenyl ether	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
4-Methylphenol	µg/L	1.9 J	1.8 J	0.98 J	-	-	-
4-Nitroaniline	µg/L	20 U	20 U	20 U	-	-	-
4-Nitrophenol	µg/L	20 U	20 U	20 U	-	-	-
Acenaphthene	µg/L	5.0 U	5.0 U	1.2 J	-	5.0 U	-
Acenaphthylene	µg/L	5.0 U	5.0 U	5.0 U	-	5.0 U	-
Acetophenone	µg/L	0.89 J	0.98 J	1.0 U	-	-	-
Anthracene	µg/L	5.0 U	5.0 U	1.0 J	-	5.0 U	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW51-12	MW51-12	MW52-12	MW53-12	MW57-13	MW57-13
Sample Identification	WG-17360-050313-MR-037	WG-17360-050313-MR-038	WG-17360-050313-MR-039	WG-17360-050213-MR-028	GW-17360-042513-DR-084	GW-17360-050713-BW-048
Sample Date	5/3/2013	5/3/2013	5/3/2013	5/2/2013	4/25/2013	5/7/2013
Sample Type		Duplicate				
Screen Depth	17-27 ft BGS	17-27 ft BGS	16.7-26.7 ft BGS	13-23 ft BGS	10-20 ft BGS	10-20 ft BGS

SVOCs (continued)

Atrazine	µg/L	3.0 U	3.0 U	3.0 U	-	-	-
Benzaldehyde	µg/L	1.0 U	1.0 U	1.0 U	-	-	-
Benzo(a)anthracene	µg/L	1.0 U	1.0 U	1.0 U	-	1.0 U	-
Benzo(a)pyrene	µg/L	1.0 U	1.0 U	1.0 U	-	1.0 U	-
Benzo(b)fluoranthene	µg/L	1.0 U	1.0 U	1.0 U	-	1.0 U	-
Benzo(g,h,i)perylene	µg/L	1.0 U	1.0 U	1.0 U	-	1.0 U	-
<i>SVOCs continued</i>							
Benzo(k)fluoranthene	µg/L	1.0 U	1.0 U	1.0 U	-	1.0 U	-
Biphenyl (1,1-Biphenyl)	µg/L	5.0 U	5.0 U	0.91 J	-	-	-
bis(2-Chloroethoxy)methane	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
bis(2-Chloroethyl)ether	µg/L	1.0 U	1.0 U	1.0 U	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
Butyl benzylphthalate (BBP)	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
Caprolactam	µg/L	10 U	10 U	10 U	-	-	-
Carbazole	µg/L	10 U	10 U	10 U	-	-	-
Chrysene	µg/L	1.0 U	1.0 U	1.0 U	-	1.0 U	-
Dibenz(a,h)anthracene	µg/L	2.0 U	2.0 U	2.0 U	-	2.0 U	-
Dibenzofuran	µg/L	4.0 U	4.0 U	1.1 J	-	-	-
Diethyl phthalate	µg/L	5.0 U	5.0 U	5.0	-	-	-
Dimethyl phthalate	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
Di-n-butylphthalate (DBP)	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
Di-n-octyl phthalate (DnOP)	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
Fluoranthene	µg/L	1.0 U	1.0 U	1.0 U	-	1.0 U	-
Fluorene	µg/L	5.0 U	5.0 U	2.1 J	-	5.0 U	-
Hexachlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	-	-	-
Hexachlorobutadiene	µg/L	1.0 U	1.0 U	1.0 U	-	-	-
Hexachlorocyclopentadiene	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
Hexachloroethane	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	2.0 U	2.0 U	2.0 U	-	2.0 U	-
Isophorone	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
Naphthalene	µg/L	1.0 J	1.1 J	12 ^c	-	5.0 U	-
Nitrobenzene	µg/L	3.0 U	3.0 U	3.0 U	-	-	-
N-Nitrosodi-n-propylamine	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
N-Nitrosodiphenylamine	µg/L	5.0 U	5.0 U	5.0 U	-	-	-
Pentachlorophenol	µg/L	1.0 U	1.0 U	1.0 U	-	-	-
Phenanthrene	µg/L	2.0 U	2.0 U	1.2 J	-	2.0 U	-
Phenol	µg/L	3.8 J	3.7 J	5.0 U	-	-	-
Pyrene	µg/L	5.0 U	5.0 U	1.1 J	-	5.0 U	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
 SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
 FORMER GRAND RAPIDS METAL PLANT
 WYOMING, MICHIGAN

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Sample Location	MW51-12	MW51-12	MW52-12	MW53-12	MW57-13	MW57-13
Sample Identification	WG-17360-050313-MR-037	WG-17360-050313-MR-038	WG-17360-050313-MR-039	WG-17360-050213-MR-028	GW-17360-042513-DR-084	GW-17360-050713-BW-048
Sample Date	5/3/2013	5/3/2013	5/3/2013	5/2/2013	4/25/2013	5/7/2013
Sample Type		Duplicate				
Screen Depth	17-27 ft BGS	17-27 ft BGS	16.7-26.7 ft BGS	13-23 ft BGS	10-20 ft BGS	10-20 ft BGS
<i>Metals</i>						
Antimony	µg/L	-	-	-	-	-
Arsenic	µg/L	-	-	-	-	-
Barium	µg/L	-	-	-	-	-
Beryllium	µg/L	-	-	-	-	-
Cadmium	µg/L	-	-	-	-	-
Chromium	µg/L	-	-	-	-	-
Chromium III (trivalent)	µg/L	-	-	-	-	-
Chromium VI (hexavalent)	µg/L	-	-	-	-	-
Cobalt	µg/L	-	-	-	-	-
Copper	µg/L	-	-	-	-	-
Lead	µg/L	-	-	-	-	-
Manganese	µg/L	-	-	-	-	-
Mercury	µg/L	-	-	-	-	-
Molybdenum	µg/L	-	-	-	-	-
Nickel	µg/L	-	-	-	-	-
Selenium	µg/L	-	-	-	-	-
Silver	µg/L	-	-	-	-	-
Thallium	µg/L	-	-	-	-	-
Vanadium	µg/L	-	-	-	-	-
Zinc	µg/L	-	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		MW58-13	MW58-13	PWDISCH	C-1	C-2	C-3
Sample Identification		GW-17360-042513-DR-085	GW-17360-042513-DR-086	WG-17360-050113-MR-017	WS-17360-050113-MR-013	WS-17360-050113-MR-012	WS-17360-050113-MR-009
Sample Date		4/25/2013	4/25/2013	5/1/2013	5/1/2013	5/1/2013	5/1/2013
Sample Type		Duplicate					
Screen Depth		13.5-18.5 ft BGS	13.5-18.5 ft BGS	45-55 ft BGS	-	-	-
Volatile Organic Compounds (VOCs)		Units					
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone ⁽⁴⁾	µg/L	25 U	25 U	25 U	25 U	25 U	25 U
2-Hexanone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Acetone	µg/L	50 U	50 U	50 U	50 U	50 U	50 U
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	3.6	2.4	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location		MW58-13	MW58-13	PWDISCH	C-1	C-2	C-3
Sample Identification		GW-17360-042513-DR-085	GW-17360-042513-DR-086	WG-17360-050113-MR-017	WS-17360-050113-MR-013	WS-17360-050113-MR-012	WS-17360-050113-MR-009
Sample Date		4/25/2013	4/25/2013	5/1/2013	5/1/2013	5/1/2013	5/1/2013
Sample Type		Duplicate					
Screen Depth		13.5-18.5 ft BGS	13.5-18.5 ft BGS	45-55 ft BGS	-	-	-
<i>VOCs (continued)</i>							
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	7.4 ^{ab}	2.1	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	2.3	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
<i>Semi-Volatile Organic Compounds (SVOCs)</i>							
2,2'-Oxybis(1-chloropropane) ⁽⁶⁾	µg/L	-	-	-	-	-	-
2,4,5-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4,6-Trichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dichlorophenol	µg/L	-	-	-	-	-	-
2,4-Dimethylphenol	µg/L	-	-	-	-	-	-
2,4-Dinitrophenol	µg/L	-	-	-	-	-	-
2,4-Dinitrotoluene	µg/L	-	-	-	-	-	-
2,6-Dinitrotoluene	µg/L	-	-	-	-	-	-
2-Chloronaphthalene	µg/L	-	-	-	-	-	-
2-Chlorophenol	µg/L	-	-	-	-	-	-
2-Methylnaphthalene	µg/L	5.0 U	5.0 U	-	-	-	-
2-Methylphenol	µg/L	-	-	-	-	-	-
2-Nitroaniline	µg/L	-	-	-	-	-	-
2-Nitrophenol	µg/L	-	-	-	-	-	-
3,3'-Dichlorobenzidine	µg/L	-	-	-	-	-	-
3-Nitroaniline	µg/L	-	-	-	-	-	-
4,6-Dinitro-2-methylphenol	µg/L	-	-	-	-	-	-
4-Bromophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Chloro-3-methylphenol	µg/L	-	-	-	-	-	-
4-Chloroaniline	µg/L	-	-	-	-	-	-
4-Chlorophenyl phenyl ether	µg/L	-	-	-	-	-	-
4-Methylphenol	µg/L	-	-	-	-	-	-
4-Nitroaniline	µg/L	-	-	-	-	-	-
4-Nitrophenol	µg/L	-	-	-	-	-	-
Acenaphthene	µg/L	5.0 U	5.0 U	-	-	-	-
Acenaphthylene	µg/L	5.0 U	5.0 U	-	-	-	-
Acetophenone	µg/L	-	-	-	-	-	-
Anthracene	µg/L	5.0 U	5.0 U	-	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

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Sample Location	MW58-13	MW58-13	PWDISCH	C-1	C-2	C-3
Sample Identification	GW-17360-042513-DR-085	GW-17360-042513-DR-086	WG-17360-050113-MR-017	WS-17360-050113-MR-013	WS-17360-050113-MR-012	WS-17360-050113-MR-009
Sample Date	4/25/2013	4/25/2013	5/1/2013	5/1/2013	5/1/2013	5/1/2013
Sample Type	Duplicate					
Screen Depth	13.5-18.5 ft BGS	13.5-18.5 ft BGS	45-55 ft BGS	-	-	-

SVOCs (continued)

Atrazine	µg/L	-	-	-	-	-
Benzaldehyde	µg/L	-	-	-	-	-
Benzo(a)anthracene	µg/L	1.0 U	1.0 U	-	-	-
Benzo(a)pyrene	µg/L	1.0 U	1.0 U	-	-	-
Benzo(b)fluoranthene	µg/L	1.0 U	1.0 U	-	-	-
Benzo(g,h,i)perylene	µg/L	1.0 U	1.0 U	-	-	-
<i>SVOCs continued</i>						
Benzo(k)fluoranthene	µg/L	1.0 U	1.0 U	-	-	-
Biphenyl (1,1-Biphenyl)	µg/L	-	-	-	-	-
bis(2-Chloroethoxy)methane	µg/L	-	-	-	-	-
bis(2-Chloroethyl)ether	µg/L	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	µg/L	-	-	-	-	-
Butyl benzylphthalate (BBP)	µg/L	-	-	-	-	-
Caprolactam	µg/L	-	-	-	-	-
Carbazole	µg/L	-	-	-	-	-
Chrysene	µg/L	1.0 U	1.0 U	-	-	-
Dibenz(a,h)anthracene	µg/L	2.0 U	2.0 U	-	-	-
Dibenzofuran	µg/L	-	-	-	-	-
Diethyl phthalate	µg/L	-	-	-	-	-
Dimethyl phthalate	µg/L	-	-	-	-	-
Di-n-butylphthalate (DBP)	µg/L	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	µg/L	-	-	-	-	-
Fluoranthene	µg/L	1.0 U	1.0 U	-	-	-
Fluorene	µg/L	5.0 U	5.0 U	-	-	-
Hexachlorobenzene	µg/L	-	-	-	-	-
Hexachlorobutadiene	µg/L	-	-	-	-	-
Hexachlorocyclopentadiene	µg/L	-	-	-	-	-
Hexachloroethane	µg/L	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	2.0 U	2.0 U	-	-	-
Isophorone	µg/L	-	-	-	-	-
Naphthalene	µg/L	5.0 U	5.0 U	-	-	-
Nitrobenzene	µg/L	-	-	-	-	-
N-Nitrosodi-n-propylamine	µg/L	-	-	-	-	-
N-Nitrosodiphenylamine	µg/L	-	-	-	-	-
Pentachlorophenol	µg/L	-	-	-	-	-
Phenanthrene	µg/L	2.0 U	2.0 U	-	-	-
Phenol	µg/L	-	-	-	-	-
Pyrene	µg/L	5.0 U	5.0 U	-	-	-

TABLE 4

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER AND SURFACE WATER SAMPLES
 SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
 FORMER GRAND RAPIDS METAL PLANT
 WYOMING, MICHIGAN

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Sample Location		MW58-13	MW58-13	PWDISCH	C-1	C-2	C-3
Sample Identification		GW-17360-042513-DR-085	GW-17360-042513-DR-086	WG-17360-050113-MR-017	WS-17360-050113-MR-013	WS-17360-050113-MR-012	WS-17360-050113-MR-009
Sample Date		4/25/2013	4/25/2013	5/1/2013	5/1/2013	5/1/2013	5/1/2013
Sample Type		Duplicate					
Screen Depth		13.5-18.5 ft BGS	13.5-18.5 ft BGS	45-55 ft BGS	-	-	-
<i>Metals</i>							
Antimony	µg/L	0.12 J	0.11 J	-	-	-	-
Arsenic	µg/L	5 U	5 U	-	-	-	-
Barium	µg/L	25	25	-	-	-	-
Beryllium	µg/L	2 U	2 U	-	-	-	-
Cadmium	µg/L	2 U	2 U	-	-	-	-
Chromium	µg/L	0.44 J	0.39 J	-	-	-	-
Chromium III (trivalent)	µg/L	-	-	-	-	-	-
Chromium VI (hexavalent)	µg/L	-	-	-	-	-	-
Cobalt	µg/L	0.39 J	0.39 J	-	-	-	-
Copper	µg/L	0.65 J	0.66 J	-	-	-	-
Lead	µg/L	0.36 J	0.11 J	-	-	-	-
Manganese	µg/L	29	29	-	-	-	-
Mercury	µg/L	0.2 U	0.2 U	-	-	-	-
Molybdenum	µg/L	0.56 J	0.57 J	-	-	-	-
Nickel	µg/L	2.1 J	2 J	-	-	-	-
Selenium	µg/L	3.4 J	3.3 J	-	-	-	-
Silver	µg/L	5 U	5 U	-	-	-	-
Thallium	µg/L	5 U	5 U	-	-	-	-
Vanadium	µg/L	0.64 J	0.65 J	-	-	-	-
Zinc	µg/L	0.66 J	0.66 J	-	-	-	-

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR VERTICAL AQUIFER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Michigan Act 451, Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels: Residential and Non-Residential Generic Cleanup Criteria ^(a)

		Residential	Non-Residential	Groundwater	Residential Groundwater	Non-Residential Groundwater	Groundwater	Water	Flammability and	Acute
		Drinking	Drinking	Surface Water	Volatilization to	Volatilization to	Contact	Solubility	Explosivity	Inhalation
		Water	Water	Interface ⁽²⁾	Indoor Air Inhalation	Indoor Air Inhalation			Screening Levels	Screening Levels
		a	b	c	d	e	f	g	h	i
<i>Volatile Organic Compounds (VOCs)</i>	<i>Units</i>									
1,1,1-Trichloroethane	µg/L	200	200	89	660000	1300000	1300000	1330000	ID	1300000
1,1,2,2-Tetrachloroethane	µg/L	8.5	35	78	12000	77000	4700	2970000	ID	ID
1,1,2-Trichloroethane	µg/L	5	5	330	17000	110000	21000	4420000	NA	ID
1,1-Dichloroethane	µg/L	880	2500	740	1000000	2300000	2400000	5060000	380000	ID
1,1-Dichloroethene	µg/L	7	7	130	200	1300	11000	2250000	97000	140000
1,2,4-Trichlorobenzene	µg/L	70	70	99	300000	300000	19000	300000	NA	300000
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	0.2	0.2	NA	220	1200	390	1230	NA	ID
1,2-Dibromoethane ⁽⁵⁾	µg/L	0.05	0.05	5.7	2400	15000	25	4200000	ID	ID
1,2-Dichlorobenzene	µg/L	600	600	13	160000	160000	160000	156000	NA	160000
1,2-Dichloroethane	µg/L	5	5	360	9600	59000	19000	8520000	2500000	ID
1,2-Dichloropropane	µg/L	5	5	230	16000	36000	16000	2800000	550000	2800000
1,3-Dichlorobenzene	µg/L	6.6	19	28	18000	41000	2000	111000	ID	ID
1,4-Dichlorobenzene	µg/L	75	75	17	16000	74000	6400	73800	NA	ID
2-Butanone ⁽⁴⁾	µg/L	13000	38000	2200	240000000	240000000	240000000	240000000	ID	240000000
2-Hexanone	µg/L	1000	2900	ID	4200000	8700000	5200000	16000000	NA	ID
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	1800	5200	ID	20000000	20000000	13000000	20000000	ID	20000000
Acetone	µg/L	730	2100	1700	1000000000	1000000000	31000000	1000000000	15000000	1000000000
Benzene	µg/L	5	5	200	5600	35000	11000	1750000	68000	67000
Bromodichloromethane	µg/L	80	80	ID	4800	37000	14000	6740000	ID	ID
Bromoform	µg/L	80	80	ID	470000	3100000	140000	3100000	ID	ID
Bromomethane (Methyl bromide)	µg/L	10	29	35	4000	9000	70000	14500000	ID	ID
Carbon disulfide	µg/L	800	2300	ID	250000	550000	1200000	1190000	13000	ID
Carbon tetrachloride	µg/L	5	5	45	370	2400	4600	793000	ID	96000
Chlorobenzene	µg/L	100	100	25	210000	470000	86000	472000	160000	ID
Chloroethane	µg/L	430	1700	1100	5700000	5700000	440000	5740000	110000	ID
Chloroform (Trichloromethane)	µg/L	80	80	350	28000	180000	150000	7920000	ID	ID
Chloromethane (Methyl chloride)	µg/L	260	1100	ID	8600	45000	490000	6340000	36000	210000
cis-1,2-Dichloroethene	µg/L	70	70	620	93000	210000	200000	3500000	530000	ID
cis-1,3-Dichloropropene	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	µg/L	80	80	ID	14000	110000	18000	2600000	ID	ID
Dichlorodifluoromethane (CFC-12)	µg/L	1700	4800	ID	220000	300000	300000	300000	ID	ID
Ethylbenzene	µg/L	74	74	18	110000	170000	170000	169000	43000	170000
Isopropyl benzene	µg/L	800	2300	28	56000	56000	56000	56000	29000	ID
Methyl acetate	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl cyclohexane	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert butyl ether (MTBE)	µg/L	40	40	7100	47000000	47000000	610000	46800000	ID	ID
Methylene chloride	µg/L	5	5	1500	220000	1400000	220000	17000000	ID	ID
Styrene	µg/L	100	100	80	170000	310000	9700	310000	140000	310000

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR VERTICAL AQUIFER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Michigan Act 451, Part 201 Cleanup Criteria and Part 213 Risk-based Screening Levels: Residential and Non-Residential Generic Cleanup Criteria^(a)

		Residential	Non-Residential	Groundwater	Residential Groundwater	Non-Residential Groundwater	Groundwater	Water	Flammability and	Acute
		Drinking	Drinking	Surface Water	Volatilization to	Volatilization to	Contact	Solubility	Explosivity	Inhalation
		Water	Water	Interface ⁽²⁾	Indoor Air Inhalation	Indoor Air Inhalation			Screening Levels	Screening Levels
		a	b	c	d	e	f	g	h	i
<i>VOCs (continued)</i>										
Tetrachloroethene	µg/L	5	5	60	25000	170000	12000	200000	ID	200000
Toluene	µg/L	790	790	270	530000	530000	530000	526000	61000	ID
trans-1,2-Dichloroethene	µg/L	100	100	1500	85000	200000	220000	6300000	230000	ID
trans-1,3-Dichloropropene	µg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene	µg/L	5	5	200	2200	4900	22000	1100000	ID	1100000
Trichlorofluoromethane (CFC-11)	µg/L	2600	7300	NA	1100000	1100000	1100000	1100000	ID	1100000
Trifluorotrichloroethane (Freon 113)	µg/L	170000	170000	32	170000	170000	170000	170000	ID	170000
Vinyl chloride	µg/L	2	2	13	1100	13000	1000	2760000	33000	ID
Xylenes (total)	µg/L	280	280	41	190000	190000	190000	186000	70000	190000

Notes:

⁽¹⁾ Cleanup criteria identified by MDEQ RRD Op Memo No. 1, updated 9/28/2012, pursuant to 1994 PA 451 as amended.

⁽²⁾ Carbonate Hardness of 344 mg/L was used to calculate Groundwater Surface Water Interface Criteria.

⁽³⁾ 1,2-Dibromoethane also known as ethylene dibromide

⁽⁴⁾ 2-butanone also known as methyl ethyl ketone (MEK)

⁽⁵⁾ 4-methyl-2-pentanone also known as methyl isobutyl ketone (MIBK)

-- Parameter was not analyzed.

U - Not present at or above the associated value.

J - Estimated concentration.

UJ - Estimated reporting limit.

ID - Insufficient data to develop criterion.

NA - A criterion or value is not available or, in the case of background and CAS numbers, not applicable.

NLL - Hazardous substance is not likely to leach under most soil conditions.

NLV - Hazardous substance is not likely to volatilize under most conditions.

 Exceeds Generic Cleanup Criteria. Superscript letter notes the criterion exceeded.

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR VERTICAL AQUIFER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		VAS 48-13	VAS 48-13	VAS 48-13	VAS 48-13	VAS 48-13
Sample Identification		GW-17360-050613-BW-001	GW-17360-050613-BW-002	GW-17360-050613-BW-003	GW-17360-050613-BW-004	GW-17360-050613-BW-005
Sample Date		5/6/2013	5/6/2013	5/6/2013	5/6/2013	5/6/2013
Sample Depth		16 ft BGS	26 ft BGS	36 ft BGS	46 ft BGS	51 ft BGS
<i>Volatile Organic Compounds (VOCs)</i>		Units				
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone ⁽⁴⁾	µg/L	25 U	25 U	25 U	25 U	25 U
2-Hexanone	µg/L	50 U	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	50 U	50 U	50 U	50 U	50 U
Acetone	µg/L	50 U	50 U	50 U	50 U	6.1 J
Benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	0.45 J
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.4	1.8	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	0.27 J
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 5
SUMMARY OF ANALYTICAL RESULTS FOR VERTICAL AQUIFER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location	VAS 48-13	VAS 48-13	VAS 48-13	VAS 48-13	VAS 48-13
Sample Identification	GW-17360-050613-BW-001	GW-17360-050613-BW-002	GW-17360-050613-BW-003	GW-17360-050613-BW-004	GW-17360-050613-BW-005
Sample Date	5/6/2013	5/6/2013	5/6/2013	5/6/2013	5/6/2013
Sample Depth	16 ft BGS	26 ft BGS	36 ft BGS	46 ft BGS	51 ft BGS

VOCs (continued)

Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	µg/L	1.0 U	1.0 U	1.0 U	0.35 J	0.78 J
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	0.42 J

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR VERTICAL AQUIFER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location		VAS 49-13	VAS 49-13	VAS 49-13	VAS 49-13
Sample Identification		GW-17360-050813-BW-006	GW-17360-050813-BW-007	GW-17360-050813-BW-008	GW-17360-050813-BW-010
Sample Date		5/8/2013	5/8/2013	5/8/2013	5/8/2013
Sample Depth		16 ft BGS	26 ft BGS	36 ft BGS	39 ft BGS
<i>Volatile Organic Compounds (VOCs)</i>		Units			
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane ⁽³⁾	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone ⁽⁴⁾	µg/L	25 U	25 U	25 U	25 U
2-Hexanone	µg/L	50 U	50 U	50 U	50 U
4-Methyl-2-pentanone ⁽⁵⁾	µg/L	50 U	50 U	50 U	50 U
Acetone	µg/L	50 U	3.0 J	4.2 J	8.5 J
Benzene	µg/L	1.0 U	1.0 U	0.33 J	1.0 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon disulfide	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Ethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Isopropyl benzene	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methyl acetate	µg/L	10 U	10 U	10 U	10 U
Methyl cyclohexane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U

TABLE 5

SUMMARY OF ANALYTICAL RESULTS FOR VERTICAL AQUIFER SAMPLES
SITE-WIDE INVESTIGATION DATA PACKAGE - STAGE IV
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN

Sample Location	VAS 49-13	VAS 49-13	VAS 49-13	VAS 49-13
Sample Identification	GW-17360-050813-BW-006	GW-17360-050813-BW-007	GW-17360-050813-BW-008	GW-17360-050813-BW-010
Sample Date	5/8/2013	5/8/2013	5/8/2013	5/8/2013
Sample Depth	16 ft BGS	26 ft BGS	36 ft BGS	39 ft BGS

VOCs (continued)

	µg/L	54 ^{ab}	120 ^{abc}	190 ^{abc}	65 ^{abc}
Tetrachloroethene	µg/L	1.0 U	1.0 U	0.73 J	0.58 J
Toluene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	1.0 U	1.0 U	1.6	1.0 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (Freon 113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U
Xylenes (total)	µg/L	3.0 U	3.0 U	0.33 J	3.0 U

ATTACHMENT A

STRATIGRAPHIC SOIL BORING LOGS AND WELL CONSTRUCTION DETAILS



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 2

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: MW48-13

PROJECT NUMBER: 017360

DATE COMPLETED: May 6, 2013

CLIENT: RACER TRUST

DRILLING METHOD: 4-1/4" HSA

LOCATION: WYOMING, MI

FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	MONITORING WELL	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 512524.7 EASTING: 12772560.12 GROUND SURFACE TOP OF CASING	671.47 671.10						
2	SP-SAND, few silt, loose, fine grained, dark brown, moist - trace fine grained at 2.0ft BGS	662.47		1SS			5	0.0
4	- trace coarse gravel at 4.5ft BGS			2SS			8	0.0
6				3SS			6	-
8				4SS			5	0.2
10	SP-SAND, trace silt, loose, fine grained, light brown, moist			5SS			7	0.1
12	- becoming compact, trace fine gravel at 12.0ft BGS			6SS			10	0.1
14	- becoming loose, wet at 13.0ft BGS			7SS			5	1.1
16	- very loose at 16.0ft BGS			8SS			2	1.3
18				16' -001			3	1.4
20				9SS				
22				10SS			3	1.2
24				11SS			2	1.4
26				12SS			2	1.0
28				13SS			3	0.9
30				26' -002				
32				14SS			7	1.3
34				15SS			4	1.5
				16SS			7	1.6
				17SS			5	1.3

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

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/30/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 2 of 2

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: MW48-13

PROJECT NUMBER: 017360

DATE COMPLETED: May 6, 2013

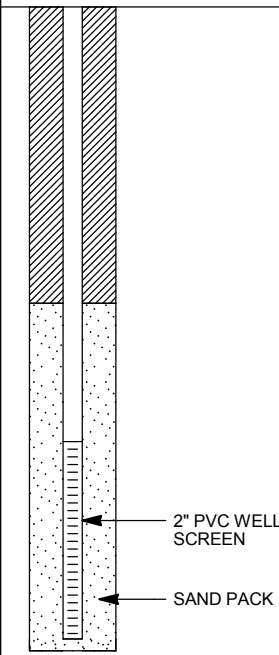
CLIENT: RACER TRUST

DRILLING METHOD: 4-1/4" HSA

LOCATION: WYOMING, MI

FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	MONITORING WELL	SAMPLE				
				NUMBER	INTERVAL	REC (%)	N' VALUE	PID (ppm)
36	- trace fine gravel at 35.0ft BGS			18SS			4	1.2
				36'-003				
38				19SS			7	1.3
40	SP-SAND, with gravel, trace silt, compact, fine grained, fine and coarse subangular to subrounded gravel, multicolored brown, wet	632.47		20SS			8	1.5
42	SP-SAND, few gravel, trace silt, fine grained, fine gravel, multicolored brown, wet	630.47		21SS			9	1.1
44				22SS			14	1.6
46	SP-SAND, few silt, trace fine gravel, compact, brown, wet	625.47		23SS			9	1.7
48	SP-SAND, with silt, compact, fine grained, brown, wet	622.97		46'-004				
50				24SS			22	1.9
52	CL-SILTY CLAY, few silty sand, lean, trace fine gravel, gray, moist	620.27		25SS			18	1.8
54	END OF BOREHOLE @ 52.0ft BGS	619.47		26SS			17	1.2
56				51'-005				
58								
60								
62								
64								
66								
68								



WELL DETAILS
 Screened interval:
 625.47 to 620.47ft
 46.00 to 51.00ft BGS
 Length: 5ft
 Diameter: 2in
 Slot Size: 0.010
 Material: PVC
 Seal:
 670.47 to 628.97ft
 1.00 to 42.50ft BGS
 Material: BENTONITE GROUT
 Sand Pack:
 628.97 to 620.17ft
 42.50 to 51.30ft BGS
 Material: SAND

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

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/30/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 2

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: MW49-13

PROJECT NUMBER: 017360

DATE COMPLETED: May 8, 2013

CLIENT: RACER TRUST

DRILLING METHOD: 4-1/4" HSA

LOCATION: WYOMING, MI

FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	MONITORING WELL	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 510574.36 EASTING: 12774090.06 GROUND SURFACE TOP OF CASING	679.23 678.78						
	TOPSOIL, vegetation	679.03	CONCRETE	1SS		54	10	0.7
2	SP-SAND, trace silt, loose, fine grained, brown, moist		BENTONITE GROUT	2SS		50	2	0.6
4			2" PVC WELL CASING	3SS		46	2	0.5
6			8" BOREHOLE	4SS		38	2	0.4
8				5SS		38	4	0.3
10				6SS		33	5	0.8
12				7SS		33	6	0.8
14	- wet at 13.5ft BGS	665.23		8SS		46	6	0.9
16	SP-SAND, trace silt, trace fine gravel, loose, fine grained, brown, wet			16' -006				
18	- trace cobble at 17.0ft BGS			9SS		38	17	0.1
20				10SS		42	5	0.2
22	- increase in density, compact at 21.0ft BGS			11SS		42	14	0.3
24	SP-SAND, trace silt, compact, fine grained, brown, wet	656.73		12SS		38	9	0.8
26	- loose at 23.0ft BGS			13SS		38	7	0.5
28				26' -007				
30				14SS		46	5	0.5
32			2" PVC WELL SCREEN	15SS		50	4	0.2
34	- increase in fine gravel, few coarse grained sand at 33.0ft BGS		SAND PACK	16SS		13	6	0.0
				17SS		33	10	0.0

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

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/30/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 2 of 2

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: MW49-13

PROJECT NUMBER: 017360

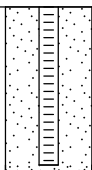
DATE COMPLETED: May 8, 2013

CLIENT: RACER TRUST

DRILLING METHOD: 4-1/4" HSA

LOCATION: WYOMING, MI

FIELD PERSONNEL: B. WILLIAMS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	MONITORING WELL	SAMPLE				
				NUMBER	INTERVAL	REC (%)	N' VALUE	PID (ppm)
36	- oxidation staining at 38.0ft BGS - decrease in sand content at 38.9ft BGS CL-SILTY CLAY (till), trace fine gravel, stiff, low plasticity, gray, moist END OF BOREHOLE @ 40.0ft BGS	639.63 639.23	 WELL DETAILS Screened interval: 645.23 to 640.23ft 34.00 to 39.00ft BGS Length: 5ft Diameter: 2in Slot Size: 0.010 Material: PVC Seal: 678.23 to 649.23ft 1.00 to 30.00ft BGS Material: BENTONITE GROUT Sand Pack: 649.23 to 640.03ft 30.00 to 39.20ft BGS Material: SAND	18SS		38	20	0.1
38				36'-008				
40				19SS		33	8	0.2
42				20SS 39'-010		29	6	-
44								
46								
48								
50								
52								
54								
56								
58								
60								
62								
64								
66								
68								

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

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/30/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: MW57-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 22, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH/ HSA

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	MONITORING WELL	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 510203.96 EASTING: 12773553.75	GROUND SURFACE TOP OF CASING 677.80 677.48						
2	GP-SANDY GRAVEL (FILL), compact, fine to coarse sand and gravel, poorly graded, brown to gray, moist	677.50	CONCRETE	1DP		85		0.4
4	SP-SAND (FILL), compact, fine to medium grained, poorly graded, dark brown, moist - orange brown at 1.1ft BGS - brown at 2.0ft BGS		BENTONITE CHIPS 2" PVC WELL CASING					0.4
6	SP-SAND, trace fine gravel, compact, fine to coarse rained, poorly graded, orange brown, moist - light brown at 5.7ft BGS	672.80	8-1/2" BOREHOLE	2DP		75		0.5
8	- moderately graded at 9.0ft BGS							0.7
10								1.6
12	- with fine gravel at 12.0ft BGS - wet at 12.8ft BGS		2" PVC WELL SCREEN	3DP		75		1.5
14	- trace fine gravel, poorly graded at 15.0ft BGS		SAND PACK					1.0
16				4DP		75		1.1
18								
20	- with fine gravel, moderately graded at 19.2ft BGS END OF BOREHOLE @ 20.0ft BGS	657.80						
22			WELL DETAILS Screened interval: 667.80 to 657.80ft 10.00 to 20.00ft BGS Length: 10ft Diameter: 2in Slot Size: 0.010 Material: PVC Seal: 676.80 to 669.80ft 1.00 to 8.00ft BGS Material: BENTONITE CHIPS Sand Pack: 669.80 to 657.80ft 8.00 to 20.00ft BGS Material: SAND					
24								
26								
28								
30								
32								
34								

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

OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT
PROJECT NUMBER: 017360
CLIENT: RACER TRUST
LOCATION: WYOMING, MI

HOLE DESIGNATION: MW58-13
DATE COMPLETED: April 22, 2013
DRILLING METHOD: DIRECT PUSH/ HSA
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	MONITORING WELL	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 511219.55 EASTING: 12772799.35 GROUND SURFACE TOP OF CASING	675.63 675.23						
	CONCRETE		CONCRETE					
2	SP-SAND (FILL), trace silt and fine gravel, compact, fine grained, poorly graded, brown, moist - trace coal and slag debris at 1.5ft BGS	674.63	BENTONITE CHIPS	1-3 -001 1DP		90		2.8
4	- no coal and slag debris at 2.5ft BGS		2" PVC WELL CASING					2.8
	FILL, mix of sand, coal and slag debris, fine to coarse sand, sand to gravel size coal and slag, gray to black, moist	671.63 670.83	8-1/2" BOREHOLE					
6	SP-SAND (FILL), trace silt and fine gravel, compact, fine grained, poorly graded, orange brown, moist			2DP 6.5-8.5 -002		75		2.0
8	- dark brown at 6.0ft BGS - orange brown at 6.2ft BGS							9.8
10	- brown, wet at 8.8ft BGS	666.43						
12	PT-PEAT, silt and clay size, trace to with woody material, black, moist - 0.2' woody material at 10.0ft BGS - with woody material at 12.0ft BGS	663.13	2" PVC WELL SCREEN	3DP		75		10.1
14	SP-SAND, trace silt, compact, fine grained, trace medium to coarse grained, poorly graded, light brown, moist							2.5
16	- fine to coarse grained, brown, wet at 14.4ft BGS							
18	- fine to medium grained, trace coarse grained at 15.0ft BGS		SAND PACK	4DP		75		1.7
20	END OF BOREHOLE @ 20.0ft BGS	655.63	2-1/2" BOREHOLE					1.3
22			WELL DETAILS					
24			Screened Interval: NATURAL COLLAPSE 662.13 to 657.13ft 13.50 to 18.50ft BGS					
26			Length: 5ft					
28			Diameter: 2in					
30			Slot Size: 0.010					
32			Material: PVC					
34			Seal: 674.63 to 663.13ft 1.00 to 12.50ft BGS Material: BENTONITE CHIPS Sand Pack: 663.13 to 657.13ft 12.50 to 18.50ft BGS Material: SAND					

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

CHEMICAL ANALYSIS

OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT
PROJECT NUMBER: 017360
CLIENT: RACER TRUST
LOCATION: WYOMING, MI

HOLE DESIGNATION: SB222-13
DATE COMPLETED: April 23, 2013
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE					
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)	
	NORTHING: 510201.29 EASTING: 12773879.22 GROUND SURFACE	679.15							
2	SP-SAND (FILL), compact, fine to medium grained, poorly graded, dark brown, moist			0-2' -043	1DP	80		1.0	
4								1.1	
6					2DP	75		0.8	
8								0.7	
10	SP-SAND, trace silt, with fine gravel, compact, fine to coarse grained, poorly graded, light brown, moist - no gravel, fine to medium grained, trace coarse grained at 10.0ft BGS - wet at 12.5ft BGS	670.15		10-12' -044	3DP	75		0.9	
12								1.1	
14									
16	END OF BOREHOLE @ 15.0ft BGS	664.15							
18									
20									
22									
24									
26									
28									
30									
32									
34									

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

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: SB223-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 23, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 510504.47 EASTING: 12772948.71 GROUND SURFACE	677.06						
	CONCRETE	676.56	CONCRETE					0.3
2	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown, moist			1DP		50		0.4
4								0.4
6			BACKFILLED WITH BENTONITE CHIPS					0.4
8	- with fine gravel at 7.0ft BGS			6-8' -003 2DP		65		0.5
10				8-10' -004				0.5
12				10-12' -005				0.5
14	- orange brown, wet at 13.0ft BGS			3DP		65		0.6
16	END OF BOREHOLE @ 15.0ft BGS	662.06						
18								
20								
22								
24								
26								
28								
30								
32								
34								

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

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT
PROJECT NUMBER: 017360
CLIENT: RACER TRUST
LOCATION: WYOMING, MI

HOLE DESIGNATION: SB224-13
DATE COMPLETED: April 23, 2013
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 510498.03 EASTING: 12772948.28 GROUND SURFACE	677.23						
	CONCRETE	676.63	CONCRETE	0-2' -006				0.8
2	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown, moist			1DP 2-4' -007		60		1.2
4				4-6' -008				1.0
6			BACKFILLED WITH BENTONITE CHIPS	6-8' -009 2DP		65		0.9
8				8-10' -010				0.7
10				10-12' -011				0.6
12				3DP				
14	- wet at 13.0ft BGS							
16	END OF BOREHOLE @ 15.0ft BGS	662.23						
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: SB225-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 23, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 510497.04 EASTING: 12772938.57 GROUND SURFACE	677.06						
	ASPHALT	676.96	CONCRETE	0-2' -012				0.9
2	CONCRETE	676.36		1DP 2-4' -013	75			1.1
4	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown, moist			4-6' -014				1.0
6			BACKFILLED WITH BENTONITE CHIPS	6-8' -015/ 016 2DP	50			1.2
8				8-10' -017				1.0
10				10-12' -018				1.1
12				3DP	75			
14	- wet at 13.0ft BGS							
16	END OF BOREHOLE @ 15.0ft BGS	662.06						
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: SB226-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 23, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 510496.72 EASTING: 12772929.96 GROUND SURFACE	677.08						
	ASPHALT	676.98	CONCRETE	0-2' -019				1.1
2	CONCRETE	676.28		1DP 2-4' -020		75		1.0
4	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown, moist			4-6' -021				0.8
6			BACKFILLED WITH BENTONITE CHIPS	6-8' -022 2DP		65		0.9
8				8-10' -023				1.0
10	SP-SAND, with fine gravel, compact, fine to coarse grained, poorly graded, light brown, moist	667.38		10-12' -024				1.1
12	- gravelly sand, moderately graded at 11.8ft BGS			3DP		65		
14	- brown, wet at 13.0ft BGS							
16	END OF BOREHOLE @ 15.0ft BGS	662.08						
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: SB227-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 23, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 510505.8 EASTING: 12772930.56 GROUND SURFACE	677.02						
	ASPHALT	676.92	CONCRETE	0-2' -025				1.7
2	CONCRETE	676.22		1DP 2-4' -026		75		1.6
4	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown, moist			4-6' -027				1.4
6			BACKFILLED WITH BENTONITE CHIPS	6-8' -028 2DP		65		1.5
8				8-10' -029				1.0
10				10-12' -030				1.1
12	SP-SAND, with fine gravel, compact, fine to coarse grained, poorly graded, light brown, moist	665.02		3DP		50		
14	- wet at 13.0ft BGS							
16	END OF BOREHOLE @ 15.0ft BGS	662.02						
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: SB228-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 23, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 510515.01 EASTING: 12772930.68 GROUND SURFACE	676.96						
	ASPHALT	676.86	CONCRETE	0-2' -031				1.7
2	CONCRETE	676.16		1DP 2-4' -032		80		1.8
4	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown, moist			4-6' -033				1.1
6			BACKFILLED WITH BENTONITE CHIPS	6-8' -034 2DP				1.0
8				8-10' -035				1.0
10				10-12' -036/ 037				1.0
12	SP-SAND, with fine gravel, compact, fine to coarse grained, poorly graded, light brown, moist	665.96		3DP				0.8
14	- brown, wet at 13.0ft BGS							
16	END OF BOREHOLE @ 15.0ft BGS	661.96						
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: SB229-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 23, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 510514.73 EASTING: 12772938.72 GROUND SURFACE	677.00						
	ASPHALT	676.80	CONCRETE					1.7
	CONCRETE	676.20						1.6
2	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown, moist			1DP		80		
4								1.2
6			BACKFILLED WITH BENTONITE CHIPS					1.3
8				6-8' -038 2DP		75		
10				8-10' -039				1.2
12				10-12' -040				1.1
14	SP-SAND, with fine gravel, compact, fine to coarse grained, poorly graded, light brown, moist	664.00		3DP		75		
16	END OF BOREHOLE @ 15.0ft BGS	662.00						
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: SB230-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 23, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 510506.5 EASTING: 12772939.3 GROUND SURFACE	677.01						
	ASPHALT	676.81	CONCRETE					1.4
2	CONCRETE	676.21		1DP		85		1.5
4	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown, moist		BACKFILLED WITH BENTONITE CHIPS					1.6
6				6-8' -041 2DP				1.6
8								1.3
10				10-12' -042 3DP				1.1
12								
14	SP-SAND, with fine gravel, compact, fine to coarse grained, poorly graded, light brown, moist	664.01						
16	END OF BOREHOLE @ 15.0ft BGS	662.01						
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

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PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT
PROJECT NUMBER: 017360
CLIENT: RACER TRUST
LOCATION: WYOMING, MI

HOLE DESIGNATION: SB231-13
DATE COMPLETED: April 24, 2013
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 512193.04 EASTING: 12772781.33 GROUND SURFACE	671.72						
	ASPHALT	671.52	CONCRETE	0-2' -045				1.1
2	FILL, mix of sand and slag debris, fine to coarse sand, fine sand to coarse gravel size slag debris, black, rust brown, bluish gray, moist	669.72 669.22		1DP 2-4' -046	70			1.0
4	SP-SAND (FILL), trace silt, compact, fine to coarse grained, poorly graded, brown, moist	667.92		4-6' -047				1.9
6	FILL, mix of sand and slag debris, fine to coarse sand, fine sand to coarse gravel size slag debris, black, rust brown, bluish gray, moist	664.92	BACKFILLED WITH BENTONITE CHIPS	6-8' -048 2DP	80			1.7
8	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, light brown, moist, trace slag debris - wet at 6.0ft BGS	663.92		8-10' -049				
10	PT-PEAT, trace silt and fine sand, firm, fibrous, dark brown to black, moist	661.72						
12	OL-ORGANIC SILT/MARL, with fine sand, soft, with fibers, grayish white, moist to wet							
	END OF BOREHOLE @ 10.0ft BGS							
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

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PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: SB232-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 24, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 512180.8 EASTING: 12772781.25 GROUND SURFACE	671.68						
	BROKEN ASPHALT	671.48	CONCRETE	0-2' -050				1.2
2	FILL, mix of sand and slag debris, fine to coarse sand, fine sand to coarse gravel size slag debris, black, rust brown, bluish gray, moist	669.68 669.38		1DP 2-4' -051		70		1.1
4	SP-SAND (FILL), trace silt, compact, fine to coarse grained, poorly graded, brown, moist	668.18		4-6' -052				1.3
6	FILL, mix of sand and slag debris, fine to coarse sand, fine sand to coarse gravel size slag debris, black, rust brown, bluish gray, moist		BACKFILLED WITH BENTONITE CHIPS	6-8' -053 2DP				
8	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, brown and gray, moist, trace to with slag debris	664.18 663.38		8-10' -054				1.0
10	- trace slag debris at 5.5ft BGS - concrete debris at 7.0ft BGS	661.68						
12	PT-PEAT, trace silt and fine sand, firm, fibrous, dark brown to black, moist							
14	OL-ORGANIC SILT/MARL, with fine sand, soft, with fibers, grayish white, moist to wet							
16	END OF BOREHOLE @ 10.0ft BGS							
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: SB239-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 24, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 512089.53 EASTING: 12772893.62 GROUND SURFACE	674.82						
	CONCRETE	674.32	CONCRETE					0.2
2	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown, moist		BACKFILLED WITH BENTONITE CHIPS			80		
4	- trace fine gravel, orange brown at 4.0ft BGS			1DP 2-4' -055				0.8
6	END OF BOREHOLE @ 5.0ft BGS	669.82						
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

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PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT
PROJECT NUMBER: 017360
CLIENT: RACER TRUST
LOCATION: WYOMING, MI

HOLE DESIGNATION: SB240-13
DATE COMPLETED: April 24, 2013
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 512058.32 EASTING: 12772894.18 GROUND SURFACE	674.73						
	CONCRETE	674.13	CONCRETE					1.0
2	SP-SAND (FILL), trace silt, compact, fine grained, poorly graded, brown, moist		BACKFILLED WITH BENTONITE CHIPS			60		1.2
4								
6	END OF BOREHOLE @ 5.0ft BGS	669.73						
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

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PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT
PROJECT NUMBER: 017360
CLIENT: RACER TRUST
LOCATION: WYOMING, MI

HOLE DESIGNATION: SB241-13
DATE COMPLETED: April 24, 2013
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 512114.9 EASTING: 12773002.52 GROUND SURFACE	676.13						
2	SP/GP-SAND AND GRAVEL (FILL), with crushed concrete, loose, fine grained sand, fine to coarse grained gravel, poorly graded, brown, moist	675.13	CONCRETE	0-2' -057				0.6
4	SP-SAND (FILL), trace silt, trace concrete, wood and brick debris, loose, fine grained, poorly graded, brown, moist			1DP 2-4' -058	60			0.7
6	- with slag debris, black at 2.5ft BGS - no slag debris, light brown at 3.0ft BGS		BACKFILLED WITH BENTONITE CHIPS	4-6' -059				0.7
8	- with slag debris, dark brown to black at 4.8ft BGS - no slag debris, light brown at 5.0ft BGS			60 2DP	60			
10	- with slag debris, dark brown to black at 6.0ft BGS - no slag debris, brown at 6.3ft BGS	666.13		8-10' -061				0.8
12	- with slag debris, dark brown to black at 7.9ft BGS - no slag debris, brown at 8.2ft BGS							
14	- fine to coarse grained, trace fine gravel, orange brown at 9.5ft BGS							
16	END OF BOREHOLE @ 10.0ft BGS							
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

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PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT
PROJECT NUMBER: 017360
CLIENT: RACER TRUST
LOCATION: WYOMING, MI

HOLE DESIGNATION: SB242-13
DATE COMPLETED: April 24, 2013
DRILLING METHOD: DIRECT PUSH
FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 512093.77 EASTING: 12773014.23 GROUND SURFACE	676.38						
2	SP/GP-SAND AND GRAVEL (FILL), with crushed concrete, loose, fine grained sand, fine to coarse grained gravel, poorly graded, brown, moist	675.38	CONCRETE	0-2' -062				0.8
4	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, dark brown to black, moist, with slag debris, foundry sand - 0.2" brick debris at 4.0ft BGS			1DP 2-4' -063/ 064	60			1.2
6			BACKFILLED WITH BENTONITE CHIPS	4-6' -065				1.1
8	SP-SAND (FILL), trace silt, fine grained, poorly graded, orange brown, moist	668.18		6-8' -067 2DP	75			0.9
10	END OF BOREHOLE @ 10.0ft BGS	666.38		8-10' -068				
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

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PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: SB243-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 24, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 512113.03 EASTING: 12773023.1 GROUND SURFACE	675.96						
2	SP/GP-SAND AND GRAVEL (FILL), with crushed concrete, loose, fine grained sand, fine to coarse grained gravel, poorly graded, brown, moist	674.96	CONCRETE	0-2' -068				1.2
4	SP-SAND (FILL), trace silt and fine gravel, compact, fine to coarse grained, poorly graded, dark brown, moist, with slag debris, trace concrete debris			1DP 2-4' -069	70			1.4
6	- no slag debris, brown at 2.0ft BGS		BACKFILLED WITH BENTONITE CHIPS	4-6' -070				1.1
8	- with slag debris, dark brown to black at 4.5ft BGS			6-8' -071 2DP	75			
10	- no slag debris, fine gravel, orange brown at 5.3ft BGS			8-10' -072				1.3
10	END OF BOREHOLE @ 10.0ft BGS	665.96						
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: SB244-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 24, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 512111.57 EASTING: 12773013.04 GROUND SURFACE	676.15						
2	SP/GP-SAND AND GRAVEL (FILL), with crushed concrete, loose, fine grained sand, fine to coarse grained gravel, poorly graded, brown, moist	675.15	CONCRETE	0-2' -073				1.2
4	SP-SAND (FILL), with slag, resembles foundry type sand, loose, fine grained, poorly graded, black, moist - trace slag, orange brown at 4.5ft BGS			1DP 2-4' -074/ 075	80			1.0
6	CONCRETE	670.15 669.85	BACKFILLED WITH BENTONITE CHIPS	4-6' -076				1.3
8	SP-SAND (FILL), trace silt, loose, fine grained, poorly graded, brown, moist	668.15		6-8' -077 2DP				
10	PT-PEAT (native), with sand and silt, loose, black, moist	667.65		8-10' -078				1.0
12	SP-SAND, trace silt, compact, fine to medium grained, poorly graded, grayish brown, moist	667.15						
14	PT/SP-PEAT AND SAND, interbedded, peat with sand and silt, loose, black, moist, fine to medium grained sand, trace silt, loose, black, moist	666.85						
16	SP-SAND, trace silt, compact, fine grained, poorly graded, orange brown, moist	666.15						
18	END OF BOREHOLE @ 10.0ft BGS							
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32								
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NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS



OVERBURDEN LOG 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13



STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

Page 1 of 1

PROJECT NAME: FORMER GRAND RAPIDS METAL PLANT

HOLE DESIGNATION: SB245-13

PROJECT NUMBER: 017360

DATE COMPLETED: April 24, 2013

CLIENT: RACER TRUST

DRILLING METHOD: DIRECT PUSH

LOCATION: WYOMING, MI

FIELD PERSONNEL: D. RIVERS

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft	BOREHOLE	SAMPLE				
				NUMBER	INTERVAL	REC (%)	'N' VALUE	PID (ppm)
	NORTHING: 512131.16 EASTING: 12773013.17 GROUND SURFACE	675.78						
2	SP/GP-SAND AND GRAVEL (FILL), with crushed concrete, loose, fine grained sand, fine to coarse grained gravel, poorly graded, brown, moist	674.78	CONCRETE	0-2' -079				0.8
4	SP-SAND (FILL), compact, fine grained, poorly graded, brown, moist, trace fine gravel	672.28		1DP 2-4' -080		75		1.1
6	SP-SAND (FILL), with slag debris, trace silt, compact, fine to coarse grained, poorly graded, dark brown to black, moist - 0.2' concrete debris at 6.0ft BGS		BACKFILLED WITH BENTONITE CHIPS	4-6' -081				1.0
8	SP-SAND, trace silt, compact, fine grained, poorly graded, brown to orange brown, moist	668.28		6-8' -082 2DP		85		1.3
10	PT-PEAT (native), with sand and silt, loose, black, moist	666.28 665.78		8-10' -083				
	END OF BOREHOLE @ 10.0ft BGS							
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 017360-T05WIN.GPJ CRA_CORP.GDT 5/29/13

ATTACHMENT B

ANALYTICAL LABORATORY DATA



06-May-2013

Paul Wiseman
Conestoga-Rovers & Associates
14496 Sheldon Road
Suite 200
Plymouth, MI 48170

Re: **Former GRMP (017360-T05Y13-01Y13)**

Work Order: **13041047**

Dear Paul,

ALS Environmental received 4 samples on 25-Apr-2013 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 31.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Beamish".

Electronically approved by: Tom Beamish

Tom Beamish
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

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Environmental

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RIGHT SOLUTIONS RIGHT PARTNER

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Work Order: 13041047

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
13041047-01	GW-17360-042513-DR-084	Groundwater		04/25/13 08:50	04/25/13 11:40	☐
13041047-02	GW-17360-042513-DR-085	Groundwater		04/25/13 09:45	04/25/13 11:40	☐
13041047-03	GW-17360-042513-DR-086	Groundwater		04/25/13 10:15	04/25/13 11:40	☐
13041047-04	Trip Blank-GW	Water		04/25/13	04/25/13 11:40	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
WorkOrder: 13041047

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Work Order: 13041047

Case Narrative**Analytical Comments:**

Batch 48019, Method PNLVI_8270_W, Sample 13041047-01A: One or more SVOC surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.

Batch 48019, Method PNLVI_8270_W, Sample 13041047-03B: One or more SVOC surrogate recoveries were above the upper control limits. The sample was non-detect, therefore, no qualification is needed.

QC Comments:

Batch R119800A, Method VOC_8260_W, Sample VLCSW1-130429: The LCS recovery was above the upper control limit. All sample results in the batch were non-detect. No qualification is necessary for 2-Hexanone and 4-Methyl-2-pentanone.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: GW-17360-042513-DR-084
Collection Date: 04/25/13 08:50 AM

Work Order: 13041047
Lab ID: 13041047-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep: SW3511 / 4/29/13	Analyst: HL	
<u>BatchID: 48019</u>							
2-Methylnaphthalene	U		0.36	5.0	µg/L	1	05/01/13 03:00
Acenaphthene	U		0.34	5.0	µg/L	1	05/01/13 03:00
Acenaphthylene	U		0.35	5.0	µg/L	1	05/01/13 03:00
Anthracene	U		0.33	5.0	µg/L	1	05/01/13 03:00
Benzo(a)anthracene	U		0.35	1.0	µg/L	1	05/01/13 03:00
Benzo(a)pyrene	U		0.16	1.0	µg/L	1	05/01/13 03:00
Benzo(b)fluoranthene	U		0.25	1.0	µg/L	1	05/01/13 03:00
Benzo(g,h,i)perylene	U		0.17	1.0	µg/L	1	05/01/13 03:00
Benzo(k)fluoranthene	U		0.30	1.0	µg/L	1	05/01/13 03:00
Chrysene	U		0.19	1.0	µg/L	1	05/01/13 03:00
Dibenzo(a,h)anthracene	U		0.23	2.0	µg/L	1	05/01/13 03:00
Fluoranthene	U		0.30	1.0	µg/L	1	05/01/13 03:00
Fluorene	U		0.29	5.0	µg/L	1	05/01/13 03:00
Indeno(1,2,3-cd)pyrene	U		0.18	2.0	µg/L	1	05/01/13 03:00
Naphthalene	U		0.39	5.0	µg/L	1	05/01/13 03:00
Phenanthrene	U		0.24	2.0	µg/L	1	05/01/13 03:00
Pyrene	U		0.20	5.0	µg/L	1	05/01/13 03:00
Surr: 2-Fluorobiphenyl	123	S		20-122	%REC	1	05/01/13 03:00
Surr: 4-Terphenyl-d14	127			22-172	%REC	1	05/01/13 03:00
Surr: Nitrobenzene-d5	117	S		8-115	%REC	1	05/01/13 03:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: GW-17360-042513-DR-085
Collection Date: 04/25/13 09:45 AM

Work Order: 13041047
Lab ID: 13041047-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470			Prep: SW7470 / 4/26/13	Analyst: LR
<u>BatchID: 47979</u>							
Mercury	U		0.00010	0.00020	mg/L	1	04/26/13 14:56
METALS BY ICP-MS							
			SW6020A			Prep: SW3005A / 4/29/13	Analyst: RH
<u>BatchID: 48012</u>							
Antimony	0.00012	J	0.000036	0.0050	mg/L	1	04/29/13 21:43
Arsenic	U		0.00058	0.0050	mg/L	1	04/29/13 21:43
Barium	0.025		0.000063	0.0050	mg/L	1	04/29/13 21:43
Beryllium	U		0.000082	0.0020	mg/L	1	04/29/13 21:43
Cadmium	U		0.000045	0.0020	mg/L	1	04/29/13 21:43
Chromium	0.00044	J	0.00027	0.0050	mg/L	1	04/29/13 21:43
Cobalt	0.00039	J	0.000041	0.0050	mg/L	1	04/29/13 21:43
Copper	0.00065	J	0.00053	0.0050	mg/L	1	04/29/13 21:43
Iron	0.050	J	0.0053	0.080	mg/L	1	04/29/13 21:43
Lead	0.00036	J	0.000051	0.0050	mg/L	1	04/29/13 21:43
Manganese	0.029		0.000054	0.0050	mg/L	1	04/29/13 21:43
Molybdenum	0.00056	J	0.000088	0.0050	mg/L	1	04/29/13 21:43
Nickel	0.0021	J	0.00025	0.0050	mg/L	1	04/29/13 21:43
Selenium	0.0034	J	0.00064	0.0050	mg/L	1	04/29/13 21:43
Silver	U		0.000042	0.0050	mg/L	1	04/29/13 21:43
Thallium	U		0.000062	0.0050	mg/L	1	04/29/13 21:43
Vanadium	0.00064	J	0.00016	0.0050	mg/L	1	04/29/13 21:43
Zinc	0.00066	J	0.00048	0.010	mg/L	1	04/29/13 21:43
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3511 / 4/29/13	Analyst: HL
<u>BatchID: 48019</u>							
2-Methylnaphthalene	U		0.36	5.0	µg/L	1	05/01/13 04:58
Acenaphthene	U		0.34	5.0	µg/L	1	05/01/13 04:58
Acenaphthylene	U		0.35	5.0	µg/L	1	05/01/13 04:58
Anthracene	U		0.33	5.0	µg/L	1	05/01/13 04:58
Benzo(a)anthracene	U		0.35	1.0	µg/L	1	05/01/13 04:58
Benzo(a)pyrene	U		0.16	1.0	µg/L	1	05/01/13 04:58
Benzo(b)fluoranthene	U		0.25	1.0	µg/L	1	05/01/13 04:58
Benzo(g,h,i)perylene	U		0.17	1.0	µg/L	1	05/01/13 04:58
Benzo(k)fluoranthene	U		0.30	1.0	µg/L	1	05/01/13 04:58
Chrysene	U		0.19	1.0	µg/L	1	05/01/13 04:58
Dibenzo(a,h)anthracene	U		0.23	2.0	µg/L	1	05/01/13 04:58
Fluoranthene	U		0.30	1.0	µg/L	1	05/01/13 04:58
Fluorene	U		0.29	5.0	µg/L	1	05/01/13 04:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: GW-17360-042513-DR-085
Collection Date: 04/25/13 09:45 AM

Work Order: 13041047
Lab ID: 13041047-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	U		0.18	2.0	µg/L	1	05/01/13 04:58
Naphthalene	U		0.39	5.0	µg/L	1	05/01/13 04:58
Phenanthrene	U		0.24	2.0	µg/L	1	05/01/13 04:58
Pyrene	U		0.20	5.0	µg/L	1	05/01/13 04:58
Surr: 2-Fluorobiphenyl	119			20-122	%REC	1	05/01/13 04:58
Surr: 4-Terphenyl-d14	122			22-172	%REC	1	05/01/13 04:58
Surr: Nitrobenzene-d5	113			8-115	%REC	1	05/01/13 04:58
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: BG	
BatchID: R119800							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	04/29/13 21:28
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	04/29/13 21:28
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	04/29/13 21:28
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	04/29/13 21:28
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	04/29/13 21:28
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	04/29/13 21:28
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	04/29/13 21:28
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	04/29/13 21:28
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	04/29/13 21:28
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	04/29/13 21:28
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	04/29/13 21:28
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	04/29/13 21:28
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	04/29/13 21:28
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	04/29/13 21:28
2-Butanone	U		0.22	25	µg/L	1	04/29/13 21:28
2-Hexanone	U		0.12	50	µg/L	1	04/29/13 21:28
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	04/29/13 21:28
Acetone	U		0.33	50	µg/L	1	04/29/13 21:28
Benzene	U		0.18	1.0	µg/L	1	04/29/13 21:28
Bromodichloromethane	U		0.12	1.0	µg/L	1	04/29/13 21:28
Bromoform	U		0.15	1.0	µg/L	1	04/29/13 21:28
Bromomethane	U		0.21	5.0	µg/L	1	04/29/13 21:28
Carbon disulfide	U		0.17	5.0	µg/L	1	04/29/13 21:28
Carbon tetrachloride	U		0.12	1.0	µg/L	1	04/29/13 21:28
Chlorobenzene	U		0.13	1.0	µg/L	1	04/29/13 21:28
Chloroethane	U		0.46	5.0	µg/L	1	04/29/13 21:28
Chloroform	U		0.15	1.0	µg/L	1	04/29/13 21:28
Chloromethane	U		0.16	5.0	µg/L	1	04/29/13 21:28
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	04/29/13 21:28
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	04/29/13 21:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: GW-17360-042513-DR-085
Collection Date: 04/25/13 09:45 AM

Work Order: 13041047
Lab ID: 13041047-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Cyclohexane	U		0.22	1.0	µg/L	1	04/29/13 21:28
Dibromochloromethane	U		0.13	5.0	µg/L	1	04/29/13 21:28
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	04/29/13 21:28
Ethylbenzene	U		0.13	1.0	µg/L	1	04/29/13 21:28
Isopropylbenzene	U		0.14	5.0	µg/L	1	04/29/13 21:28
Methyl acetate	U		0.19	10	µg/L	1	04/29/13 21:28
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	04/29/13 21:28
Methylcyclohexane	U		0.99	1.0	µg/L	1	04/29/13 21:28
Methylene chloride	U		0.19	5.0	µg/L	1	04/29/13 21:28
Styrene	U		0.11	1.0	µg/L	1	04/29/13 21:28
Tetrachloroethene	U		0.15	1.0	µg/L	1	04/29/13 21:28
Toluene	U		0.12	1.0	µg/L	1	04/29/13 21:28
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	04/29/13 21:28
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	04/29/13 21:28
Trichloroethene	U		0.14	1.0	µg/L	1	04/29/13 21:28
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	04/29/13 21:28
Vinyl chloride	U		0.17	1.0	µg/L	1	04/29/13 21:28
Xylenes, Total	U		0.29	3.0	µg/L	1	04/29/13 21:28
Surr: 1,2-Dichloroethane-d4	105			70-120	%REC	1	04/29/13 21:28
Surr: 4-Bromofluorobenzene	99.6			75-120	%REC	1	04/29/13 21:28
Surr: Dibromofluoromethane	99.0			85-115	%REC	1	04/29/13 21:28
Surr: Toluene-d8	103			85-120	%REC	1	04/29/13 21:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: GW-17360-042513-DR-086
Collection Date: 04/25/13 10:15 AM

Work Order: 13041047
Lab ID: 13041047-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470			Prep: SW7470 / 4/26/13	Analyst: LR
<u>BatchID: 47979</u>							
Mercury	U		0.00010	0.00020	mg/L	1	04/26/13 14:58
METALS BY ICP-MS							
			SW6020A			Prep: SW3005A / 4/29/13	Analyst: RH
<u>BatchID: 48012</u>							
Antimony	0.00011	J	0.000036	0.0050	mg/L	1	04/29/13 21:48
Arsenic	U		0.00058	0.0050	mg/L	1	04/29/13 21:48
Barium	0.025		0.000063	0.0050	mg/L	1	04/29/13 21:48
Beryllium	U		0.000082	0.0020	mg/L	1	04/29/13 21:48
Cadmium	U		0.000045	0.0020	mg/L	1	04/29/13 21:48
Chromium	0.00039	J	0.00027	0.0050	mg/L	1	04/29/13 21:48
Cobalt	0.00039	J	0.000041	0.0050	mg/L	1	04/29/13 21:48
Copper	0.00066	J	0.00053	0.0050	mg/L	1	04/29/13 21:48
Iron	0.049	J	0.0053	0.080	mg/L	1	04/29/13 21:48
Lead	0.00011	J	0.000051	0.0050	mg/L	1	04/29/13 21:48
Manganese	0.029		0.000054	0.0050	mg/L	1	04/29/13 21:48
Molybdenum	0.00057	J	0.000088	0.0050	mg/L	1	04/29/13 21:48
Nickel	0.0020	J	0.00025	0.0050	mg/L	1	04/29/13 21:48
Selenium	0.0033	J	0.00064	0.0050	mg/L	1	04/29/13 21:48
Silver	U		0.000042	0.0050	mg/L	1	04/29/13 21:48
Thallium	U		0.000062	0.0050	mg/L	1	04/29/13 21:48
Vanadium	0.00065	J	0.00016	0.0050	mg/L	1	04/29/13 21:48
Zinc	0.00066	J	0.00048	0.010	mg/L	1	04/29/13 21:48
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3511 / 4/29/13	Analyst: HL
<u>BatchID: 48019</u>							
2-Methylnaphthalene	U		0.36	5.0	µg/L	1	05/01/13 05:36
Acenaphthene	U		0.34	5.0	µg/L	1	05/01/13 05:36
Acenaphthylene	U		0.35	5.0	µg/L	1	05/01/13 05:36
Anthracene	U		0.33	5.0	µg/L	1	05/01/13 05:36
Benzo(a)anthracene	U		0.35	1.0	µg/L	1	05/01/13 05:36
Benzo(a)pyrene	U		0.16	1.0	µg/L	1	05/01/13 05:36
Benzo(b)fluoranthene	U		0.25	1.0	µg/L	1	05/01/13 05:36
Benzo(g,h,i)perylene	U		0.17	1.0	µg/L	1	05/01/13 05:36
Benzo(k)fluoranthene	U		0.30	1.0	µg/L	1	05/01/13 05:36
Chrysene	U		0.19	1.0	µg/L	1	05/01/13 05:36
Dibenzo(a,h)anthracene	U		0.23	2.0	µg/L	1	05/01/13 05:36
Fluoranthene	U		0.30	1.0	µg/L	1	05/01/13 05:36
Fluorene	U		0.29	5.0	µg/L	1	05/01/13 05:36

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: GW-17360-042513-DR-086
Collection Date: 04/25/13 10:15 AM

Work Order: 13041047
Lab ID: 13041047-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	U		0.18	2.0	µg/L	1	05/01/13 05:36
Naphthalene	U		0.39	5.0	µg/L	1	05/01/13 05:36
Phenanthrene	U		0.24	2.0	µg/L	1	05/01/13 05:36
Pyrene	U		0.20	5.0	µg/L	1	05/01/13 05:36
Surr: 2-Fluorobiphenyl	126	S		20-122	%REC	1	05/01/13 05:36
Surr: 4-Terphenyl-d14	129			22-172	%REC	1	05/01/13 05:36
Surr: Nitrobenzene-d5	122	S		8-115	%REC	1	05/01/13 05:36
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: BG	
BatchID: R119800							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	04/29/13 21:52
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	04/29/13 21:52
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	04/29/13 21:52
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	04/29/13 21:52
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	04/29/13 21:52
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	04/29/13 21:52
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	04/29/13 21:52
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	04/29/13 21:52
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	04/29/13 21:52
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	04/29/13 21:52
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	04/29/13 21:52
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	04/29/13 21:52
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	04/29/13 21:52
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	04/29/13 21:52
2-Butanone	U		0.22	25	µg/L	1	04/29/13 21:52
2-Hexanone	U		0.12	50	µg/L	1	04/29/13 21:52
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	04/29/13 21:52
Acetone	U		0.33	50	µg/L	1	04/29/13 21:52
Benzene	U		0.18	1.0	µg/L	1	04/29/13 21:52
Bromodichloromethane	U		0.12	1.0	µg/L	1	04/29/13 21:52
Bromoform	U		0.15	1.0	µg/L	1	04/29/13 21:52
Bromomethane	U		0.21	5.0	µg/L	1	04/29/13 21:52
Carbon disulfide	U		0.17	5.0	µg/L	1	04/29/13 21:52
Carbon tetrachloride	U		0.12	1.0	µg/L	1	04/29/13 21:52
Chlorobenzene	U		0.13	1.0	µg/L	1	04/29/13 21:52
Chloroethane	U		0.46	5.0	µg/L	1	04/29/13 21:52
Chloroform	U		0.15	1.0	µg/L	1	04/29/13 21:52
Chloromethane	U		0.16	5.0	µg/L	1	04/29/13 21:52
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	04/29/13 21:52
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	04/29/13 21:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: GW-17360-042513-DR-086
Collection Date: 04/25/13 10:15 AM

Work Order: 13041047
Lab ID: 13041047-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Cyclohexane	U		0.22	1.0	µg/L	1	04/29/13 21:52
Dibromochloromethane	U		0.13	5.0	µg/L	1	04/29/13 21:52
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	04/29/13 21:52
Ethylbenzene	U		0.13	1.0	µg/L	1	04/29/13 21:52
Isopropylbenzene	U		0.14	5.0	µg/L	1	04/29/13 21:52
Methyl acetate	U		0.19	10	µg/L	1	04/29/13 21:52
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	04/29/13 21:52
Methylcyclohexane	U		0.99	1.0	µg/L	1	04/29/13 21:52
Methylene chloride	U		0.19	5.0	µg/L	1	04/29/13 21:52
Styrene	U		0.11	1.0	µg/L	1	04/29/13 21:52
Tetrachloroethene	U		0.15	1.0	µg/L	1	04/29/13 21:52
Toluene	U		0.12	1.0	µg/L	1	04/29/13 21:52
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	04/29/13 21:52
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	04/29/13 21:52
Trichloroethene	U		0.14	1.0	µg/L	1	04/29/13 21:52
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	04/29/13 21:52
Vinyl chloride	U		0.17	1.0	µg/L	1	04/29/13 21:52
Xylenes, Total	U		0.29	3.0	µg/L	1	04/29/13 21:52
Surr: 1,2-Dichloroethane-d4	104			70-120	%REC	1	04/29/13 21:52
Surr: 4-Bromofluorobenzene	97.2			75-120	%REC	1	04/29/13 21:52
Surr: Dibromofluoromethane	101			85-115	%REC	1	04/29/13 21:52
Surr: Toluene-d8	101			85-120	%REC	1	04/29/13 21:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: Trip Blank-GW
Collection Date: 04/25/13

Work Order: 13041047
Lab ID: 13041047-04
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R119800</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	04/29/13 21:05
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	04/29/13 21:05
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	04/29/13 21:05
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	04/29/13 21:05
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	04/29/13 21:05
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	04/29/13 21:05
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	04/29/13 21:05
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	04/29/13 21:05
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	04/29/13 21:05
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	04/29/13 21:05
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	04/29/13 21:05
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	04/29/13 21:05
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	04/29/13 21:05
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	04/29/13 21:05
2-Butanone	U		0.22	25	µg/L	1	04/29/13 21:05
2-Hexanone	U		0.12	50	µg/L	1	04/29/13 21:05
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	04/29/13 21:05
Acetone	U		0.33	50	µg/L	1	04/29/13 21:05
Benzene	U		0.18	1.0	µg/L	1	04/29/13 21:05
Bromodichloromethane	U		0.12	1.0	µg/L	1	04/29/13 21:05
Bromoform	U		0.15	1.0	µg/L	1	04/29/13 21:05
Bromomethane	U		0.21	5.0	µg/L	1	04/29/13 21:05
Carbon disulfide	U		0.17	5.0	µg/L	1	04/29/13 21:05
Carbon tetrachloride	U		0.12	1.0	µg/L	1	04/29/13 21:05
Chlorobenzene	U		0.13	1.0	µg/L	1	04/29/13 21:05
Chloroethane	U		0.46	5.0	µg/L	1	04/29/13 21:05
Chloroform	0.76	J	0.15	1.0	µg/L	1	04/29/13 21:05
Chloromethane	U		0.16	5.0	µg/L	1	04/29/13 21:05
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	04/29/13 21:05
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	04/29/13 21:05
Cyclohexane	U		0.22	1.0	µg/L	1	04/29/13 21:05
Dibromochloromethane	U		0.13	5.0	µg/L	1	04/29/13 21:05
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	04/29/13 21:05
Ethylbenzene	U		0.13	1.0	µg/L	1	04/29/13 21:05
Isopropylbenzene	U		0.14	5.0	µg/L	1	04/29/13 21:05
Methyl acetate	U		0.19	10	µg/L	1	04/29/13 21:05
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	04/29/13 21:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: Trip Blank-GW
Collection Date: 04/25/13

Work Order: 13041047
Lab ID: 13041047-04
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	04/29/13 21:05
Methylene chloride	U		0.19	5.0	µg/L	1	04/29/13 21:05
Styrene	U		0.11	1.0	µg/L	1	04/29/13 21:05
Tetrachloroethene	U		0.15	1.0	µg/L	1	04/29/13 21:05
Toluene	U		0.12	1.0	µg/L	1	04/29/13 21:05
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	04/29/13 21:05
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	04/29/13 21:05
Trichloroethene	U		0.14	1.0	µg/L	1	04/29/13 21:05
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	04/29/13 21:05
Vinyl chloride	U		0.17	1.0	µg/L	1	04/29/13 21:05
Xylenes, Total	U		0.29	3.0	µg/L	1	04/29/13 21:05
Surr: 1,2-Dichloroethane-d4	105			70-120	%REC	1	04/29/13 21:05
Surr: 4-Bromofluorobenzene	99.7			75-120	%REC	1	04/29/13 21:05
Surr: Dibromofluoromethane	99.8			85-115	%REC	1	04/29/13 21:05
Surr: Toluene-d8	103			85-120	%REC	1	04/29/13 21:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47979** Instrument ID **HG1** Method: **SW7470**

MBLK		Sample ID: MBLK-47979-47979				Units: mg/L		Analysis Date: 04/26/13 02:18 PM		
Client ID:		Run ID: HG1_130426A				SeqNo: 2293381		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury U 0.00020

LCS		Sample ID: LCS-47979-47979				Units: mg/L		Analysis Date: 04/26/13 02:20 PM		
Client ID:		Run ID: HG1_130426A				SeqNo: 2293384		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.001852 0.00020 0.002 0 92.6 80-120 0

MS		Sample ID: 13041005-02AMS				Units: mg/L		Analysis Date: 04/26/13 02:34 PM		
Client ID:		Run ID: HG1_130426A				SeqNo: 2293396		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.0187 0.0020 0.02 0.00033 91.8 75-125 0

MSD		Sample ID: 13041005-02AMSD				Units: mg/L		Analysis Date: 04/26/13 02:36 PM		
Client ID:		Run ID: HG1_130426A				SeqNo: 2293401		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.01821 0.0020 0.02 0.00033 89.4 75-125 0.0187 2.66 20

The following samples were analyzed in this batch:

13041047-02C	13041047-03C

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48012** Instrument ID **ICPMS2** Method: **SW6020A**

MBLK		Sample ID: MBLK-48012-48012				Units: mg/L		Analysis Date: 04/29/13 08:47 PM		
Client ID:		Run ID: ICPMS2_130429A				SeqNo: 2297149		Prep Date: 04/29/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.0004578	0.0050								J
Arsenic	U	0.0050								
Barium	0.0000648	0.0050								J
Beryllium	U	0.0020								
Cadmium	U	0.0020								
Chromium	U	0.0050								
Cobalt	U	0.0050								
Copper	U	0.0050								
Iron	0.007793	0.080								J
Lead	U	0.0050								
Manganese	0.0006918	0.0050								J
Molybdenum	U	0.0050								
Nickel	U	0.0050								
Selenium	0.0008103	0.0050								J
Silver	U	0.0050								
Thallium	U	0.0050								
Vanadium	U	0.0050								
Zinc	U	0.010								

LCS		Sample ID: LCS-48012-48012				Units: mg/L		Analysis Date: 04/29/13 09:07 PM		
Client ID:		Run ID: ICPMS2_130429A				SeqNo: 2297153		Prep Date: 04/29/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.09153	0.0050	0.1	0	91.5	80-120	0			
Arsenic	0.09365	0.0050	0.1	0	93.6	80-120	0			
Barium	0.09336	0.0050	0.1	0	93.4	80-120	0			
Beryllium	0.09211	0.0020	0.1	0	92.1	80-120	0			
Cadmium	0.09206	0.0020	0.1	0	92.1	80-120	0			
Chromium	0.09076	0.0050	0.1	0	90.8	80-120	0			
Cobalt	0.09285	0.0050	0.1	0	92.8	80-120	0			
Copper	0.0922	0.0050	0.1	0	92.2	80-120	0			
Iron	9.201	0.080	10	0	92	80-120	0			
Lead	0.09332	0.0050	0.1	0	93.3	80-120	0			
Manganese	0.09342	0.0050	0.1	0	93.4	80-120	0			
Molybdenum	0.09133	0.0050	0.1	0	91.3	80-120	0			
Nickel	0.09249	0.0050	0.1	0	92.5	80-120	0			
Selenium	0.09219	0.0050	0.1	0	92.2	80-120	0			
Silver	0.09032	0.0050	0.1	0	90.3	80-120	0			
Thallium	0.08665	0.0050	0.1	0	86.6	80-120	0			
Vanadium	0.09633	0.0050	0.1	0	96.3	80-120	0			
Zinc	0.09107	0.010	0.1	0	91.1	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48012** Instrument ID **ICPMS2** Method: **SW6020A**

MS Sample ID: 13041123-08BMS				Units: mg/L			Analysis Date: 04/30/13 12:52 AM			
Client ID:		Run ID: ICPMS2_130429A		SeqNo: 2297195		Prep Date: 04/29/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.09329	0.0050	0.1	0.000187	93.1	75-125	0			
Arsenic	0.09799	0.0050	0.1	0.0001239	97.9	75-125	0			
Barium	0.2143	0.0050	0.1	0.1186	95.7	75-125	0			
Beryllium	0.08936	0.0020	0.1	0.00001363	89.3	75-125	0			
Cadmium	0.09321	0.0020	0.1	0.00001003	93.2	75-125	0			
Chromium	0.09169	0.0050	0.1	0.0004898	91.2	75-125	0			
Cobalt	0.08965	0.0050	0.1	0.0002921	89.4	75-125	0			
Copper	0.08735	0.0050	0.1	0.0007885	86.6	75-125	0			
Iron	9.12	0.080	10	0.09039	90.3	75-125	0			
Lead	0.0964	0.0050	0.1	0.0004332	96	75-125	0			
Manganese	0.1302	0.0050	0.1	0.03937	90.8	75-125	0			
Molybdenum	0.09617	0.0050	0.1	0.001901	94.3	75-125	0			
Nickel	0.09233	0.0050	0.1	0.002862	89.5	75-125	0			
Selenium	0.09246	0.0050	0.1	0.0002301	92.2	75-125	0			
Silver	0.08714	0.0050	0.1	0.000002166	87.1	75-125	0			
Thallium	0.09107	0.0050	0.1	0.00005528	91	75-125	0			
Vanadium	0.09741	0.0050	0.1	-9.716E-06	97.4	75-125	0			
Zinc	0.09239	0.010	0.1	0.002727	89.7	75-125	0			

MSD Sample ID: 13041123-08BMSD				Units: mg/L			Analysis Date: 04/30/13 12:57 AM			
Client ID:		Run ID: ICPMS2_130429A		SeqNo: 2297196		Prep Date: 04/29/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.09286	0.0050	0.1	0.000187	92.7	75-125	0.09329	0.462	20	
Arsenic	0.09886	0.0050	0.1	0.0001239	98.7	75-125	0.09799	0.884	20	
Barium	0.2111	0.0050	0.1	0.1186	92.5	75-125	0.2143	1.5	20	
Beryllium	0.09016	0.0020	0.1	0.00001363	90.1	75-125	0.08936	0.891	20	
Cadmium	0.09284	0.0020	0.1	0.00001003	92.8	75-125	0.09321	0.398	20	
Chromium	0.09168	0.0050	0.1	0.0004898	91.2	75-125	0.09169	0.0109	20	
Cobalt	0.09061	0.0050	0.1	0.0002921	90.3	75-125	0.08965	1.07	20	
Copper	0.08813	0.0050	0.1	0.0007885	87.3	75-125	0.08735	0.889	20	
Iron	9.169	0.080	10	0.09039	90.8	75-125	9.12	0.536	20	
Lead	0.09678	0.0050	0.1	0.0004332	96.3	75-125	0.0964	0.393	20	
Manganese	0.1311	0.0050	0.1	0.03937	91.7	75-125	0.1302	0.689	20	
Molybdenum	0.09609	0.0050	0.1	0.001901	94.2	75-125	0.09617	0.0832	20	
Nickel	0.09128	0.0050	0.1	0.002862	88.4	75-125	0.09233	1.14	20	
Selenium	0.09325	0.0050	0.1	0.0002301	93	75-125	0.09246	0.851	20	
Silver	0.08736	0.0050	0.1	0.000002166	87.4	75-125	0.08714	0.252	20	
Thallium	0.09208	0.0050	0.1	0.00005528	92	75-125	0.09107	1.1	20	
Vanadium	0.09755	0.0050	0.1	-9.716E-06	97.6	75-125	0.09741	0.144	20	
Zinc	0.0921	0.010	0.1	0.002727	89.4	75-125	0.09239	0.314	20	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48012** Instrument ID **ICPMS2** Method: **SW6020A**

The following samples were analyzed in this batch:

13041047-02C	13041047-03C

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48019** Instrument ID **SVMS4** Method: **SW8270**

MBLK		Sample ID: SBLKW1-48019-48019				Units: µg/L		Analysis Date: 05/01/13 03:39 AM		
Client ID:		Run ID: SVMS4_130430A				SeqNo: 2299212		Prep Date: 04/29/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	U	5.0								
Acenaphthene	U	5.0								
Acenaphthylene	U	5.0								
Anthracene	U	5.0								
Benzo(a)anthracene	U	5.0								
Benzo(a)pyrene	U	5.0								
Benzo(b)fluoranthene	U	5.0								
Benzo(g,h,i)perylene	U	5.0								
Benzo(k)fluoranthene	U	5.0								
Chrysene	U	5.0								
Dibenzo(a,h)anthracene	U	5.0								
Fluoranthene	U	5.0								
Fluorene	U	5.0								
Indeno(1,2,3-cd)pyrene	U	5.0								
Naphthalene	U	5.0								
Phenanthrene	U	5.0								
Pyrene	U	5.0								
Surr: 2-Fluorobiphenyl	126.9	0	114	0	111	20-122	0			
Surr: 4-Terphenyl-d14	140	0	114	0	123	22-172	0			
Surr: Nitrobenzene-d5	129.1	0	114	0	113	8-115	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48019** Instrument ID **SVMS4** Method: **SW8270**

LCS		Sample ID: SLCSW1-48019-48019				Units: µg/L		Analysis Date: 05/01/13 01:03 AM		
Client ID:		Run ID: SVMS4_130430A				SeqNo: 2299208		Prep Date: 04/29/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	46.29	5.0	45.7	0	101	60-140	0			
Acenaphthene	57.14	5.0	45.7	0	125	60-140	0			
Acenaphthylene	58.86	5.0	45.7	0	129	60-140	0			
Anthracene	48	5.0	45.7	0	105	60-140	0			
Benzo(a)anthracene	53.71	5.0	45.7	0	118	60-140	0			
Benzo(a)pyrene	57.14	5.0	45.7	0	125	60-140	0			
Benzo(b)fluoranthene	38.86	5.0	45.7	0	85	60-140	0			
Benzo(g,h,i)perylene	48.57	5.0	45.7	0	106	60-140	0			
Benzo(k)fluoranthene	54.86	5.0	45.7	0	120	60-140	0			
Chrysene	48.57	5.0	45.7	0	106	60-140	0			
Dibenzo(a,h)anthracene	50.29	5.0	45.7	0	110	60-140	0			
Fluoranthene	52.57	5.0	45.7	0	115	60-140	0			
Fluorene	44.57	5.0	45.7	0	97.5	60-140	0			
Indeno(1,2,3-cd)pyrene	50.29	5.0	45.7	0	110	60-140	0			
Naphthalene	38.86	5.0	45.7	0	85	60-140	0			
Phenanthrene	50.29	5.0	45.7	0	110	60-140	0			
Pyrene	52.57	5.0	45.7	0	115	60-140	0			
Surr: 2-Fluorobiphenyl	114.3	0	114	0	100	20-122	0			
Surr: 4-Terphenyl-d14	145.1	0	114	0	127	22-172	0			
Surr: Nitrobenzene-d5	125.1	0	114	0	110	8-115	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48019** Instrument ID **SVMS4** Method: **SW8270**

MS Sample ID: 13041047-01A MS				Units: µg/L		Analysis Date: 05/01/13 01:42 AM				
Client ID: GW-17360-042513-DR-084			Run ID: SVMS4_130430A		SeqNo: 2299209		Prep Date: 04/29/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	162	18	160	0	101	60-140	0			
Acenaphthene	190	18	160	0	119	60-140	0			
Acenaphthylene	192	18	160	0	120	60-140	0			
Anthracene	158	18	160	0	98.8	60-140	0			
Benzo(a)anthracene	176	18	160	0	110	60-140	0			
Benzo(a)pyrene	190	18	160	0	119	60-140	0			
Benzo(b)fluoranthene	130	18	160	0	81.3	60-140	0			
Benzo(g,h,i)perylene	162	18	160	0	101	60-140	0			
Benzo(k)fluoranthene	176	18	160	0	110	60-140	0			
Chrysene	162	18	160	0	101	60-140	0			
Dibenzo(a,h)anthracene	166	18	160	0	104	60-140	0			
Fluoranthene	176	18	160	0	110	60-140	0			
Fluorene	150	18	160	0	93.8	60-140	0			
Indeno(1,2,3-cd)pyrene	166	18	160	0	104	60-140	0			
Naphthalene	142	18	160	0	88.8	60-140	0			
Phenanthrene	166	18	160	0	104	60-140	0			
Pyrene	176	18	160	0	110	60-140	0			
Surr: 2-Fluorobiphenyl	392	0	399	0	98.2	20-122	0			
Surr: 4-Terphenyl-d14	490	0	399	0	123	22-172	0			
Surr: Nitrobenzene-d5	422	0	399	0	106	8-115	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48019** Instrument ID **SVMS4** Method: **SW8270**

MSD				Sample ID: 13041047-01A MSD			Units: µg/L		Analysis Date: 05/01/13 02:21 AM	
Client ID: GW-17360-042513-DR-084				Run ID: SVMS4_130430A			SeqNo: 2299210		Prep Date: 04/29/13	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	158	18	160	0	98.8	60-140	162	2.5	30	
Acenaphthene	210	18	160	0	131	60-140	190	10	30	
Acenaphthylene	214	18	160	0	134	60-140	192	10.8	30	
Anthracene	172	18	160	0	108	60-140	158	8.48	30	
Benzo(a)anthracene	196	18	160	0	123	60-140	176	10.8	30	
Benzo(a)pyrene	206	18	160	0	129	60-140	190	8.08	30	
Benzo(b)fluoranthene	142	18	160	0	88.8	60-140	130	8.82	30	
Benzo(g,h,i)perylene	178	18	160	0	111	60-140	162	9.41	30	
Benzo(k)fluoranthene	196	18	160	0	123	60-140	176	10.8	30	
Chrysene	174	18	160	0	109	60-140	162	7.14	30	
Dibenzo(a,h)anthracene	180	18	160	0	113	60-140	166	8.09	30	
Fluoranthene	188	18	160	0	118	60-140	176	6.59	30	
Fluorene	164	18	160	0	103	60-140	150	8.92	30	
Indeno(1,2,3-cd)pyrene	180	18	160	0	113	60-140	166	8.09	30	
Naphthalene	144	18	160	0	90	60-140	142	1.4	30	
Phenanthrene	180	18	160	0	113	60-140	166	8.09	30	
Pyrene	192	18	160	0	120	60-140	176	8.7	30	
Surr: 2-Fluorobiphenyl	414	0	399	0	104	20-122	392	5.46	30	
Surr: 4-Terphenyl-d14	530	0	399	0	133	22-172	490	7.84	30	
Surr: Nitrobenzene-d5	442	0	399	0	111	8-115	422	4.63	30	

The following samples were analyzed in this batch:

13041047-01A	13041047-02B	13041047-03B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119800A** Instrument ID **VMS5** Method: **SW8260**

MBLK		Sample ID: VBLKW2-130429-R119800A				Units: µg/L		Analysis Date: 04/29/13 07:07 PM		
Client ID:		Run ID: VMS5_130429A				SeqNo: 2297689		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								
Toluene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: R119800A	Instrument ID VMS5	Method: SW8260						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.79</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>104</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.1</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>19.37</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.8</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>21.25</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>106</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119800A** Instrument ID **VMS5** Method: **SW8260**

LCS		Sample ID: VLCSW1-130429-R119800A				Units: µg/L		Analysis Date: 04/29/13 06:20 PM		
Client ID:		Run ID: VMS5_130429A				SeqNo: 2297688		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	19.4	1.0	20	0	97	65-130	0			
1,1,2,2-Tetrachloroethane	23.94	1.0	20	0	120	65-130	0			
1,1,2-Trichloroethane	22.02	1.0	20	0	110	75-125	0			
1,1-Dichloroethane	18.7	1.0	20	0	93.5	70-135	0			
1,1-Dichloroethene	18.5	1.0	20	0	92.5	70-130	0			
1,2,4-Trichlorobenzene	21.28	1.0	20	0	106	65-135	0			
1,2-Dibromo-3-chloropropane	24.43	1.0	20	0	122	50-130	0			
1,2-Dibromoethane	23.56	1.0	20	0	118	80-120	0			
1,2-Dichlorobenzene	22.17	1.0	20	0	111	70-120	0			
1,2-Dichloroethane	20.45	1.0	20	0	102	70-130	0			
1,2-Dichloropropane	19.21	2.0	20	0	96	75-125	0			
1,3-Dichlorobenzene	21.75	2.0	20	0	109	75-125	0			
1,4-Dichlorobenzene	21.48	2.0	20	0	107	75-125	0			
2-Butanone	25.91	5.0	20	0	130	30-150	0			
2-Hexanone	28.2	5.0	20	0	141	55-130	0			S
4-Methyl-2-pentanone	35.9	5.0	20	0	180	60-135	0			S
Acetone	27.2	20	20	0	136	40-140	0			
Benzene	19.96	1.0	20	0	99.8	80-120	0			
Bromodichloromethane	20.64	1.0	20	0	103	75-120	0			
Bromoform	20.37	1.0	20	0	102	70-130	0			
Bromomethane	19.5	1.0	20	0	97.5	30-145	0			
Carbon disulfide	18.03	2.5	20	0	90.2	35-165	0			
Carbon tetrachloride	20.39	1.0	20	0	102	65-140	0			
Chlorobenzene	21.45	1.0	20	0	107	80-120	0			
Chloroethane	17.51	1.0	20	0	87.6	60-135	0			
Chloroform	18.17	1.0	20	0	90.8	65-135	0			
Chloromethane	15.89	1.0	20	0	79.4	70-125	0			
cis-1,2-Dichloroethene	19.43	1.0	20	0	97.2	70-125	0			
cis-1,3-Dichloropropene	20.21	1.0	20	0	101	70-130	0			
Dibromochloromethane	20.76	1.0	20	0	104	60-135	0			
Dichlorodifluoromethane	17.38	1.0	20	0	86.9	30-155	0			
Ethylbenzene	21.42	1.0	20	0	107	75-125	0			
Isopropylbenzene	22.19	1.0	20	0	111	75-125	0			
Methyl tert-butyl ether	22.53	5.0	20	0	113	65-125	0			
Methylene chloride	20.29	5.0	20	0	101	55-140	0			
Styrene	21.91	1.0	20	0	110	65-135	0			
Tetrachloroethene	21.54	2.0	20	0	108	45-150	0			
Toluene	21.38	1.0	20	0	107	75-120	0			
trans-1,2-Dichloroethene	19.42	1.0	20	0	97.1	60-140	0			
trans-1,3-Dichloropropene	21.83	1.0	20	0	109	55-140	0			
Trichloroethene	19.71	1.0	20	0	98.6	70-125	0			
Trichlorofluoromethane	20.03	1.0	20	0	100	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: R119800A	Instrument ID VMS5	Method: SW8260					
Vinyl chloride	17.48	1.0	20	0	87.4	50-145	0
Xylenes, Total	65.02	3.0	60	0	108	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.63</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>103</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.42</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>19.4</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>20.84</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>104</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119800A** Instrument ID **VMS5** Method: **SW8260**

MS Sample ID: 13041066-01E MS				Units: µg/L			Analysis Date: 04/30/13 03:42 AM			
Client ID:		Run ID: VMS5_130429A		SeqNo: 2297693		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.7	1.0	20	0	104	65-130	0			
1,1,2,2-Tetrachloroethane	23.06	1.0	20	0	115	65-130	0			
1,1,2-Trichloroethane	21.29	1.0	20	0	106	75-125	0			
1,1-Dichloroethane	19.56	1.0	20	0	97.8	70-135	0			
1,1-Dichloroethene	20.02	1.0	20	0	100	70-130	0			
1,2,4-Trichlorobenzene	18.82	1.0	20	0	94.1	65-135	0			
1,2-Dibromo-3-chloropropane	19.28	1.0	20	0	96.4	50-130	0			
1,2-Dibromoethane	22.43	1.0	20	0	112	80-120	0			
1,2-Dichlorobenzene	21.43	1.0	20	0	107	70-120	0			
1,2-Dichloroethane	20.31	1.0	20	0	102	70-130	0			
1,2-Dichloropropane	19.91	2.0	20	0	99.6	75-125	0			
1,3-Dichlorobenzene	20.64	2.0	20	0	103	75-125	0			
1,4-Dichlorobenzene	21.05	2.0	20	0	105	75-125	0			
2-Butanone	24.94	5.0	20	0	125	30-150	0			
2-Hexanone	28.26	5.0	20	0	141	55-130	0			S
4-Methyl-2-pentanone	34.33	5.0	20	0	172	60-135	0			S
Acetone	28.57	20	20	0	143	40-140	0			S
Benzene	20.57	1.0	20	0	103	80-120	0			
Bromodichloromethane	18.79	1.0	20	0	94	75-120	0			
Bromoform	17.1	1.0	20	0	85.5	70-130	0			
Bromomethane	15.72	1.0	20	0	78.6	30-145	0			
Carbon disulfide	18.37	2.5	20	0	91.8	35-165	0			
Carbon tetrachloride	21.27	1.0	20	0	106	65-140	0			
Chlorobenzene	21.67	1.0	20	0	108	80-120	0			
Chloroethane	17.37	1.0	20	0	86.8	60-135	0			
Chloroform	18.59	1.0	20	0	93	65-135	0			
Chloromethane	17.04	1.0	20	0	85.2	70-125	0			
cis-1,2-Dichloroethene	19.21	1.0	20	0	96	70-125	0			
cis-1,3-Dichloropropene	19.24	1.0	20	0	96.2	70-130	0			
Dibromochloromethane	17.23	1.0	20	0	86.2	60-135	0			
Dichlorodifluoromethane	18.57	1.0	20	0	92.8	30-155	0			
Ethylbenzene	22.63	1.0	20	0	113	75-125	0			
Isopropylbenzene	23.33	1.0	20	0	117	75-125	0			
Methyl tert-butyl ether	21.16	5.0	20	0	106	65-125	0			
Methylene chloride	19.6	5.0	20	0	98	55-140	0			
Styrene	22.06	1.0	20	0	110	65-135	0			
Tetrachloroethene	22.68	2.0	20	0	113	45-150	0			
Toluene	22	1.0	20	0	110	75-120	0			
trans-1,2-Dichloroethene	20.03	1.0	20	0	100	60-140	0			
trans-1,3-Dichloropropene	20.15	1.0	20	0	101	55-140	0			
Trichloroethene	20.82	1.0	20	0	104	70-125	0			
Trichlorofluoromethane	21.7	1.0	20	0	108	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: R119800A		Instrument ID VMS5		Method: SW8260			
Vinyl chloride	18.72	1.0	20	0	93.6	50-145	0
Xylenes, Total	66.78	3.0	60	0	111	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	20.8	0	20	0	104	70-120	0
<i>Surr: 4-Bromofluorobenzene</i>	20.96	0	20	0	105	75-120	0
<i>Surr: Dibromofluoromethane</i>	18.97	0	20	0	94.8	85-115	0
<i>Surr: Toluene-d8</i>	21.16	0	20	0	106	85-120	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119800A** Instrument ID **VMS5** Method: **SW8260**

MSD Sample ID: 13041066-01E MSD				Units: µg/L			Analysis Date: 04/30/13 04:05 AM			
Client ID:		Run ID: VMS5_130429A			SeqNo: 2297694		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.71	1.0	20	0	104	65-130	20.7	0.0483	30	
1,1,2,2-Tetrachloroethane	23.11	1.0	20	0	116	65-130	23.06	0.217	30	
1,1,2-Trichloroethane	21.63	1.0	20	0	108	75-125	21.29	1.58	30	
1,1-Dichloroethane	19.43	1.0	20	0	97.2	70-135	19.56	0.667	30	
1,1-Dichloroethene	19.43	1.0	20	0	97.2	70-130	20.02	2.99	30	
1,2,4-Trichlorobenzene	20.01	1.0	20	0	100	65-135	18.82	6.13	30	
1,2-Dibromo-3-chloropropane	20.19	1.0	20	0	101	50-130	19.28	4.61	30	
1,2-Dibromoethane	22.12	1.0	20	0	111	80-120	22.43	1.39	30	
1,2-Dichlorobenzene	21.96	1.0	20	0	110	70-120	21.43	2.44	30	
1,2-Dichloroethane	20.74	1.0	20	0	104	70-130	20.31	2.1	30	
1,2-Dichloropropane	20.73	2.0	20	0	104	75-125	19.91	4.04	30	
1,3-Dichlorobenzene	21.33	2.0	20	0	107	75-125	20.64	3.29	30	
1,4-Dichlorobenzene	21.59	2.0	20	0	108	75-125	21.05	2.53	30	
2-Butanone	26.43	5.0	20	0	132	30-150	24.94	5.8	30	
2-Hexanone	28.13	5.0	20	0	141	55-130	28.26	0.461	30	S
4-Methyl-2-pentanone	35.78	5.0	20	0	179	60-135	34.33	4.14	30	S
Acetone	30.99	20	20	0	155	40-140	28.57	8.13	30	S
Benzene	20.82	1.0	20	0	104	80-120	20.57	1.21	30	
Bromodichloromethane	19.82	1.0	20	0	99.1	75-120	18.79	5.34	30	
Bromoform	17.67	1.0	20	0	88.4	70-130	17.1	3.28	30	
Bromomethane	13.04	1.0	20	0	65.2	30-145	15.72	18.6	30	
Carbon disulfide	17.47	2.5	20	0	87.4	35-165	18.37	5.02	30	
Carbon tetrachloride	21.08	1.0	20	0	105	65-140	21.27	0.897	30	
Chlorobenzene	21.09	1.0	20	0	105	80-120	21.67	2.71	30	
Chloroethane	17.64	1.0	20	0	88.2	60-135	17.37	1.54	30	
Chloroform	18.47	1.0	20	0	92.4	65-135	18.59	0.648	30	
Chloromethane	16.44	1.0	20	0	82.2	70-125	17.04	3.58	30	
cis-1,2-Dichloroethene	19.3	1.0	20	0	96.5	70-125	19.21	0.467	30	
cis-1,3-Dichloropropene	19.53	1.0	20	0	97.6	70-130	19.24	1.5	30	
Dibromochloromethane	18.3	1.0	20	0	91.5	60-135	17.23	6.02	30	
Dichlorodifluoromethane	18.72	1.0	20	0	93.6	30-155	18.57	0.805	30	
Ethylbenzene	22.23	1.0	20	0	111	75-125	22.63	1.78	30	
Isopropylbenzene	22.94	1.0	20	0	115	75-125	23.33	1.69	30	
Methyl tert-butyl ether	21.83	5.0	20	0	109	65-125	21.16	3.12	30	
Methylene chloride	19.67	5.0	20	0	98.4	55-140	19.6	0.357	30	
Styrene	21.25	1.0	20	0	106	65-135	22.06	3.74	30	
Tetrachloroethene	22.34	2.0	20	0	112	45-150	22.68	1.51	30	
Toluene	21.31	1.0	20	0	107	75-120	22	3.19	30	
trans-1,2-Dichloroethene	20.25	1.0	20	0	101	60-140	20.03	1.09	30	
trans-1,3-Dichloropropene	20.08	1.0	20	0	100	55-140	20.15	0.348	30	
Trichloroethene	21.07	1.0	20	0	105	70-125	20.82	1.19	30	
Trichlorofluoromethane	21.79	1.0	20	0	109	60-145	21.7	0.414	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041047
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: R119800A	Instrument ID VMS5			Method: SW8260					
Vinyl chloride	18.84	1.0	20	0	94.2	50-145	18.72	0.639	30
Xylenes, Total	66.21	3.0	60	0	110	75-130	66.78	0.857	30
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.91</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>105</i>	<i>70-120</i>	<i>20.8</i>	<i>0.527</i>	<i>30</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.53</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>103</i>	<i>75-120</i>	<i>20.96</i>	<i>2.07</i>	<i>30</i>
<i>Surr: Dibromofluoromethane</i>	<i>19.78</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.9</i>	<i>85-115</i>	<i>18.97</i>	<i>4.18</i>	<i>30</i>
<i>Surr: Toluene-d8</i>	<i>20.61</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>103</i>	<i>85-120</i>	<i>21.16</i>	<i>2.63</i>	<i>30</i>

The following samples were analyzed in this batch:

13041047-02A	13041047-03A	13041047-04A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



**CONESTOGA-ROVERS
& ASSOCIATES**

CHAIN OF CUSTODY RECORD

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170

Phone: (734) 453-5123

Fax: (734) 453-5201

13041047
COC NO.: **PL- 11152**
PAGE 1 OF 2

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 017360-T05 Y13 -01 Y13				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 17360-T05-019														
Project Name: RACER-Fmr GRM P				Lab Contact: P. Wiseman				Lab Quote No:				Cooler No:														
Project Location: Wyoming, MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)														
Chemistry Contact: P. Wiseman				<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Matrix Code (see back of COC)</th> <th>Grab (G) or Comp (C)</th> <th>Unpreserved</th> <th>Hydrochloric Acid (HCl)</th> <th>Nitric Acid (HNO₃)</th> <th>Sulfuric Acid (H₂SO₄)</th> <th>Sodium Hydroxide (NaOH)</th> <th>Methanol/Water (Soil VOC)</th> <th>EnCores 3x5-g, 1x25-g</th> <th>Other:</th> <th>Total Containers/Sample</th> <th>TCL VOCs</th> <th>PAHs</th> <th>Site Specific Metals</th> <th>MS/MSD Request</th> </tr> </table>				Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	PAHs	Site Specific Metals	MS/MSD Request	Carrier: Courier-Pickup			
Matrix Code (see back of COC)	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)					Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	PAHs	Site Specific Metals	MS/MSD Request								
Sampler(s): D. Rivers				Airbill No:																						
Date Shipped: 4/25/13				COMMENTS/ SPECIAL INSTRUCTIONS:																						

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 ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	PAHs	Site Specific Metals	MS/MSD Request	
1	GW-17360-042513-DR-084	4/25/13	850	WG	G	4								4		X			X
2	↓ ↓ ↓ ↓ -085	↓	945	↓	↓	2	3	1						6	X	X	X		
3	↓ ↓ ↓ ↓ -086	↓	1015	↓	↓	2	3	1						6	X	X	X		
4	Trip Blank-GW	↓	-	WG	-	1								1					
5																			
6																			
7																			
8																			
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: 17		Notes/ Special Requirements: 3.0°C	
All Samples in Cooler must be on COC							

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
1. D. Rivers	CRA	4/25/13	1140	1. [Signature]			
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)

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **CRA - PLYMOUTH**

Date/Time Received: **25-Apr-13 11:40**

Work Order: **13041047**

Received by: **KRW**

Checklist completed by *Diane Shaw* 25-Apr-13
eSignature Date

Reviewed by: *Tom Bramish* 25-Apr-13
eSignature Date

Matrices: Groundwater

Carrier name: Client

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>3.0 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/25/2013 2:09:54 PM</u>		
Water - VOA vials have zero headspace?	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☒	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☒	N/A ☐
pH adjusted by:			
Login Notes:			

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



02-May-2013

Paul Wiseman
Conestoga-Rovers & Associates
14496 Sheldon Road
Suite 200
Plymouth, MI 48170

Re: **Former GRMP (017360-T02Y13-01Y13)**

Work Order: **13041050**

Dear Paul,

ALS Environmental received 5 samples on 25-Apr-2013 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 28.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Beamish".

Electronically approved by: Tom Beamish

Tom Beamish
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

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Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Work Order: 13041050

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
13041050-01	SO-17360-042413-DR-050	Soil		04/24/13 08:45	04/25/13 11:40	☐
13041050-02	SO-17360-042413-DR-051	Soil		04/24/13 08:47	04/25/13 11:40	☐
13041050-03	SO-17360-042413-DR-052	Soil		04/24/13 08:50	04/25/13 11:40	☐
13041050-04	SO-17360-042413-DR-053	Soil		04/24/13 09:05	04/25/13 11:40	☐
13041050-05	SO-17360-042413-DR-054	Soil		04/24/13 09:10	04/25/13 11:40	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Work Order: 13041050

Case Narrative**Analytical Comments:**

Batch 48045, Method CR6_7196_S, Sample 13041050-04A: The Hexavalent Chromium analysis was run at a dilution due to very dark background color causing undiluted sample to read well over the range of the curve.

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
WorkOrder: 13041050

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group USA, Corp

Date: 02-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Sample ID: SO-17360-042413-DR-050
Collection Date: 04/24/13 08:45 AM

Work Order: 13041050
Lab ID: 13041050-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 4/26/13	Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		40	370	µg/Kg-dry	1	04/29/13 20:07
Aroclor 1221	U		40	370	µg/Kg-dry	1	04/29/13 20:07
Aroclor 1232	U		40	370	µg/Kg-dry	1	04/29/13 20:07
Aroclor 1242	U		40	370	µg/Kg-dry	1	04/29/13 20:07
Aroclor 1248	U		40	370	µg/Kg-dry	1	04/29/13 20:07
Aroclor 1254	U		13	370	µg/Kg-dry	1	04/29/13 20:07
Aroclor 1260	U		13	370	µg/Kg-dry	1	04/29/13 20:07
Surr: Decachlorobiphenyl	59.1			40-140	%REC	1	04/29/13 20:07
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48020</u>							
Mercury	0.096		0.00089	0.044	mg/Kg-dry	1	04/30/13 11:42
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 4/26/13	Analyst: ML
<u>BatchID: 47985</u>							
Antimony	1.0		0.0017	0.43	mg/Kg-dry	1	04/27/13 05:31
Arsenic	6.0		0.058	0.43	mg/Kg-dry	1	04/27/13 05:31
Barium	50		0.012	0.43	mg/Kg-dry	1	04/27/13 05:31
Beryllium	0.28		0.0034	0.17	mg/Kg-dry	1	04/27/13 05:31
Cadmium	2.5		0.0017	0.17	mg/Kg-dry	1	04/27/13 05:31
Chromium	9.6		0.070	0.43	mg/Kg-dry	1	04/27/13 05:31
Cobalt	3.3		0.0017	0.43	mg/Kg-dry	1	04/27/13 05:31
Copper	150		0.084	0.43	mg/Kg-dry	1	04/27/13 05:31
Iron	8,900		1.4	6.8	mg/Kg-dry	1	04/27/13 05:31
Lead	55		0.0017	0.43	mg/Kg-dry	1	04/27/13 05:31
Molybdenum	1.9		0.019	0.43	mg/Kg-dry	1	04/27/13 05:31
Nickel	14		0.043	0.43	mg/Kg-dry	1	04/27/13 05:31
Selenium	0.36	J	0.055	0.43	mg/Kg-dry	1	04/27/13 05:31
Silver	0.17	J	0.0017	0.43	mg/Kg-dry	1	04/27/13 05:31
Thallium	0.042	J	0.010	0.43	mg/Kg-dry	1	04/27/13 05:31
Vanadium	8.7		0.026	0.43	mg/Kg-dry	1	04/27/13 05:31
Zinc	110		0.036	0.85	mg/Kg-dry	1	04/27/13 05:31
<u>BatchID: 47985</u>							
Manganese	200		0.38	4.3	mg/Kg-dry	10	04/30/13 13:11
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: RM
<u>BatchID: 47962</u>							
2-Methylnaphthalene	U		120	950	µg/Kg-dry	10	04/29/13 18:59
Acenaphthene	U		110	360	µg/Kg-dry	10	04/29/13 18:59

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 02-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Sample ID: SO-17360-042413-DR-050
Collection Date: 04/24/13 08:45 AM

Work Order: 13041050
Lab ID: 13041050-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		110	360	µg/Kg-dry	10	04/29/13 18:59
Anthracene	U		120	360	µg/Kg-dry	10	04/29/13 18:59
Benzo(a)anthracene	910		140	360	µg/Kg-dry	10	04/29/13 18:59
Benzo(a)pyrene	1,300		180	360	µg/Kg-dry	10	04/29/13 18:59
Benzo(b)fluoranthene	1,700		190	360	µg/Kg-dry	10	04/29/13 18:59
Benzo(g,h,i)perylene	1,200		280	360	µg/Kg-dry	10	04/29/13 18:59
Benzo(k)fluoranthene	1,500		160	360	µg/Kg-dry	10	04/29/13 18:59
Chrysene	1,500		130	360	µg/Kg-dry	10	04/29/13 18:59
Dibenzo(a,h)anthracene	330	J	200	360	µg/Kg-dry	10	04/29/13 18:59
Fluoranthene	1,600		140	360	µg/Kg-dry	10	04/29/13 18:59
Fluorene	U		100	360	µg/Kg-dry	10	04/29/13 18:59
Indeno(1,2,3-cd)pyrene	1,000		220	360	µg/Kg-dry	10	04/29/13 18:59
Naphthalene	U		100	360	µg/Kg-dry	10	04/29/13 18:59
Phenanthrene	640		360	360	µg/Kg-dry	10	04/29/13 18:59
Pyrene	2,000		150	360	µg/Kg-dry	10	04/29/13 18:59
Surr: 2-Fluorobiphenyl	43.4			12-100	%REC	10	04/29/13 18:59
Surr: 4-Terphenyl-d14	90.8			25-137	%REC	10	04/29/13 18:59
Surr: Nitrobenzene-d5	51.4			37-107	%REC	10	04/29/13 18:59
CHROMIUM, TRIVALENT			CALCULATION				Analyst: MB
BatchID: R119863							
Chromium, Trivalent	9.6		0.31	0.60	mg/Kg-dry	1	04/30/13 12:30
CHROMIUM, HEXAVALENT			SW7196A				Prep: SW3060A / 4/26/13 Analyst: MB
BatchID: 48045							
Chromium, Hexavalent	U		0.21	2.4	mg/Kg-dry	1	04/30/13 11:00
MOISTURE			A2540 G				Analyst: DC
BatchID: R119865							
Moisture	17		0.025	0.050	% of sample	1	04/29/13 13:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 02-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Sample ID: SO-17360-042413-DR-051
Collection Date: 04/24/13 08:47 AM

Work Order: 13041050
Lab ID: 13041050-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 4/26/13	Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		44	410	µg/Kg-dry	1	04/29/13 20:27
Aroclor 1221	U		44	410	µg/Kg-dry	1	04/29/13 20:27
Aroclor 1232	U		44	410	µg/Kg-dry	1	04/29/13 20:27
Aroclor 1242	U		44	410	µg/Kg-dry	1	04/29/13 20:27
Aroclor 1248	U		44	410	µg/Kg-dry	1	04/29/13 20:27
Aroclor 1254	U		14	410	µg/Kg-dry	1	04/29/13 20:27
Aroclor 1260	U		14	410	µg/Kg-dry	1	04/29/13 20:27
Surr: Decachlorobiphenyl	74.1			40-140	%REC	1	04/29/13 20:27
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48020</u>							
Mercury	0.031	J	0.0010	0.050	mg/Kg-dry	1	04/30/13 11:44
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 4/26/13	Analyst: ML
<u>BatchID: 47985</u>							
Antimony	0.62		0.0017	0.43	mg/Kg-dry	1	04/27/13 05:55
Arsenic	5.3		0.058	0.43	mg/Kg-dry	1	04/27/13 05:55
Barium	74		0.012	0.43	mg/Kg-dry	1	04/27/13 05:55
Beryllium	0.50		0.0034	0.17	mg/Kg-dry	1	04/27/13 05:55
Cadmium	1.2		0.0017	0.17	mg/Kg-dry	1	04/27/13 05:55
Chromium	4.6		0.070	0.43	mg/Kg-dry	1	04/27/13 05:55
Cobalt	3.1		0.0017	0.43	mg/Kg-dry	1	04/27/13 05:55
Copper	42		0.083	0.43	mg/Kg-dry	1	04/27/13 05:55
Iron	3,300		1.4	6.8	mg/Kg-dry	1	04/27/13 05:55
Lead	27		0.0017	0.43	mg/Kg-dry	1	04/27/13 05:55
Manganese	30		0.037	0.43	mg/Kg-dry	1	04/27/13 05:55
Molybdenum	1.3		0.019	0.43	mg/Kg-dry	1	04/27/13 05:55
Nickel	9.3		0.043	0.43	mg/Kg-dry	1	04/27/13 05:55
Selenium	0.32	J	0.055	0.43	mg/Kg-dry	1	04/27/13 05:55
Silver	0.16	J	0.0017	0.43	mg/Kg-dry	1	04/27/13 05:55
Thallium	0.11	J	0.010	0.43	mg/Kg-dry	1	04/27/13 05:55
Vanadium	5.6		0.026	0.43	mg/Kg-dry	1	04/27/13 05:55
Zinc	50		0.036	0.85	mg/Kg-dry	1	04/27/13 05:55
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: RM
<u>BatchID: 47962</u>							
2-Methylnaphthalene	190		12	99	µg/Kg-dry	1	04/29/13 17:28
Acenaphthene	U		11	37	µg/Kg-dry	1	04/29/13 17:28
Acenaphthylene	U		12	37	µg/Kg-dry	1	04/29/13 17:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 02-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Sample ID: SO-17360-042413-DR-051
Collection Date: 04/24/13 08:47 AM

Work Order: 13041050
Lab ID: 13041050-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	U		13	37	µg/Kg-dry	1	04/29/13 17:28
Benzo(a)anthracene	66		15	37	µg/Kg-dry	1	04/29/13 17:28
Benzo(a)pyrene	58		19	37	µg/Kg-dry	1	04/29/13 17:28
Benzo(b)fluoranthene	110		20	37	µg/Kg-dry	1	04/29/13 17:28
Benzo(g,h,i)perylene	68		29	37	µg/Kg-dry	1	04/29/13 17:28
Benzo(k)fluoranthene	68		17	37	µg/Kg-dry	1	04/29/13 17:28
Chrysene	100		14	37	µg/Kg-dry	1	04/29/13 17:28
Dibenzo(a,h)anthracene	U		21	37	µg/Kg-dry	1	04/29/13 17:28
Fluoranthene	92		15	37	µg/Kg-dry	1	04/29/13 17:28
Fluorene	U		11	37	µg/Kg-dry	1	04/29/13 17:28
Indeno(1,2,3-cd)pyrene	56		23	37	µg/Kg-dry	1	04/29/13 17:28
Naphthalene	150		11	37	µg/Kg-dry	1	04/29/13 17:28
Phenanthrene	210		37	37	µg/Kg-dry	1	04/29/13 17:28
Pyrene	130		15	37	µg/Kg-dry	1	04/29/13 17:28
Surr: 2-Fluorobiphenyl	69.6			12-100	%REC	1	04/29/13 17:28
Surr: 4-Terphenyl-d14	120			25-137	%REC	1	04/29/13 17:28
Surr: Nitrobenzene-d5	69.1			37-107	%REC	1	04/29/13 17:28
CHROMIUM, TRIVALENT			CALCULATION				Analyst: MB
BatchID: R119863							
Chromium, Trivalent	4.6		0.31	0.62	mg/Kg-dry	1	04/30/13 12:30
CHROMIUM, HEXAVALENT			SW7196A				Prep: SW3060A / 4/26/13 Analyst: MB
BatchID: 48045							
Chromium, Hexavalent	U		0.22	2.4	mg/Kg-dry	1	04/30/13 11:00
MOISTURE			A2540 G				Analyst: DC
BatchID: R119865							
Moisture	19		0.025	0.050	% of sample	1	04/29/13 13:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 02-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Sample ID: SO-17360-042413-DR-052
Collection Date: 04/24/13 08:50 AM

Work Order: 13041050
Lab ID: 13041050-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		41	380	µg/Kg-dry	1	04/30/13 06:33
Aroclor 1221	U		41	380	µg/Kg-dry	1	04/30/13 06:33
Aroclor 1232	U		41	380	µg/Kg-dry	1	04/30/13 06:33
Aroclor 1242	U		41	380	µg/Kg-dry	1	04/30/13 06:33
Aroclor 1248	U		41	380	µg/Kg-dry	1	04/30/13 06:33
Aroclor 1254	U		13	380	µg/Kg-dry	1	04/30/13 06:33
Aroclor 1260	U		13	380	µg/Kg-dry	1	04/30/13 06:33
Surr: Decachlorobiphenyl	75.1			40-140	%REC	1	04/30/13 06:33
MERCURY BY CVAA							
			SW7471		Prep: SW7471 / 4/30/13		Analyst: LR
<u>BatchID: 48020</u>							
Mercury	0.020	J	0.00084	0.042	mg/Kg-dry	1	04/30/13 11:52
METALS BY ICP-MS							
			SW6020A		Prep: SW3050B / 4/26/13		Analyst: ML
<u>BatchID: 47985</u>							
Antimony	0.25	J	0.0017	0.42	mg/Kg-dry	1	04/27/13 06:01
Arsenic	17		0.057	0.42	mg/Kg-dry	1	04/27/13 06:01
Barium	28		0.012	0.42	mg/Kg-dry	1	04/27/13 06:01
Beryllium	0.22		0.0034	0.17	mg/Kg-dry	1	04/27/13 06:01
Cadmium	0.61		0.0017	0.17	mg/Kg-dry	1	04/27/13 06:01
Chromium	2.8		0.069	0.42	mg/Kg-dry	1	04/27/13 06:01
Cobalt	1.6		0.0017	0.42	mg/Kg-dry	1	04/27/13 06:01
Copper	6.6		0.082	0.42	mg/Kg-dry	1	04/27/13 06:01
Iron	1,700		1.4	6.7	mg/Kg-dry	1	04/27/13 06:01
Lead	14		0.0017	0.42	mg/Kg-dry	1	04/27/13 06:01
Manganese	30		0.037	0.42	mg/Kg-dry	1	04/27/13 06:01
Molybdenum	0.48		0.018	0.42	mg/Kg-dry	1	04/27/13 06:01
Nickel	5.3		0.042	0.42	mg/Kg-dry	1	04/27/13 06:01
Selenium	0.17	J	0.054	0.42	mg/Kg-dry	1	04/27/13 06:01
Silver	0.040	J	0.0017	0.42	mg/Kg-dry	1	04/27/13 06:01
Thallium	0.064	J	0.010	0.42	mg/Kg-dry	1	04/27/13 06:01
Vanadium	4.1		0.025	0.42	mg/Kg-dry	1	04/27/13 06:01
Zinc	16		0.035	0.84	mg/Kg-dry	1	04/27/13 06:01
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270		Prep: SW3541 / 4/26/13		Analyst: RM
<u>BatchID: 47962</u>							
2-Methylnaphthalene	27	J	12	97	µg/Kg-dry	1	04/29/13 17:51
Acenaphthene	U		11	36	µg/Kg-dry	1	04/29/13 17:51
Acenaphthylene	U		11	36	µg/Kg-dry	1	04/29/13 17:51

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 02-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Sample ID: SO-17360-042413-DR-052
Collection Date: 04/24/13 08:50 AM

Work Order: 13041050
Lab ID: 13041050-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	U		12	36	µg/Kg-dry	1	04/29/13 17:51
Benzo(a)anthracene	56		15	36	µg/Kg-dry	1	04/29/13 17:51
Benzo(a)pyrene	49		19	36	µg/Kg-dry	1	04/29/13 17:51
Benzo(b)fluoranthene	86		19	36	µg/Kg-dry	1	04/29/13 17:51
Benzo(g,h,i)perylene	51		28	36	µg/Kg-dry	1	04/29/13 17:51
Benzo(k)fluoranthene	61		16	36	µg/Kg-dry	1	04/29/13 17:51
Chrysene	90		14	36	µg/Kg-dry	1	04/29/13 17:51
Dibenzo(a,h)anthracene	U		21	36	µg/Kg-dry	1	04/29/13 17:51
Fluoranthene	78		14	36	µg/Kg-dry	1	04/29/13 17:51
Fluorene	U		11	36	µg/Kg-dry	1	04/29/13 17:51
Indeno(1,2,3-cd)pyrene	48		23	36	µg/Kg-dry	1	04/29/13 17:51
Naphthalene	29	J	10	36	µg/Kg-dry	1	04/29/13 17:51
Phenanthrene	84		36	36	µg/Kg-dry	1	04/29/13 17:51
Pyrene	110		15	36	µg/Kg-dry	1	04/29/13 17:51
Surr: 2-Fluorobiphenyl	77.9			12-100	%REC	1	04/29/13 17:51
Surr: 4-Terphenyl-d14	127			25-137	%REC	1	04/29/13 17:51
Surr: Nitrobenzene-d5	81.4			37-107	%REC	1	04/29/13 17:51
CHROMIUM, TRIVALENT			CALCULATION				Analyst: MB
BatchID: <u>R119863</u>							
Chromium, Trivalent	2.8		0.31	0.61	mg/Kg-dry	1	04/30/13 12:30
CHROMIUM, HEXAVALENT			SW7196A				Analyst: MB
BatchID: <u>48045</u>			Prep: SW3060A / 4/26/13				
Chromium, Hexavalent	U		0.22	2.4	mg/Kg-dry	1	04/30/13 11:00
MOISTURE			A2540 G				Analyst: DC
BatchID: <u>R119865</u>							
Moisture	18		0.025	0.050	% of sample	1	04/29/13 13:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 02-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Sample ID: SO-17360-042413-DR-053
Collection Date: 04/24/13 09:05 AM

Work Order: 13041050
Lab ID: 13041050-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 4/26/13	Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		60	550	µg/Kg-dry	1	04/30/13 06:53
Aroclor 1221	U		60	550	µg/Kg-dry	1	04/30/13 06:53
Aroclor 1232	U		60	550	µg/Kg-dry	1	04/30/13 06:53
Aroclor 1242	U		60	550	µg/Kg-dry	1	04/30/13 06:53
Aroclor 1248	U		60	550	µg/Kg-dry	1	04/30/13 06:53
Aroclor 1254	U		19	550	µg/Kg-dry	1	04/30/13 06:53
Aroclor 1260	U		19	550	µg/Kg-dry	1	04/30/13 06:53
Surr: Decachlorobiphenyl	77.1			40-140	%REC	1	04/30/13 06:53
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48020</u>							
Mercury	0.068		0.0013	0.065	mg/Kg-dry	1	04/30/13 11:54
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 4/26/13	Analyst: ML
<u>BatchID: 47985</u>							
Antimony	0.41	J	0.0027	0.67	mg/Kg-dry	1	04/27/13 06:06
Arsenic	3.4		0.091	0.67	mg/Kg-dry	1	04/27/13 06:06
Barium	100		0.019	0.67	mg/Kg-dry	1	04/27/13 06:06
Beryllium	0.23	J	0.0054	0.27	mg/Kg-dry	1	04/27/13 06:06
Cadmium	0.40		0.0027	0.27	mg/Kg-dry	1	04/27/13 06:06
Chromium	12		0.11	0.67	mg/Kg-dry	1	04/27/13 06:06
Cobalt	3.6		0.0027	0.67	mg/Kg-dry	1	04/27/13 06:06
Copper	9.8		0.13	0.67	mg/Kg-dry	1	04/27/13 06:06
Iron	9,000		2.2	11	mg/Kg-dry	1	04/27/13 06:06
Lead	8.5		0.0027	0.67	mg/Kg-dry	1	04/27/13 06:06
Molybdenum	0.93		0.029	0.67	mg/Kg-dry	1	04/27/13 06:06
Nickel	9.4		0.067	0.67	mg/Kg-dry	1	04/27/13 06:06
Selenium	1.2		0.086	0.67	mg/Kg-dry	1	04/27/13 06:06
Silver	0.022	J	0.0027	0.67	mg/Kg-dry	1	04/27/13 06:06
Thallium	0.14	J	0.016	0.67	mg/Kg-dry	1	04/27/13 06:06
Vanadium	19		0.040	0.67	mg/Kg-dry	1	04/27/13 06:06
Zinc	23		0.056	1.3	mg/Kg-dry	1	04/27/13 06:06
<u>BatchID: 47985</u>							
Manganese	270		0.59	6.7	mg/Kg-dry	10	04/30/13 13:17
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: RM
<u>BatchID: 47962</u>							
2-Methylnaphthalene	U		20	160	µg/Kg-dry	1	04/29/13 18:14
Acenaphthene	U		19	61	µg/Kg-dry	1	04/29/13 18:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 02-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Sample ID: SO-17360-042413-DR-053
Collection Date: 04/24/13 09:05 AM

Work Order: 13041050
Lab ID: 13041050-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		19	61	µg/Kg-dry	1	04/29/13 18:14
Anthracene	U		21	61	µg/Kg-dry	1	04/29/13 18:14
Benzo(a)anthracene	37	J	25	61	µg/Kg-dry	1	04/29/13 18:14
Benzo(a)pyrene	U		31	61	µg/Kg-dry	1	04/29/13 18:14
Benzo(b)fluoranthene	U		33	61	µg/Kg-dry	1	04/29/13 18:14
Benzo(g,h,i)perylene	U		48	61	µg/Kg-dry	1	04/29/13 18:14
Benzo(k)fluoranthene	U		28	61	µg/Kg-dry	1	04/29/13 18:14
Chrysene	40	J	23	61	µg/Kg-dry	1	04/29/13 18:14
Dibenzo(a,h)anthracene	U		35	61	µg/Kg-dry	1	04/29/13 18:14
Fluoranthene	55	J	24	61	µg/Kg-dry	1	04/29/13 18:14
Fluorene	U		18	61	µg/Kg-dry	1	04/29/13 18:14
Indeno(1,2,3-cd)pyrene	U		38	61	µg/Kg-dry	1	04/29/13 18:14
Naphthalene	U		17	61	µg/Kg-dry	1	04/29/13 18:14
Phenanthrene	U		61	61	µg/Kg-dry	1	04/29/13 18:14
Pyrene	72		25	61	µg/Kg-dry	1	04/29/13 18:14
Surr: 2-Fluorobiphenyl	49.4			12-100	%REC	1	04/29/13 18:14
Surr: 4-Terphenyl-d14	81.7			25-137	%REC	1	04/29/13 18:14
Surr: Nitrobenzene-d5	48.1			37-107	%REC	1	04/29/13 18:14
CHROMIUM, TRIVALENT			CALCULATION				Analyst: MB
BatchID: <u>R119863</u>							
Chromium, Trivalent	12		0.44	0.86	mg/Kg-dry	1	04/30/13 12:30
CHROMIUM, HEXAVALENT			SW7196A				Analyst: MB
BatchID: <u>48045</u>			Prep: SW3060A / 4/26/13				
Chromium, Hexavalent	U		1.5	17	mg/Kg-dry	5	04/30/13 11:00
MOISTURE			A2540 G				Analyst: DC
BatchID: <u>R119865</u>							
Moisture	42		0.025	0.050	% of sample	1	04/29/13 13:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 02-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Sample ID: SO-17360-042413-DR-054
Collection Date: 04/24/13 09:10 AM

Work Order: 13041050
Lab ID: 13041050-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 4/26/13	Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		71	660	µg/Kg-dry	1	04/30/13 07:13
Aroclor 1221	U		71	660	µg/Kg-dry	1	04/30/13 07:13
Aroclor 1232	U		71	660	µg/Kg-dry	1	04/30/13 07:13
Aroclor 1242	U		71	660	µg/Kg-dry	1	04/30/13 07:13
Aroclor 1248	U		71	660	µg/Kg-dry	1	04/30/13 07:13
Aroclor 1254	U		22	660	µg/Kg-dry	1	04/30/13 07:13
Aroclor 1260	U		22	660	µg/Kg-dry	1	04/30/13 07:13
Surr: Decachlorobiphenyl	79.1			40-140	%REC	1	04/30/13 07:13
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48020</u>							
Mercury	0.0051	J	0.0014	0.069	mg/Kg-dry	1	04/30/13 11:57
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 4/26/13	Analyst: ML
<u>BatchID: 47985</u>							
Arsenic	3.6		0.090	0.66	mg/Kg-dry	1	04/27/13 06:12
Barium	180		0.018	0.66	mg/Kg-dry	1	04/27/13 06:12
Beryllium	0.034	J	0.0053	0.26	mg/Kg-dry	1	04/27/13 06:12
Cadmium	0.11	J	0.0026	0.26	mg/Kg-dry	1	04/27/13 06:12
Lead	1.0		0.0026	0.66	mg/Kg-dry	1	04/27/13 06:12
Molybdenum	1.2		0.029	0.66	mg/Kg-dry	1	04/27/13 06:12
Thallium	0.042	J	0.016	0.66	mg/Kg-dry	1	04/27/13 06:12
<u>BatchID: 47985</u>							
Antimony	0.33	J	0.013	3.3	mg/Kg-dry	5	04/30/13 13:23
Chromium	2.0	J	0.54	3.3	mg/Kg-dry	5	04/30/13 15:15
Cobalt	0.46	J	0.013	3.3	mg/Kg-dry	5	04/30/13 15:15
Copper	2.9	J	0.65	3.3	mg/Kg-dry	5	04/30/13 13:23
Iron	2,700		11	53	mg/Kg-dry	5	04/30/13 13:23
Manganese	160		0.29	3.3	mg/Kg-dry	5	04/30/13 13:23
Nickel	2.3	J	0.33	3.3	mg/Kg-dry	5	04/30/13 13:23
Selenium	1.3	J	0.42	3.3	mg/Kg-dry	5	04/30/13 13:23
Silver	U		0.013	3.3	mg/Kg-dry	5	04/30/13 15:15
Vanadium	6.2		0.20	3.3	mg/Kg-dry	5	04/30/13 13:23
Zinc	5.1	J	0.28	6.6	mg/Kg-dry	5	04/30/13 13:23
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: RM
<u>BatchID: 47962</u>							
2-Methylnaphthalene	U		21	170	µg/Kg-dry	1	04/29/13 18:36
Acenaphthene	U		19	63	µg/Kg-dry	1	04/29/13 18:36

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 02-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Sample ID: SO-17360-042413-DR-054
Collection Date: 04/24/13 09:10 AM

Work Order: 13041050
Lab ID: 13041050-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		20	63	µg/Kg-dry	1	04/29/13 18:36
Anthracene	U		21	63	µg/Kg-dry	1	04/29/13 18:36
Benzo(a)anthracene	U		25	63	µg/Kg-dry	1	04/29/13 18:36
Benzo(a)pyrene	U		32	63	µg/Kg-dry	1	04/29/13 18:36
Benzo(b)fluoranthene	U		34	63	µg/Kg-dry	1	04/29/13 18:36
Benzo(g,h,i)perylene	U		49	63	µg/Kg-dry	1	04/29/13 18:36
Benzo(k)fluoranthene	U		28	63	µg/Kg-dry	1	04/29/13 18:36
Chrysene	U		24	63	µg/Kg-dry	1	04/29/13 18:36
Dibenzo(a,h)anthracene	U		36	63	µg/Kg-dry	1	04/29/13 18:36
Fluoranthene	U		25	63	µg/Kg-dry	1	04/29/13 18:36
Fluorene	U		18	63	µg/Kg-dry	1	04/29/13 18:36
Indeno(1,2,3-cd)pyrene	U		40	63	µg/Kg-dry	1	04/29/13 18:36
Naphthalene	U		18	63	µg/Kg-dry	1	04/29/13 18:36
Phenanthrene	U		63	63	µg/Kg-dry	1	04/29/13 18:36
Pyrene	U		26	63	µg/Kg-dry	1	04/29/13 18:36
Surr: 2-Fluorobiphenyl	64.3			12-100	%REC	1	04/29/13 18:36
Surr: 4-Terphenyl-d14	125			25-137	%REC	1	04/29/13 18:36
Surr: Nitrobenzene-d5	67.1			37-107	%REC	1	04/29/13 18:36
CHROMIUM, TRIVALENT			CALCULATION				Analyst: MB
BatchID: R119965							
Chromium, Trivalent	2.0		0.53	1.0	mg/Kg-dry	1	05/01/13 16:50
CHROMIUM, HEXAVALENT			SW7196A				Prep: SW3060A / 4/26/13 Analyst: MB
BatchID: 48045							
Chromium, Hexavalent	U		0.37	4.1	mg/Kg-dry	1	04/30/13 11:00
MOISTURE			A2540 G				Analyst: DC
BatchID: R119865							
Moisture	52		0.025	0.050	% of sample	1	04/29/13 13:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Conestoga-Rovers & Associates
Work Order: 13041050
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **47971** Instrument ID **GC4** Method: **SW8082**

MBLK		Sample ID: PBLKS1-47971-47971				Units: µg/Kg		Analysis Date: 04/29/13 10:24 AM		
Client ID:		Run ID: GC4_130429A				SeqNo: 2296521		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	U	40								
Aroclor 1221	U	40								
Aroclor 1232	U	40								
Aroclor 1242	U	40								
Aroclor 1248	U	40								
Aroclor 1254	U	40								
Aroclor 1260	U	40								
<i>Surr: Decachlorobiphenyl</i>	22.67	0	33.3	0	68.1	40-140	0			

LCS		Sample ID: PLCSS1-47971-47971				Units: µg/Kg		Analysis Date: 04/29/13 10:44 AM		
Client ID:		Run ID: GC4_130429A				SeqNo: 2296522		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	794.3	40	833	0	95.4	50-130	0			
Aroclor 1260	804.3	40	833	0	96.6	50-130	0			
<i>Surr: Decachlorobiphenyl</i>	24.67	0	33.3	0	74.1	40-140	0			

MS		Sample ID: 13041049-03A MS				Units: µg/Kg		Analysis Date: 04/29/13 03:29 PM		
Client ID:		Run ID: GC4_130429A				SeqNo: 2296518		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	713.7	38	799.8	0	89.2	40-140	0			
Aroclor 1260	806.2	38	799.8	72.71	91.7	40-140	0			
<i>Surr: Decachlorobiphenyl</i>	24.96	0	31.97	0	78.1	40-140	0			

MSD		Sample ID: 13041049-03A MSD				Units: µg/Kg		Analysis Date: 04/29/13 03:49 PM		
Client ID:		Run ID: GC4_130429A				SeqNo: 2296519		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	757.9	39	805.6	0	94.1	40-140	713.7	6.01	50	
Aroclor 1260	880.4	39	805.6	72.71	100	40-140	806.2	8.8	50	
<i>Surr: Decachlorobiphenyl</i>	25.15	0	32.21	0	78.1	40-140	24.96	0.726	50	

The following samples were analyzed in this batch:

13041050-01A	13041050-02A	13041050-03A
13041050-04A	13041050-05A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041050
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **48020** Instrument ID **HG1** Method: **SW7471**

MBLK	Sample ID: MBLK-48020-48020					Units: mg/Kg		Analysis Date: 04/30/13 11:31 AM		
Client ID:	Run ID: HG1_130430A				SeqNo: 2298002		Prep Date: 04/30/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.001 0.020 J

LCS	Sample ID: LCS-48020-48020					Units: mg/Kg		Analysis Date: 04/30/13 11:34 AM		
Client ID:	Run ID: HG1_130430A				SeqNo: 2298003		Prep Date: 04/30/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1648 0.020 0.1665 0 98.9 80-120 0

MS	Sample ID: 13041055-03AMS					Units: mg/Kg		Analysis Date: 04/30/13 12:05 PM		
Client ID:	Run ID: HG1_130430A				SeqNo: 2298018		Prep Date: 04/30/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1295 0.015 0.1286 0.004118 97.5 75-125 0

MSD	Sample ID: 13041055-03AMSD					Units: mg/Kg		Analysis Date: 04/30/13 12:07 PM		
Client ID:	Run ID: HG1_130430A				SeqNo: 2298019		Prep Date: 04/30/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1241 0.016 0.1301 0.004118 92.2 75-125 0.1295 4.25 35

The following samples were analyzed in this batch:

13041050-01A	13041050-02A	13041050-03A
13041050-04A	13041050-05A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041050
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **47985** Instrument ID **ICPMS1** Method: **SW6020A**

Sample ID: MBLK-47985-47985				Units: mg/Kg			Analysis Date: 04/26/13 08:06 PM			
Client ID:		Run ID: ICPMS1_130426A			SeqNo: 2293619		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	U	0.25								
Arsenic	U	0.25								
Barium	0.05725	0.25								J
Cadmium	0.002058	0.10								J
Chromium	U	0.25								
Cobalt	0.00664	0.25								J
Copper	U	0.25								
Lead	0.02467	0.25								J
Manganese	0.135	0.25								J
Molybdenum	U	0.25								
Nickel	U	0.25								
Silver	U	0.25								
Thallium	0.0307	0.25								J
Vanadium	U	0.25								
Zinc	U	0.50								

MBLK	Sample ID: MBLK-47985-47985					Units: mg/Kg		Analysis Date: 04/27/13 03:22 AM		
Client ID:	Run ID: ICPMS1_130426A			SeqNo: 2294927		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	U	0.10								

MBLK		Sample ID: MBLK-47985-47985				Units: mg/Kg		Analysis Date: 04/30/13 12:30 PM		
Client ID:			Run ID: ICPMS1_130430A			SeqNo: 2297901		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	0.94	4.0								J
Selenium	U	0.25								

MBLK		Sample ID: MBLK-47985-47985					Units: mg/Kg		Analysis Date: 04/30/13 03:08 PM		
Client ID:			Run ID: ICPMS2_130430A			SeqNo: 2298361		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Barium	U	0.25									
Copper	U	0.25									
Iron	1.47	4.0								J	
Lead	U	0.25									
Manganese	U	0.25									
Zinc	U	0.50									

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041050
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **47985** Instrument ID **ICPMS1** Method: **SW6020A**

LCS		Sample ID: LCS-47985-47985				Units: mg/Kg		Analysis Date: 04/26/13 08:12 PM		
Client ID:		Run ID: ICPMS1_130426A				SeqNo: 2293620		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	4.5	0.25	5	0	90	80-120	0			
Arsenic	4.25	0.25	5	0	85	80-120	0			
Barium	4.746	0.25	5	0	94.9	80-120	0			
Cadmium	4.472	0.10	5	0	89.4	80-120	0			
Chromium	4.677	0.25	5	0	93.5	80-120	0			
Cobalt	4.54	0.25	5	0	90.8	80-120	0			
Copper	4.579	0.25	5	0	91.6	80-120	0			
Lead	4.958	0.25	5	0	99.2	80-120	0			
Manganese	4.83	0.25	5	0	96.6	80-120	0			
Molybdenum	4.796	0.25	5	0	95.9	80-120	0			
Nickel	4.645	0.25	5	0	92.9	80-120	0			
Silver	4.566	0.25	5	0	91.3	80-120	0			
Thallium	4.68	0.25	5	0	93.6	80-120	0			
Vanadium	4.718	0.25	5	0	94.4	80-120	0			
Zinc	4.033	0.50	5	0	80.7	80-120	0			

LCS		Sample ID: LCS-47985-47985				Units: mg/Kg		Analysis Date: 04/27/13 03:28 AM		
Client ID:		Run ID: ICPMS1_130426A				SeqNo: 2294928		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	4.489	0.10	5	0	89.8	80-120	0			

LCS		Sample ID: LCS-47985-47985				Units: mg/Kg		Analysis Date: 04/30/13 12:36 PM		
Client ID:		Run ID: ICPMS1_130430A				SeqNo: 2297902		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	482.6	4.0	500	0	96.5	80-120	0			

LCS		Sample ID: LCS-47985-47985				Units: mg/Kg		Analysis Date: 04/30/13 03:13 PM		
Client ID:		Run ID: ICPMS2_130430A				SeqNo: 2298362		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	4.746	0.25	5	0	94.9	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041050
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **47985** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: 13041010-01AMS				Units: mg/Kg			Analysis Date: 04/26/13 08:23 PM			
Client ID:		Run ID: ICPMS1_130426A			SeqNo: 2293622		Prep Date: 04/26/13		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	6.522	1.5	7.463	0.1659	85.2	75-125	0			
Arsenic	13.28	1.5	7.463	6.624	89.2	75-125	0			
Barium	72.9	1.5	7.463	60.09	172	75-125	0			SO
Cadmium	8.221	0.60	7.463	0.8325	99	75-125	0			
Chromium	35.22	1.5	7.463	23.21	161	75-125	0			S
Cobalt	8.869	1.5	7.463	1.78	95	75-125	0			
Copper	15.04	1.5	7.463	7.408	102	75-125	0			
Lead	30.39	1.5	7.463	19.93	140	75-125	0			S
Manganese	395.5	1.5	7.463	354.7	547	75-125	0			SO
Molybdenum	7.588	1.5	7.463	0.2714	98	75-125	0			
Nickel	12.93	1.5	7.463	4.985	106	75-125	0			
Silver	7.17	1.5	7.463	0.1344	94.3	75-125	0			
Thallium	7.158	1.5	7.463	0.2	93.2	75-125	0			
Vanadium	14.56	1.5	7.463	5.299	124	75-125	0			
Zinc	79.76	3.0	7.463	63.85	213	75-125	0			SO

MS Sample ID: 13041010-01AMS				Units: mg/Kg			Analysis Date: 04/27/13 03:57 AM			
Client ID:		Run ID: ICPMS1_130426A			SeqNo: 2294933		Prep Date: 04/26/13		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	6.681	0.60	7.463	0.1267	87.8	75-125	0			
Iron	11140	24	746.3	10250	120	75-125	0			O
Selenium	7.26	1.5	7.463	0.4728	90.9	75-125	0			

MS Sample ID: 13041010-01AMS				Units: mg/Kg			Analysis Date: 04/30/13 03:23 PM			
Client ID:		Run ID: ICPMS2_130430A			SeqNo: 2298364		Prep Date: 04/26/13		DF: 4	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	7.17	1.5	7.463	0.4796	89.7	75-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041050
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **47985** Instrument ID **ICPMS1** Method: **SW6020A**

MSD Sample ID: 13041010-01AMSD				Units: mg/Kg		Analysis Date: 04/26/13 08:47 PM				
Client ID:		Run ID: ICPMS1_130426A		SeqNo: 2293626		Prep Date: 04/26/13		DF: 4		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	6.282	1.5	7.418	0.1659	82.4	75-125	6.522	3.76	25	
Arsenic	14	1.5	7.418	6.624	99.5	75-125	13.28	5.3	25	
Barium	76.17	1.5	7.418	60.09	217	75-125	72.9	4.4	25	SO
Cadmium	8.187	0.59	7.418	0.8325	99.1	75-125	8.221	0.414	25	
Chromium	35.85	1.5	7.418	23.21	170	75-125	35.22	1.75	25	S
Cobalt	8.887	1.5	7.418	1.78	95.8	75-125	8.869	0.209	25	
Copper	14.96	1.5	7.418	7.408	102	75-125	15.04	0.516	25	
Lead	31.31	1.5	7.418	19.93	153	75-125	30.39	2.97	25	S
Manganese	378.9	1.5	7.418	354.7	326	75-125	395.5	4.28	25	SO
Molybdenum	7.671	1.5	7.418	0.2714	99.7	75-125	7.588	1.08	25	
Nickel	13.05	1.5	7.418	4.985	109	75-125	12.93	0.986	25	
Silver	7.021	1.5	7.418	0.1344	92.8	75-125	7.17	2.11	25	
Thallium	7.169	1.5	7.418	0.2	93.9	75-125	7.158	0.153	25	
Vanadium	14.74	1.5	7.418	5.299	127	75-125	14.56	1.23	25	S
Zinc	82.34	3.0	7.418	63.85	249	75-125	79.76	3.19	25	SO

MSD Sample ID: 13041010-01AMSD				Units: mg/Kg		Analysis Date: 04/27/13 04:03 AM				
Client ID:		Run ID: ICPMS1_130426A		SeqNo: 2294934		Prep Date: 04/26/13		DF: 4		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	6.496	0.59	7.418	0.1267	85.9	75-125	6.681	2.81	25	
Iron	11460	24	741.8	10250	163	75-125	11140	2.78	25	SO
Selenium	6.828	1.5	7.418	0.4728	85.7	75-125	7.26	6.13	25	

MSD Sample ID: 13041010-01AMSD				Units: mg/Kg		Analysis Date: 04/30/13 03:28 PM				
Client ID:		Run ID: ICPMS2_130430A		SeqNo: 2298365		Prep Date: 04/26/13		DF: 4		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Selenium	7.721	1.5	7.418	0.4796	97.6	75-125	7.17	7.4	25	

The following samples were analyzed in this batch:

13041050-01A	13041050-02A	13041050-03A
13041050-04A	13041050-05A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041050
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **47962** Instrument ID **SVMS5** Method: **SW8270**

MBLK		Sample ID: SBLKS1-47962-47962				Units: µg/Kg		Analysis Date: 04/29/13 11:08 AM		
Client ID:		Run ID: SVMS5_130429A				SeqNo: 2297445		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	U	80								
Acenaphthene	U	30								
Acenaphthylene	U	30								
Anthracene	U	30								
Benzo(a)anthracene	U	30								
Benzo(a)pyrene	U	30								
Benzo(b)fluoranthene	U	30								
Benzo(g,h,i)perylene	U	30								
Benzo(k)fluoranthene	U	30								
Chrysene	U	30								
Dibenzo(a,h)anthracene	U	30								
Fluoranthene	U	30								
Fluorene	U	30								
Indeno(1,2,3-cd)pyrene	U	30								
Naphthalene	U	30								
Phenanthrene	U	30								
Pyrene	U	30								
<i>Surr: 2-Fluorobiphenyl</i>	<i>1429</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>85.7</i>	<i>12-100</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>2079</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>125</i>	<i>25-137</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>1490</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>89.4</i>	<i>37-107</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041050
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **47962** Instrument ID **SVMS5** Method: **SW8270**

LCS		Sample ID: SLCSS1-47962-47962				Units: µg/Kg		Analysis Date: 04/29/13 11:30 AM		
Client ID:		Run ID: SVMS5_130429A				SeqNo: 2297446		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	544	80	666.7	0	81.6	45-105	0			
Acenaphthene	535	30	666.7	0	80.2	45-110	0			
Acenaphthylene	519	30	666.7	0	77.8	45-105	0			
Anthracene	513	30	666.7	0	76.9	55-105	0			
Benzo(a)anthracene	516	30	666.7	0	77.4	50-110	0			
Benzo(a)pyrene	477.7	30	666.7	0	71.6	50-110	0			
Benzo(b)fluoranthene	546.3	30	666.7	0	81.9	45-115	0			
Benzo(g,h,i)perylene	390	30	666.7	0	58.5	40-125	0			
Benzo(k)fluoranthene	692.7	30	666.7	0	104	45-115	0			
Chrysene	582.3	30	666.7	0	87.3	55-110	0			
Dibenzo(a,h)anthracene	418.7	30	666.7	0	62.8	40-125	0			
Fluoranthene	480	30	666.7	0	72	55-115	0			
Fluorene	565.3	30	666.7	0	84.8	50-110	0			
Indeno(1,2,3-cd)pyrene	437	30	666.7	0	65.5	40-120	0			
Naphthalene	539.3	30	666.7	0	80.9	40-105	0			
Phenanthrene	527	30	666.7	0	79	50-110	0			
Pyrene	594.3	30	666.7	0	89.1	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	<i>1350</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>81</i>	<i>12-100</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>1856</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>111</i>	<i>25-137</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>1394</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>83.7</i>	<i>37-107</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041050
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **47962** Instrument ID **SVMS5** Method: **SW8270**

MS Sample ID: 13041009-05A MS				Units: µg/Kg			Analysis Date: 04/29/13 11:52 AM			
Client ID:		Run ID: SVMS5_130429A		SeqNo: 2297447		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	1554	240	1973	0	78.7	45-105	0			
Acenaphthene	1577	89	1973	0	79.9	45-110	0			
Acenaphthylene	1502	89	1973	0	76.1	45-105	0			
Anthracene	1592	89	1973	0	80.6	55-105	0			
Benzo(a)anthracene	1660	89	1973	0	84.1	50-110	0			
Benzo(a)pyrene	1775	89	1973	0	89.9	50-110	0			
Benzo(b)fluoranthene	1833	89	1973	0	92.9	45-115	0			
Benzo(g,h,i)perylene	1815	89	1973	0	91.9	40-125	0			
Benzo(k)fluoranthene	1878	89	1973	0	95.1	45-115	0			
Chrysene	1810	89	1973	0	91.7	55-110	0			
Dibenzo(a,h)anthracene	1609	89	1973	0	81.5	40-125	0			
Fluoranthene	1660	89	1973	0	84.1	55-115	0			
Fluorene	1712	89	1973	0	86.7	50-110	0			
Indeno(1,2,3-cd)pyrene	1580	89	1973	0	80	40-120	0			
Naphthalene	1459	89	1973	0	73.9	40-105	0			
Phenanthrene	1643	89	1973	0	83.2	50-110	0			
Pyrene	2052	89	1973	0	104	45-125	0			
<i>Surr: 2-Fluorobiphenyl</i>	3837	0	4933	0	77.8	12-100	0			
<i>Surr: 4-Terphenyl-d14</i>	5688	0	4933	0	115	25-137	0			
<i>Surr: Nitrobenzene-d5</i>	4042	0	4933	0	81.9	37-107	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041050
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **47962** Instrument ID **SVMS5** Method: **SW8270**

MSD					Sample ID: 13041009-05A MSD		Units: µg/Kg		Analysis Date: 04/29/13 12:14 PM		
Client ID:			Run ID: SVMS5_130429A			SeqNo: 2297448		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
2-Methylnaphthalene	1534	240	1995	0	76.9	45-105	1554	1.29	30		
Acenaphthene	1580	90	1995	0	79.2	45-110	1577	0.211	30		
Acenaphthylene	1565	90	1995	0	78.4	45-105	1502	4.13	30		
Anthracene	1560	90	1995	0	78.2	55-105	1592	1.99	30		
Benzo(a)anthracene	1711	90	1995	0	85.7	50-110	1660	3.03	30		
Benzo(a)pyrene	1857	90	1995	0	93.1	50-110	1775	4.53	30		
Benzo(b)fluoranthene	1882	90	1995	0	94.3	45-115	1833	2.64	30		
Benzo(g,h,i)perylene	1652	90	1995	0	82.8	40-125	1815	9.38	30		
Benzo(k)fluoranthene	1862	90	1995	0	93.3	45-115	1878	0.819	30		
Chrysene	1812	90	1995	0	90.8	55-110	1810	0.16	30		
Dibenzo(a,h)anthracene	1568	90	1995	0	78.6	40-125	1609	2.59	30		
Fluoranthene	1599	90	1995	0	80.1	55-115	1660	3.72	30		
Fluorene	1771	90	1995	0	88.7	50-110	1712	3.37	30		
Indeno(1,2,3-cd)pyrene	1518	90	1995	0	76.1	40-120	1580	3.97	30		
Naphthalene	1390	90	1995	0	69.6	40-105	1459	4.9	30		
Phenanthrene	1594	90	1995	0	79.9	50-110	1643	3.02	30		
Pyrene	1997	90	1995	0	100	45-125	2052	2.73	30		
Surr: 2-Fluorobiphenyl	3912	0	4988	0	78.4	12-100	3837	1.94	40		
Surr: 4-Terphenyl-d14	5605	0	4988	0	112	25-137	5688	1.47	40		
Surr: Nitrobenzene-d5	3679	0	4988	0	73.8	37-107	4042	9.42	40		

The following samples were analyzed in this batch:

13041050-01A	13041050-02A	13041050-03A
13041050-04A	13041050-05A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041050
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **48045** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK	Sample ID: MBLK-48045-48045					Units: mg/Kg		Analysis Date: 04/30/13 11:00 AM		
Client ID:	Run ID: WETCHEM_130430D				SeqNo: 2297663		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent U 0.50

LCS	Sample ID: LCS-48045-48045					Units: mg/Kg		Analysis Date: 04/30/13 11:00 AM		
Client ID:	Run ID: WETCHEM_130430D				SeqNo: 2297662		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.869 0.50 1.984 0 94.2 75-110 0

MS	Sample ID: 13041071-02B MS					Units: mg/Kg		Analysis Date: 04/30/13 11:00 AM		
Client ID:	Run ID: WETCHEM_130430D				SeqNo: 2297659		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.012 0.50 2 0.144 43.4 60-130 0 S

MSD	Sample ID: 13041071-02B MSD					Units: mg/Kg		Analysis Date: 04/30/13 11:00 AM		
Client ID:	Run ID: WETCHEM_130430D				SeqNo: 2297660		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.116 0.50 2 0.144 48.6 60-130 1.012 9.77 30 S

The following samples were analyzed in this batch:

13041050-01A	13041050-02A	13041050-03A
13041050-04A	13041050-05A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041050
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119865** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS-R119865					Units: % of sample		Analysis Date: 04/29/13 01:40 PM		
Client ID:	Run ID: MOIST_130429B				SeqNo: 2297788		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture U 0.050

LCS	Sample ID: LCS-R119865					Units: % of sample		Analysis Date: 04/29/13 01:40 PM		
Client ID:	Run ID: MOIST_130429B				SeqNo: 2297787		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 13041050-01ADUP					Units: % of sample		Analysis Date: 04/29/13 01:40 PM		
Client ID: SO-17360-042413-DR-050	Run ID: MOIST_130429B				SeqNo: 2297768		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 14.69 0.050 0 0 0 0-0 17.15 15.5 20

DUP	Sample ID: 13041130-11BDUP					Units: % of sample		Analysis Date: 04/29/13 01:40 PM		
Client ID:	Run ID: MOIST_130429B				SeqNo: 2297786		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 12.38 0.050 0 0 0 0-0 10.7 14.6 20

The following samples were analyzed in this batch:

13041050-01A	13041050-02A	13041050-03A
13041050-04A	13041050-05A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



**CONESTOGA-ROVERS
& ASSOCIATES**

CHAIN OF CUSTODY RECORD

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170

Phone: (734) 453-5123

Fax: (734) 453-5201

COC NO.: **PL- 11146**

PAGE **1** OF **1**

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 017360-T02Y13-01Y13				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 17360-T02-01B					
Project Name: RACER-Fmr Grand Rapids Metal				Lab Contact: T. Beamish				Lab Quote No: 1				Cooler No:					
Project Location: Wyoming, MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)					
Chemistry Contact: P. Wiseman				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other:				Total Containers/Sample TAL Metals PCBs PAHs Speciated Cr Total Cr Total Pb Frac Pb Hold Frac Pb-Hold 5 day TAT Wetted Request 2wk TAT					
Sampler(s): D. Rivers																	
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)			DATE (mm/dd/yy)	TIME (hh:mm)	COMMENTS/ SPECIAL INSTRUCTIONS:											
1	SO-17360-042913-DR-045			4/24/13	830												
2	046				832												
3	047				835												
4	048				837												
5	049				840												
6	050				845												
7	051				847												
8	052				850												
9	053				905												
10	054				910												
11	055				945												
12	056				1025												
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: 12 All Samples in Cooler must be on COC Notes/ Special Requirements: * Hold Frac Pb pending Total Pb analysis																	
RELINQUISHED BY		COMPANY		DATE		TIME		RECEIVED BY		COMPANY		DATE		TIME			
1. D. Rivers		CRA		4/25/13		1140		1. [Signature]									
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 (2011.08.04)

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **CRA - PLYMOUTH**

Date/Time Received: **25-Apr-13 11:40**

Work Order: **13041050**

Received by: **KRW**

Checklist completed by Diane Shaw 25-Apr-13
eSignature Date

Reviewed by: Tom Bramish 25-Apr-13
eSignature Date

Matrices: Soil

Carrier name: Client

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>4.6 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/25/2013 3:35:24 PM</u>		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒
pH adjusted?	Yes ☐	No ☐	N/A ☒
pH adjusted by:			
Login Notes:			

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



06-May-2013

Paul Wiseman
Conestoga-Rovers & Associates
14496 Sheldon Road
Suite 200
Plymouth, MI 48170

Re: **Former GRMP (017360-T02Y13-01Y13)**

Work Order: **13041051**

Dear Paul,

ALS Environmental received 2 samples on 25-Apr-2013 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 12.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Beamish".

Electronically approved by: Tom Beamish

Tom Beamish
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Group An ALS Limited Company

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Work Order: 13041051

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
13041051-01	SO-17360-042413-DR-055	Soil		04/24/13 09:45	04/25/13 11:40	☐
13041051-02	SO-17360-042413-DR-056	Soil		04/24/13 10:25	04/25/13 11:40	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
WorkOrder: 13041051

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
mg/Kg-dry	Milligrams per Kilogram Dry Weight

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Sample ID: SO-17360-042413-DR-055
Collection Date: 04/24/13 09:45 AM

Work Order: 13041051
Lab ID: 13041051-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3050B / 5/1/13		Analyst: ML
<u>BatchID: 48082</u>							
Chromium	2.4		0.29	1.8	mg/Kg-dry	5	05/02/13 20:50
LEAD ANALYSIS BY ICP-MS			SW6020A		Prep: SW3050 / 5/2/13		Analyst: RH
<u>BatchID: 48113</u>							
Lead (coarse fraction)	1.2	J	0.0093	9.3	mg/Kg-dry	10	05/02/13 15:56
LEAD ANALYSIS BY ICP-MS			SW6020A		Prep: SW3050 / 5/2/13		Analyst: RH
<u>BatchID: 48114</u>							
Lead (fine fraction)	2.7	J	0.0098	9.8	mg/Kg-dry	10	05/02/13 16:40
LEAD ANALYSIS BY ICP-MS			SW6020A				Analyst: RH
<u>BatchID: R120070</u>							
Lead (total - calculated)	2.0		0.0010	1.0	mg/Kg-dry	1	05/02/13
CHROMIUM, TRIVALENT			CALCULATION				Analyst: JJG
<u>BatchID: R120096</u>							
Chromium, Trivalent	2.4		0.27	0.54	mg/Kg-dry	1	05/03/13 16:44
CHROMIUM, HEXAVALENT			SW7196A		Prep: SW3060A / 4/26/13		Analyst: MB
<u>BatchID: 48045</u>							
Chromium, Hexavalent	U		0.19	2.1	mg/Kg-dry	1	04/30/13 11:00
MOISTURE			A2540 G				Analyst: DC
<u>BatchID: R119865</u>							
Moisture	7.0		0.025	0.050	% of sample	1	04/29/13 13:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T02Y13-01Y13)
Sample ID: SO-17360-042413-DR-056
Collection Date: 04/24/13 10:25 AM

Work Order: 13041051
Lab ID: 13041051-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3050B / 5/1/13		Analyst: ML
<u>BatchID: 48082</u>							
Chromium	16		0.30	1.9	mg/Kg-dry	5	05/02/13 20:56
LEAD ANALYSIS BY ICP-MS			SW6020A		Prep: SW3050 / 5/2/13		Analyst: RH
<u>BatchID: 48113</u>							
Lead (coarse fraction)	7.2	J	0.0094	9.4	mg/Kg-dry	10	05/02/13 16:02
LEAD ANALYSIS BY ICP-MS			SW6020A		Prep: SW3050 / 5/2/13		Analyst: RH
<u>BatchID: 48114</u>							
Lead (fine fraction)	25		0.0098	9.8	mg/Kg-dry	10	05/02/13 17:24
LEAD ANALYSIS BY ICP-MS			SW6020A				Analyst: RH
<u>BatchID: R120070</u>							
Lead (total - calculated)	9.4		0.0010	1.0	mg/Kg-dry	1	05/02/13
CHROMIUM, TRIVALENT			CALCULATION				Analyst: JJG
<u>BatchID: R120096</u>							
Chromium, Trivalent	16		0.27	0.53	mg/Kg-dry	1	05/03/13 16:44
CHROMIUM, HEXAVALENT			SW7196A		Prep: SW3060A / 4/26/13		Analyst: MB
<u>BatchID: 48045</u>							
Chromium, Hexavalent	U		0.19	2.1	mg/Kg-dry	1	04/30/13 11:00
MOISTURE			A2540 G				Analyst: DC
<u>BatchID: R119865</u>							
Moisture	4.9		0.025	0.050	% of sample	1	04/29/13 13:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Conestoga-Rovers & Associates

QC BATCH REPORT

Work Order: 13041051

Project: Former GRMP (017360-T02Y13-01Y13)

Batch ID: 48082

Instrument ID ICPMS1

Method: SW6020A

MBLK		Sample ID: MBLK-48082-48082				Units: mg/Kg		Analysis Date: 05/02/13 04:12 AM		
Client ID:		Run ID: ICPMS1_130501A				SeqNo: 2300457		Prep Date: 05/01/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium	0.06605	0.25								J

LCS		Sample ID: LCS-48082-48082				Units: mg/Kg		Analysis Date: 05/02/13 04:19 AM		
Client ID:		Run ID: ICPMS1_130501A				SeqNo: 2300458		Prep Date: 05/01/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium	4.728	0.25	5	0	94.6	80-120	0			

MS		Sample ID: 13041049-58BMS				Units: mg/Kg		Analysis Date: 05/02/13 09:14 PM		
Client ID:		Run ID: ICPMS1_130502A				SeqNo: 2302494		Prep Date: 05/01/13		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium	16.15	1.8	7.375	9.084	95.9	75-125	0			

MSD		Sample ID: 13041049-58BMSD				Units: mg/Kg		Analysis Date: 05/02/13 09:20 PM		
Client ID:		Run ID: ICPMS1_130502A				SeqNo: 2302496		Prep Date: 05/01/13		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium	21.57	2.0	7.837	9.084	159	75-125	16.15	28.7	25	SR

The following samples were analyzed in this batch:

13041051-01A	13041051-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041051
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **48113** Instrument ID **ICPMS2** Method: **SW6020A**

MBLK	Sample ID: MBLK-48113-48113					Units: mg/Kg-dry		Analysis Date: 05/02/13 12:41 PM		
Client ID:	Run ID: ICPMS2_130501A				SeqNo: 2301563		Prep Date: 05/02/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Lead (coarse fraction) 0.001123 0.75 J

LCS	Sample ID: LCS-48113-48113					Units: mg/Kg-dry		Analysis Date: 05/02/13 12:46 PM		
Client ID:	Run ID: ICPMS2_130501A				SeqNo: 2301564		Prep Date: 05/02/13		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Lead (coarse fraction) 132 7.3 145.3 0 90.8 80-120 0

MS	Sample ID: 13041051-02AMS					Units: mg/Kg-dry		Analysis Date: 05/02/13 04:11 PM		
Client ID: SO-17360-042413-DR-056	Run ID: ICPMS2_130502A				SeqNo: 2302733		Prep Date: 05/02/13		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Lead (coarse fraction) 57.86 7.1 47.04 7.166 108 75-125 0

MSD	Sample ID: 13041051-02AMSD					Units: mg/Kg-dry		Analysis Date: 05/02/13 04:16 PM		
Client ID: SO-17360-042413-DR-056	Run ID: ICPMS2_130502A				SeqNo: 2302734		Prep Date: 05/02/13		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Lead (coarse fraction) 61.04 6.8 45.41 7.166 119 75-125 57.86 5.35 25

LCS2	Sample ID: LCS2-48113-48113					Units: mg/Kg-dry		Analysis Date: 05/02/13 03:51 PM		
Client ID:	Run ID: ICPMS2_130502A				SeqNo: 2302730		Prep Date: 05/02/13		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Lead (coarse fraction) 396.3 6.9 398.2 0 99.5 80-120 0

The following samples were analyzed in this batch:

13041051-01A	13041051-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041051
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **48114** Instrument ID **ICPMS2** Method: **SW6020A**

MBLK	Sample ID: MBLK-48114-48114					Units: mg/Kg-dry		Analysis Date: 05/02/13 04:23 PM		
Client ID:	Run ID: ICPMS2_130502A				SeqNo: 2302998		Prep Date: 05/02/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Lead (fine fraction) U 0.75

LCS	Sample ID: LCS-48114-48114					Units: mg/Kg-dry		Analysis Date: 05/02/13 04:28 PM		
Client ID:	Run ID: ICPMS2_130502A				SeqNo: 2302999		Prep Date: 05/02/13		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Lead (fine fraction) 138.7 7.2 144.6 0 95.9 80-120 0

MS	Sample ID: 13041051-01AMS					Units: mg/Kg-dry		Analysis Date: 05/02/13 04:45 PM		
Client ID: SO-17360-042413-DR-055	Run ID: ICPMS2_130502A				SeqNo: 2303002		Prep Date: 05/02/13		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Lead (fine fraction) 51.13 7.4 49.02 2.71 98.8 75-125 0

MSD	Sample ID: 13041051-01AMSD					Units: mg/Kg-dry		Analysis Date: 05/02/13 05:19 PM		
Client ID: SO-17360-042413-DR-055	Run ID: ICPMS2_130502A				SeqNo: 2303009		Prep Date: 05/02/13		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Lead (fine fraction) 49.95 7.2 48.26 2.71 97.9 75-125 51.13 2.33 25

LCS2	Sample ID: LCS2-48114-48114					Units: mg/Kg-dry		Analysis Date: 05/02/13 04:33 PM		
Client ID:	Run ID: ICPMS2_130502A				SeqNo: 2303000		Prep Date: 05/02/13		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Lead (fine fraction) 385.4 6.8 391.3 0 98.5 80-120 0

The following samples were analyzed in this batch:

13041051-01A	13041051-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041051
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **48045** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK	Sample ID: MBLK-48045-48045					Units: mg/Kg		Analysis Date: 04/30/13 11:00 AM		
Client ID:	Run ID: WETCHEM_130430D				SeqNo: 2297663		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent U 0.50

LCS	Sample ID: LCS-48045-48045					Units: mg/Kg		Analysis Date: 04/30/13 11:00 AM		
Client ID:	Run ID: WETCHEM_130430D				SeqNo: 2297662		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.869 0.50 1.984 0 94.2 75-110 0

MS	Sample ID: 13041071-02B MS					Units: mg/Kg		Analysis Date: 04/30/13 11:00 AM		
Client ID:	Run ID: WETCHEM_130430D				SeqNo: 2297659		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.012 0.50 2 0.144 43.4 60-130 0 S

MSD	Sample ID: 13041071-02B MSD					Units: mg/Kg		Analysis Date: 04/30/13 11:00 AM		
Client ID:	Run ID: WETCHEM_130430D				SeqNo: 2297660		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 1.116 0.50 2 0.144 48.6 60-130 1.012 9.77 30 S

The following samples were analyzed in this batch:

13041051-01A	13041051-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041051
Project: Former GRMP (017360-T02Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119865** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS-R119865				Units: % of sample			Analysis Date: 04/29/13 01:40 PM		
Client ID:	Run ID: MOIST_130429B				SeqNo: 2297788		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture U 0.050

LCS	Sample ID: LCS-R119865				Units: % of sample			Analysis Date: 04/29/13 01:40 PM		
Client ID:	Run ID: MOIST_130429B				SeqNo: 2297787		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 13041050-01ADUP				Units: % of sample			Analysis Date: 04/29/13 01:40 PM		
Client ID:	Run ID: MOIST_130429B				SeqNo: 2297768		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 14.69 0.050 0 0 0 0-0 17.15 15.5 20

DUP	Sample ID: 13041130-11BDUP				Units: % of sample			Analysis Date: 04/29/13 01:40 PM		
Client ID:	Run ID: MOIST_130429B				SeqNo: 2297786		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 12.38 0.050 0 0 0 0-0 10.7 14.6 20

The following samples were analyzed in this batch:

13041051-01A	13041051-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



**CONESTOGA-ROVERS
& ASSOCIATES**

CHAIN OF CUSTODY RECORD

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170

Phone: (734) 453-5123

Fax: (734) 453-5201

13041051
COC NO.: **PL- 11146**

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/Phase/Task Code: 017360-T02Y13-01Y13				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 17360-T02-018			
Project Name: RACER-Fmr Grand Rapids Metal				Lab Contact: T-Beams				Lab Quote No: 1				Cooler No:			
Project Location: Wyoming, MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)			
Chemistry Contact: P. Wiseman				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other:				Total Containers/Sample TAL Metals PCBs PAHs Speciated Cr Total Cr Total Pb Frac Pb Hold Frac Pb-Hold 5 day TAT MSB Request 2wk TAT			
Sampler(s): D. Rivers															
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	COMMENTS/ SPECIAL INSTRUCTIONS:											
1	SO-17360-042913-DR-045	4/24/13	830	SO G											
2	046		832												
3	047		835												
4	048		837												
5	049		840												
6	050		845												
7	051		847												
8	052		850												
9	053		905												
10	054		910												
11	055		945												
12	056		1025												
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: 12				Notes/ Special Requirements: * Hold Frac Pb pending Total Pb analysis				4.6%			
All Samples in Cooler must be on COC															
RELINQUISHED BY		COMPANY		DATE		TIME		RECEIVED BY		COMPANY		DATE		TIME	
1. D. Rivers		CRA		4/25/13		1140		1.							
2.								2.							
3.								3.							

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT - ALL FIELDS MUST BE COMPLETED ACCURATELY

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **CRA - PLYMOUTH**

Date/Time Received: **25-Apr-13 11:40**

Work Order: **13041051**

Received by: **KRW**

Checklist completed by *Diane Shaw* 25-Apr-13
eSignature Date

Reviewed by: *Tom Bramish* 25-Apr-13
eSignature Date

Matrices: Soil

Carrier name: Client

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>4.6 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/25/2013 3:45:19 PM</u>		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒
pH adjusted?	Yes ☐	No ☐	N/A ☒
pH adjusted by:			
Login Notes:			

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



08-May-2013

Paul Wiseman
Conestoga-Rovers & Associates
14496 Sheldon Road
Suite 200
Plymouth, MI 48170

Re: **Former GRMP (017360-T05Y13-02Y13)**

Work Order: **1305243**

Dear Paul,

ALS Environmental received 6 samples on 07-May-2013 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 26.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Beamish".

Electronically approved by: Tom Beamish

Tom Beamish
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Group An ALS Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Work Order: 1305243

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1305243-01	GW-17360-050613-BW-001	Groundwater		05/06/13 10:45	05/07/13 08:10	☐
1305243-02	GW-17360-050613-BW-002	Groundwater		05/06/13 12:00	05/07/13 08:10	☐
1305243-03	GW-17360-050613-BW-003	Groundwater		05/06/13 13:00	05/07/13 08:10	☐
1305243-04	GW-17360-050613-BW-004	Groundwater		05/06/13 14:30	05/07/13 08:10	☐
1305243-05	GW-17360-050613-BW-005	Groundwater		05/06/13 16:30	05/07/13 08:10	☐
1305243-06	Trip Blank	Water		05/06/13	05/07/13 08:10	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
WorkOrder: 1305243

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Work Order: 1305243

Case Narrative**Analytical Comments:**

Chloroform was detected in two of the field samples, as well as the trip blank, at approximately the same concentrations; Chloroform was not detected in the method blank.

QC Comments:

Batch R120275A, Method VOC_8260_W, Sample VLCSW1-130507: The LCS recovery was above the upper control limit. All sample results in the batch were non-detect. No qualification is necessary for 4-Methyl-2-pentanone.

ALS Group USA, Corp

Date: 08-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050613-BW-001
Collection Date: 05/06/13 10:45 AM

Work Order: 1305243
Lab ID: 1305243-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R120275</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/07/13 17:22
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/07/13 17:22
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/07/13 17:22
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/07/13 17:22
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/07/13 17:22
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/07/13 17:22
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/07/13 17:22
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/07/13 17:22
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/07/13 17:22
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/07/13 17:22
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/07/13 17:22
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/07/13 17:22
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/07/13 17:22
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/07/13 17:22
2-Butanone	U		0.22	25	µg/L	1	05/07/13 17:22
2-Hexanone	U		0.12	50	µg/L	1	05/07/13 17:22
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/07/13 17:22
Acetone	U		0.33	50	µg/L	1	05/07/13 17:22
Benzene	U		0.18	1.0	µg/L	1	05/07/13 17:22
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/07/13 17:22
Bromoform	U		0.15	1.0	µg/L	1	05/07/13 17:22
Bromomethane	U		0.21	5.0	µg/L	1	05/07/13 17:22
Carbon disulfide	U		0.17	5.0	µg/L	1	05/07/13 17:22
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/07/13 17:22
Chlorobenzene	U		0.13	1.0	µg/L	1	05/07/13 17:22
Chloroethane	U		0.46	5.0	µg/L	1	05/07/13 17:22
Chloroform	U		0.15	1.0	µg/L	1	05/07/13 17:22
Chloromethane	U		0.16	5.0	µg/L	1	05/07/13 17:22
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/07/13 17:22
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/07/13 17:22
Cyclohexane	U		0.22	1.0	µg/L	1	05/07/13 17:22
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/07/13 17:22
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/07/13 17:22
Ethylbenzene	U		0.13	1.0	µg/L	1	05/07/13 17:22
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/07/13 17:22
Methyl acetate	U		0.19	10	µg/L	1	05/07/13 17:22
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/07/13 17:22

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 08-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050613-BW-001
Collection Date: 05/06/13 10:45 AM

Work Order: 1305243
Lab ID: 1305243-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/07/13 17:22
Methylene chloride	U		0.19	5.0	µg/L	1	05/07/13 17:22
Styrene	U		0.11	1.0	µg/L	1	05/07/13 17:22
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/07/13 17:22
Toluene	U		0.12	1.0	µg/L	1	05/07/13 17:22
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/07/13 17:22
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/07/13 17:22
Trichloroethene	U		0.14	1.0	µg/L	1	05/07/13 17:22
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/07/13 17:22
Vinyl chloride	U		0.17	1.0	µg/L	1	05/07/13 17:22
Xylenes, Total	U		0.29	3.0	µg/L	1	05/07/13 17:22
Surr: 1,2-Dichloroethane-d4	104			70-120	%REC	1	05/07/13 17:22
Surr: 4-Bromofluorobenzene	102			75-120	%REC	1	05/07/13 17:22
Surr: Dibromofluoromethane	99.3			85-115	%REC	1	05/07/13 17:22
Surr: Toluene-d8	99.6			85-120	%REC	1	05/07/13 17:22

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 08-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050613-BW-002
Collection Date: 05/06/13 12:00 PM

Work Order: 1305243
Lab ID: 1305243-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R120275</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/07/13 17:45
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/07/13 17:45
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/07/13 17:45
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/07/13 17:45
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/07/13 17:45
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/07/13 17:45
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/07/13 17:45
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/07/13 17:45
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/07/13 17:45
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/07/13 17:45
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/07/13 17:45
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/07/13 17:45
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/07/13 17:45
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/07/13 17:45
2-Butanone	U		0.22	25	µg/L	1	05/07/13 17:45
2-Hexanone	U		0.12	50	µg/L	1	05/07/13 17:45
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/07/13 17:45
Acetone	U		0.33	50	µg/L	1	05/07/13 17:45
Benzene	U		0.18	1.0	µg/L	1	05/07/13 17:45
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/07/13 17:45
Bromoform	U		0.15	1.0	µg/L	1	05/07/13 17:45
Bromomethane	U		0.21	5.0	µg/L	1	05/07/13 17:45
Carbon disulfide	U		0.17	5.0	µg/L	1	05/07/13 17:45
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/07/13 17:45
Chlorobenzene	U		0.13	1.0	µg/L	1	05/07/13 17:45
Chloroethane	U		0.46	5.0	µg/L	1	05/07/13 17:45
Chloroform	1.4		0.15	1.0	µg/L	1	05/07/13 17:45
Chloromethane	U		0.16	5.0	µg/L	1	05/07/13 17:45
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/07/13 17:45
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/07/13 17:45
Cyclohexane	U		0.22	1.0	µg/L	1	05/07/13 17:45
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/07/13 17:45
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/07/13 17:45
Ethylbenzene	U		0.13	1.0	µg/L	1	05/07/13 17:45
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/07/13 17:45
Methyl acetate	U		0.19	10	µg/L	1	05/07/13 17:45
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/07/13 17:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 08-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050613-BW-002
Collection Date: 05/06/13 12:00 PM

Work Order: 1305243
Lab ID: 1305243-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/07/13 17:45
Methylene chloride	U		0.19	5.0	µg/L	1	05/07/13 17:45
Styrene	U		0.11	1.0	µg/L	1	05/07/13 17:45
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/07/13 17:45
Toluene	U		0.12	1.0	µg/L	1	05/07/13 17:45
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/07/13 17:45
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/07/13 17:45
Trichloroethene	U		0.14	1.0	µg/L	1	05/07/13 17:45
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/07/13 17:45
Vinyl chloride	U		0.17	1.0	µg/L	1	05/07/13 17:45
Xylenes, Total	U		0.29	3.0	µg/L	1	05/07/13 17:45
Surr: 1,2-Dichloroethane-d4	103			70-120	%REC	1	05/07/13 17:45
Surr: 4-Bromofluorobenzene	98.4			75-120	%REC	1	05/07/13 17:45
Surr: Dibromofluoromethane	98.4			85-115	%REC	1	05/07/13 17:45
Surr: Toluene-d8	97.8			85-120	%REC	1	05/07/13 17:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 08-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050613-BW-003
Collection Date: 05/06/13 01:00 PM

Work Order: 1305243
Lab ID: 1305243-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R120275</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/07/13 18:09
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/07/13 18:09
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/07/13 18:09
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/07/13 18:09
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/07/13 18:09
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/07/13 18:09
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/07/13 18:09
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/07/13 18:09
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/07/13 18:09
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/07/13 18:09
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/07/13 18:09
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/07/13 18:09
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/07/13 18:09
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/07/13 18:09
2-Butanone	U		0.22	25	µg/L	1	05/07/13 18:09
2-Hexanone	U		0.12	50	µg/L	1	05/07/13 18:09
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/07/13 18:09
Acetone	U		0.33	50	µg/L	1	05/07/13 18:09
Benzene	U		0.18	1.0	µg/L	1	05/07/13 18:09
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/07/13 18:09
Bromoform	U		0.15	1.0	µg/L	1	05/07/13 18:09
Bromomethane	U		0.21	5.0	µg/L	1	05/07/13 18:09
Carbon disulfide	U		0.17	5.0	µg/L	1	05/07/13 18:09
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/07/13 18:09
Chlorobenzene	U		0.13	1.0	µg/L	1	05/07/13 18:09
Chloroethane	U		0.46	5.0	µg/L	1	05/07/13 18:09
Chloroform	1.8		0.15	1.0	µg/L	1	05/07/13 18:09
Chloromethane	U		0.16	5.0	µg/L	1	05/07/13 18:09
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/07/13 18:09
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/07/13 18:09
Cyclohexane	U		0.22	1.0	µg/L	1	05/07/13 18:09
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/07/13 18:09
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/07/13 18:09
Ethylbenzene	U		0.13	1.0	µg/L	1	05/07/13 18:09
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/07/13 18:09
Methyl acetate	U		0.19	10	µg/L	1	05/07/13 18:09
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/07/13 18:09

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 08-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050613-BW-003
Collection Date: 05/06/13 01:00 PM

Work Order: 1305243
Lab ID: 1305243-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/07/13 18:09
Methylene chloride	U		0.19	5.0	µg/L	1	05/07/13 18:09
Styrene	U		0.11	1.0	µg/L	1	05/07/13 18:09
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/07/13 18:09
Toluene	U		0.12	1.0	µg/L	1	05/07/13 18:09
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/07/13 18:09
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/07/13 18:09
Trichloroethene	U		0.14	1.0	µg/L	1	05/07/13 18:09
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/07/13 18:09
Vinyl chloride	U		0.17	1.0	µg/L	1	05/07/13 18:09
Xylenes, Total	U		0.29	3.0	µg/L	1	05/07/13 18:09
Surr: 1,2-Dichloroethane-d4	103			70-120	%REC	1	05/07/13 18:09
Surr: 4-Bromofluorobenzene	100			75-120	%REC	1	05/07/13 18:09
Surr: Dibromofluoromethane	101			85-115	%REC	1	05/07/13 18:09
Surr: Toluene-d8	97.1			85-120	%REC	1	05/07/13 18:09

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 08-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050613-BW-004
Collection Date: 05/06/13 02:30 PM

Work Order: 1305243
Lab ID: 1305243-04
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R120275</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/07/13 18:32
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/07/13 18:32
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/07/13 18:32
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/07/13 18:32
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/07/13 18:32
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/07/13 18:32
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/07/13 18:32
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/07/13 18:32
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/07/13 18:32
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/07/13 18:32
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/07/13 18:32
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/07/13 18:32
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/07/13 18:32
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/07/13 18:32
2-Butanone	U		0.22	25	µg/L	1	05/07/13 18:32
2-Hexanone	U		0.12	50	µg/L	1	05/07/13 18:32
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/07/13 18:32
Acetone	U		0.33	50	µg/L	1	05/07/13 18:32
Benzene	U		0.18	1.0	µg/L	1	05/07/13 18:32
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/07/13 18:32
Bromoform	U		0.15	1.0	µg/L	1	05/07/13 18:32
Bromomethane	U		0.21	5.0	µg/L	1	05/07/13 18:32
Carbon disulfide	U		0.17	5.0	µg/L	1	05/07/13 18:32
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/07/13 18:32
Chlorobenzene	U		0.13	1.0	µg/L	1	05/07/13 18:32
Chloroethane	U		0.46	5.0	µg/L	1	05/07/13 18:32
Chloroform	U		0.15	1.0	µg/L	1	05/07/13 18:32
Chloromethane	U		0.16	5.0	µg/L	1	05/07/13 18:32
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/07/13 18:32
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/07/13 18:32
Cyclohexane	U		0.22	1.0	µg/L	1	05/07/13 18:32
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/07/13 18:32
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/07/13 18:32
Ethylbenzene	U		0.13	1.0	µg/L	1	05/07/13 18:32
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/07/13 18:32
Methyl acetate	U		0.19	10	µg/L	1	05/07/13 18:32
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/07/13 18:32

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 08-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050613-BW-004
Collection Date: 05/06/13 02:30 PM

Work Order: 1305243
Lab ID: 1305243-04
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/07/13 18:32
Methylene chloride	U		0.19	5.0	µg/L	1	05/07/13 18:32
Styrene	U		0.11	1.0	µg/L	1	05/07/13 18:32
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/07/13 18:32
Toluene	0.35	J	0.12	1.0	µg/L	1	05/07/13 18:32
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/07/13 18:32
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/07/13 18:32
Trichloroethene	U		0.14	1.0	µg/L	1	05/07/13 18:32
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/07/13 18:32
Vinyl chloride	U		0.17	1.0	µg/L	1	05/07/13 18:32
Xylenes, Total	U		0.29	3.0	µg/L	1	05/07/13 18:32
Surr: 1,2-Dichloroethane-d4	104			70-120	%REC	1	05/07/13 18:32
Surr: 4-Bromofluorobenzene	97.7			75-120	%REC	1	05/07/13 18:32
Surr: Dibromofluoromethane	102			85-115	%REC	1	05/07/13 18:32
Surr: Toluene-d8	97.8			85-120	%REC	1	05/07/13 18:32

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 08-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050613-BW-005
Collection Date: 05/06/13 04:30 PM

Work Order: 1305243
Lab ID: 1305243-05
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: BG	
BatchID: R120275							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/07/13 18:56
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/07/13 18:56
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/07/13 18:56
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/07/13 18:56
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/07/13 18:56
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/07/13 18:56
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/07/13 18:56
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/07/13 18:56
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/07/13 18:56
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/07/13 18:56
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/07/13 18:56
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/07/13 18:56
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/07/13 18:56
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/07/13 18:56
2-Butanone	U		0.22	25	µg/L	1	05/07/13 18:56
2-Hexanone	U		0.12	50	µg/L	1	05/07/13 18:56
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/07/13 18:56
Acetone	6.1	J	0.33	50	µg/L	1	05/07/13 18:56
Benzene	0.45	J	0.18	1.0	µg/L	1	05/07/13 18:56
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/07/13 18:56
Bromoform	U		0.15	1.0	µg/L	1	05/07/13 18:56
Bromomethane	U		0.21	5.0	µg/L	1	05/07/13 18:56
Carbon disulfide	U		0.17	5.0	µg/L	1	05/07/13 18:56
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/07/13 18:56
Chlorobenzene	U		0.13	1.0	µg/L	1	05/07/13 18:56
Chloroethane	U		0.46	5.0	µg/L	1	05/07/13 18:56
Chloroform	U		0.15	1.0	µg/L	1	05/07/13 18:56
Chloromethane	U		0.16	5.0	µg/L	1	05/07/13 18:56
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/07/13 18:56
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/07/13 18:56
Cyclohexane	U		0.22	1.0	µg/L	1	05/07/13 18:56
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/07/13 18:56
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/07/13 18:56
Ethylbenzene	0.27	J	0.13	1.0	µg/L	1	05/07/13 18:56
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/07/13 18:56
Methyl acetate	U		0.19	10	µg/L	1	05/07/13 18:56
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/07/13 18:56

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 08-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050613-BW-005
Collection Date: 05/06/13 04:30 PM

Work Order: 1305243
Lab ID: 1305243-05
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/07/13 18:56
Methylene chloride	U		0.19	5.0	µg/L	1	05/07/13 18:56
Styrene	U		0.11	1.0	µg/L	1	05/07/13 18:56
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/07/13 18:56
Toluene	0.78	J	0.12	1.0	µg/L	1	05/07/13 18:56
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/07/13 18:56
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/07/13 18:56
Trichloroethene	U		0.14	1.0	µg/L	1	05/07/13 18:56
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/07/13 18:56
Vinyl chloride	U		0.17	1.0	µg/L	1	05/07/13 18:56
Xylenes, Total	0.42	J	0.29	3.0	µg/L	1	05/07/13 18:56
Surr: 1,2-Dichloroethane-d4	104			70-120	%REC	1	05/07/13 18:56
Surr: 4-Bromofluorobenzene	98.1			75-120	%REC	1	05/07/13 18:56
Surr: Dibromofluoromethane	99.6			85-115	%REC	1	05/07/13 18:56
Surr: Toluene-d8	97.8			85-120	%REC	1	05/07/13 18:56

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 08-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: Trip Blank
Collection Date: 05/06/13

Work Order: 1305243
Lab ID: 1305243-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R120275</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/07/13 16:58
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/07/13 16:58
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/07/13 16:58
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/07/13 16:58
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/07/13 16:58
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/07/13 16:58
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/07/13 16:58
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/07/13 16:58
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/07/13 16:58
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/07/13 16:58
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/07/13 16:58
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/07/13 16:58
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/07/13 16:58
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/07/13 16:58
2-Butanone	U		0.22	25	µg/L	1	05/07/13 16:58
2-Hexanone	U		0.12	50	µg/L	1	05/07/13 16:58
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/07/13 16:58
Acetone	U		0.33	50	µg/L	1	05/07/13 16:58
Benzene	U		0.18	1.0	µg/L	1	05/07/13 16:58
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/07/13 16:58
Bromoform	U		0.15	1.0	µg/L	1	05/07/13 16:58
Bromomethane	U		0.21	5.0	µg/L	1	05/07/13 16:58
Carbon disulfide	U		0.17	5.0	µg/L	1	05/07/13 16:58
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/07/13 16:58
Chlorobenzene	U		0.13	1.0	µg/L	1	05/07/13 16:58
Chloroethane	U		0.46	5.0	µg/L	1	05/07/13 16:58
Chloroform	1.5		0.15	1.0	µg/L	1	05/07/13 16:58
Chloromethane	U		0.16	5.0	µg/L	1	05/07/13 16:58
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/07/13 16:58
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/07/13 16:58
Cyclohexane	U		0.22	1.0	µg/L	1	05/07/13 16:58
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/07/13 16:58
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/07/13 16:58
Ethylbenzene	U		0.13	1.0	µg/L	1	05/07/13 16:58
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/07/13 16:58
Methyl acetate	U		0.19	10	µg/L	1	05/07/13 16:58
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/07/13 16:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 08-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: Trip Blank
Collection Date: 05/06/13

Work Order: 1305243
Lab ID: 1305243-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/07/13 16:58
Methylene chloride	U		0.19	5.0	µg/L	1	05/07/13 16:58
Styrene	U		0.11	1.0	µg/L	1	05/07/13 16:58
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/07/13 16:58
Toluene	U		0.12	1.0	µg/L	1	05/07/13 16:58
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/07/13 16:58
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/07/13 16:58
Trichloroethene	U		0.14	1.0	µg/L	1	05/07/13 16:58
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/07/13 16:58
Vinyl chloride	U		0.17	1.0	µg/L	1	05/07/13 16:58
Xylenes, Total	U		0.29	3.0	µg/L	1	05/07/13 16:58
Surr: 1,2-Dichloroethane-d4	102			70-120	%REC	1	05/07/13 16:58
Surr: 4-Bromofluorobenzene	101			75-120	%REC	1	05/07/13 16:58
Surr: Dibromofluoromethane	99.1			85-115	%REC	1	05/07/13 16:58
Surr: Toluene-d8	99.1			85-120	%REC	1	05/07/13 16:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Conestoga-Rovers & Associates

QC BATCH REPORT

Work Order: 1305243

Project: Former GRMP (017360-T05Y13-02Y13)

Batch ID: R120275A

Instrument ID VMS5

Method: SW8260

MBLK Sample ID: VBLKW1-130507-R120275A					Units: µg/L		Analysis Date: 05/07/13 01:49 PM			
Client ID:			Run ID: VMS5_130507A		SeqNo: 2308654		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	4.66	20								J
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305243
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: R120275A	Instrument ID VMS5	Method: SW8260						
Toluene	U	1.0						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.2</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.2</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>20.03</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.31</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.6</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305243
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: **R120275A** Instrument ID **VMS5** Method: **SW8260**

LCS		Sample ID: VLCSW1-130507-R120275A				Units: µg/L		Analysis Date: 05/07/13 01:02 PM		
Client ID:		Run ID: VMS5_130507A				SeqNo: 2308653		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.76	1.0	20	0	104	65-130	0			
1,1,2,2-Tetrachloroethane	18.36	1.0	20	0	91.8	65-130	0			
1,1,2-Trichloroethane	18.09	1.0	20	0	90.4	75-125	0			
1,1-Dichloroethane	20.33	1.0	20	0	102	70-135	0			
1,1-Dichloroethene	21.73	1.0	20	0	109	70-130	0			
1,2,4-Trichlorobenzene	19.56	1.0	20	0	97.8	65-135	0			
1,2-Dibromo-3-chloropropane	18.6	1.0	20	0	93	50-130	0			
1,2-Dibromoethane	18.77	1.0	20	0	93.8	80-120	0			
1,2-Dichlorobenzene	18.4	1.0	20	0	92	70-120	0			
1,2-Dichloroethane	18.81	1.0	20	0	94	70-130	0			
1,2-Dichloropropane	18.95	2.0	20	0	94.8	75-125	0			
1,3-Dichlorobenzene	17.57	2.0	20	0	87.8	75-125	0			
1,4-Dichlorobenzene	17.74	2.0	20	0	88.7	75-125	0			
2-Butanone	21.07	5.0	20	0	105	30-150	0			
2-Hexanone	18.64	5.0	20	0	93.2	55-130	0			
4-Methyl-2-pentanone	27.91	5.0	20	0	140	60-135	0			S
Acetone	23.49	20	20	0	117	40-140	0			
Benzene	19.62	1.0	20	0	98.1	80-120	0			
Bromodichloromethane	20.67	1.0	20	0	103	75-120	0			
Bromoform	19.5	1.0	20	0	97.5	70-130	0			
Bromomethane	27.53	1.0	20	0	138	30-145	0			
Carbon disulfide	24.04	2.5	20	0	120	35-165	0			
Carbon tetrachloride	21.9	1.0	20	0	110	65-140	0			
Chlorobenzene	18.91	1.0	20	0	94.6	80-120	0			
Chloroethane	24.75	1.0	20	0	124	60-135	0			
Chloroform	19.78	1.0	20	0	98.9	65-135	0			
Chloromethane	24.61	1.0	20	0	123	70-125	0			
cis-1,2-Dichloroethene	20.5	1.0	20	0	102	70-125	0			
cis-1,3-Dichloropropene	20.06	1.0	20	0	100	70-130	0			
Dibromochloromethane	18.67	1.0	20	0	93.4	60-135	0			
Dichlorodifluoromethane	26	1.0	20	0	130	30-155	0			
Ethylbenzene	19.26	1.0	20	0	96.3	75-125	0			
Isopropylbenzene	19.07	1.0	20	0	95.4	75-125	0			
Methyl tert-butyl ether	21.73	5.0	20	0	109	65-125	0			
Methylene chloride	24.05	5.0	20	0	120	55-140	0			
Styrene	18.89	1.0	20	0	94.4	65-135	0			
Tetrachloroethene	18.97	2.0	20	0	94.8	45-150	0			
Toluene	18.8	1.0	20	0	94	75-120	0			
trans-1,2-Dichloroethene	21.6	1.0	20	0	108	60-140	0			
trans-1,3-Dichloropropene	19.3	1.0	20	0	96.5	55-140	0			
Trichloroethene	19.75	1.0	20	0	98.8	70-125	0			
Trichlorofluoromethane	23.25	1.0	20	0	116	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305243
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: R120275A	Instrument ID VMS5	Method: SW8260					
Vinyl chloride	22.64	1.0	20	0	113	50-145	0
Xylenes, Total	56.71	3.0	60	0	94.5	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.9</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.5</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.98</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.9</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>19.66</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.3</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>19.43</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.2</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305243
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: **R120275A** Instrument ID **VMS5** Method: **SW8260**

MS				Sample ID: 1305259-02A MS			Units: µg/L		Analysis Date: 05/07/13 10:27 PM	
Client ID:				Run ID: VMS5_130507A			SeqNo: 2309104		Prep Date:	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	21.42	1.0	20	0	107	65-130	0			
1,1,2,2-Tetrachloroethane	17.74	1.0	20	0	88.7	65-130	0			
1,1,2-Trichloroethane	17.49	1.0	20	0	87.4	75-125	0			
1,1-Dichloroethane	20.13	1.0	20	0	101	70-135	0			
1,1-Dichloroethene	22.37	1.0	20	0	112	70-130	0			
1,2,4-Trichlorobenzene	17.42	1.0	20	0	87.1	65-135	0			
1,2-Dibromo-3-chloropropane	15.32	1.0	20	0	76.6	50-130	0			
1,2-Dibromoethane	18.49	1.0	20	0	92.4	80-120	0			
1,2-Dichlorobenzene	18.36	1.0	20	0	91.8	70-120	0			
1,2-Dichloroethane	18.23	1.0	20	0	91.2	70-130	0			
1,2-Dichloropropane	18.2	2.0	20	0	91	75-125	0			
1,3-Dichlorobenzene	17.93	2.0	20	0	89.6	75-125	0			
1,4-Dichlorobenzene	18.05	2.0	20	0	90.2	75-125	0			
2-Butanone	30.55	5.0	20	0	153	30-150	0			S
2-Hexanone	26.1	5.0	20	0	130	55-130	0			S
4-Methyl-2-pentanone	28.42	5.0	20	0	142	60-135	0			S
Acetone	42.16	20	20	0	211	40-140	0			S
Benzene	19.97	1.0	20	0.39	97.9	80-120	0			
Bromodichloromethane	19.81	1.0	20	0	99	75-120	0			
Bromoform	17.78	1.0	20	0	88.9	70-130	0			
Bromomethane	23.69	1.0	20	0	118	30-145	0			
Carbon disulfide	23.6	2.5	20	0	118	35-165	0			
Carbon tetrachloride	20.98	1.0	20	0	105	65-140	0			
Chlorobenzene	19.09	1.0	20	0	95.4	80-120	0			
Chloroethane	24.63	1.0	20	0	123	60-135	0			
Chloroform	19.38	1.0	20	0	96.9	65-135	0			
Chloromethane	24.53	1.0	20	0	123	70-125	0			
cis-1,2-Dichloroethene	20.25	1.0	20	0	101	70-125	0			
cis-1,3-Dichloropropene	19.41	1.0	20	0	97	70-130	0			
Dibromochloromethane	16.94	1.0	20	0	84.7	60-135	0			
Dichlorodifluoromethane	26.23	1.0	20	0	131	30-155	0			
Ethylbenzene	19.67	1.0	20	0	98.4	75-125	0			
Isopropylbenzene	20.46	1.0	20	0	102	75-125	0			
Methyl tert-butyl ether	19.95	5.0	20	0	99.8	65-125	0			
Methylene chloride	22.28	5.0	20	0	111	55-140	0			
Styrene	19.18	1.0	20	0	95.9	65-135	0			
Tetrachloroethene	28.15	2.0	20	0	141	45-150	0			
Toluene	18.81	1.0	20	0	94	75-120	0			
trans-1,2-Dichloroethene	21.67	1.0	20	0	108	60-140	0			
trans-1,3-Dichloropropene	18.47	1.0	20	0	92.4	55-140	0			
Trichloroethene	19.77	1.0	20	0	98.8	70-125	0			
Trichlorofluoromethane	24.83	1.0	20	0	124	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305243
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: R120275A	Instrument ID VMS5	Method: SW8260					
Vinyl chloride	23.66	1.0	20	0	118	50-145	0
Xylenes, Total	58.82	3.0	60	0	98	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.87</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.4</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.89</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.4</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>19.67</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.4</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>19.47</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.4</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305243
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: **R120275A** Instrument ID **VMS5** Method: **SW8260**

MSD Sample ID: 1305259-02A MSD				Units: µg/L			Analysis Date: 05/07/13 10:50 PM			
Client ID:		Run ID: VMS5_130507A			SeqNo: 2309105		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.2	1.0	20	0	101	65-130	21.42	5.86	30	
1,1,2,2-Tetrachloroethane	17.83	1.0	20	0	89.2	65-130	17.74	0.506	30	
1,1,2-Trichloroethane	18.2	1.0	20	0	91	75-125	17.49	3.98	30	
1,1-Dichloroethane	19.04	1.0	20	0	95.2	70-135	20.13	5.57	30	
1,1-Dichloroethene	21.28	1.0	20	0	106	70-130	22.37	4.99	30	
1,2,4-Trichlorobenzene	17.84	1.0	20	0	89.2	65-135	17.42	2.38	30	
1,2-Dibromo-3-chloropropane	16.43	1.0	20	0	82.2	50-130	15.32	6.99	30	
1,2-Dibromoethane	18.68	1.0	20	0	93.4	80-120	18.49	1.02	30	
1,2-Dichlorobenzene	18.05	1.0	20	0	90.2	70-120	18.36	1.7	30	
1,2-Dichloroethane	18.23	1.0	20	0	91.2	70-130	18.23	0	30	
1,2-Dichloropropane	18.25	2.0	20	0	91.2	75-125	18.2	0.274	30	
1,3-Dichlorobenzene	17.34	2.0	20	0	86.7	75-125	17.93	3.35	30	
1,4-Dichlorobenzene	17.53	2.0	20	0	87.6	75-125	18.05	2.92	30	
2-Butanone	28.83	5.0	20	0	144	30-150	30.55	5.79	30	
2-Hexanone	26.27	5.0	20	0	131	55-130	26.1	0.649	30	S
4-Methyl-2-pentanone	26.89	5.0	20	0	134	60-135	28.42	5.53	30	
Acetone	41.05	20	20	0	205	40-140	42.16	2.67	30	S
Benzene	19.38	1.0	20	0.39	95	80-120	19.97	3	30	
Bromodichloromethane	19.42	1.0	20	0	97.1	75-120	19.81	1.99	30	
Bromoform	18.21	1.0	20	0	91	70-130	17.78	2.39	30	
Bromomethane	24.73	1.0	20	0	124	30-145	23.69	4.3	30	
Carbon disulfide	21.98	2.5	20	0	110	35-165	23.6	7.11	30	
Carbon tetrachloride	20.55	1.0	20	0	103	65-140	20.98	2.07	30	
Chlorobenzene	18.81	1.0	20	0	94	80-120	19.09	1.48	30	
Chloroethane	23.39	1.0	20	0	117	60-135	24.63	5.16	30	
Chloroform	18.78	1.0	20	0	93.9	65-135	19.38	3.14	30	
Chloromethane	23.7	1.0	20	0	118	70-125	24.53	3.44	30	
cis-1,2-Dichloroethene	19.11	1.0	20	0	95.6	70-125	20.25	5.79	30	
cis-1,3-Dichloropropene	19.14	1.0	20	0	95.7	70-130	19.41	1.4	30	
Dibromochloromethane	16.99	1.0	20	0	85	60-135	16.94	0.295	30	
Dichlorodifluoromethane	25.89	1.0	20	0	129	30-155	26.23	1.3	30	
Ethylbenzene	19.51	1.0	20	0	97.6	75-125	19.67	0.817	30	
Isopropylbenzene	20.54	1.0	20	0	103	75-125	20.46	0.39	30	
Methyl tert-butyl ether	19.76	5.0	20	0	98.8	65-125	19.95	0.957	30	
Methylene chloride	21.22	5.0	20	0	106	55-140	22.28	4.87	30	
Styrene	19.06	1.0	20	0	95.3	65-135	19.18	0.628	30	
Tetrachloroethene	28.59	2.0	20	0	143	45-150	28.15	1.55	30	
Toluene	18.3	1.0	20	0	91.5	75-120	18.81	2.75	30	
trans-1,2-Dichloroethene	20.36	1.0	20	0	102	60-140	21.67	6.23	30	
trans-1,3-Dichloropropene	18.33	1.0	20	0	91.6	55-140	18.47	0.761	30	
Trichloroethene	18.88	1.0	20	0	94.4	70-125	19.77	4.61	30	
Trichlorofluoromethane	23.51	1.0	20	0	118	60-145	24.83	5.46	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305243
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: R120275A	Instrument ID VMS5			Method: SW8260					
Vinyl chloride	22.57	1.0	20	0	113	50-145	23.66	4.72	30
Xylenes, Total	57.88	3.0	60	0	96.5	75-130	58.82	1.61	30
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.11</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>70-120</i>	<i>19.87</i>	<i>1.2</i>	<i>30</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.44</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>75-120</i>	<i>19.89</i>	<i>2.73</i>	<i>30</i>
<i>Surr: Dibromofluoromethane</i>	<i>19.65</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.2</i>	<i>85-115</i>	<i>19.67</i>	<i>0.102</i>	<i>30</i>
<i>Surr: Toluene-d8</i>	<i>20.04</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>85-120</i>	<i>19.47</i>	<i>2.89</i>	<i>30</i>

The following samples were analyzed in this batch:

1305243-01A	1305243-02A	1305243-03A
1305243-04A	1305243-05A	1305243-06A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



**CONESTOGA-ROVERS
& ASSOCIATES**

CHAIN OF CUSTODY RECORD

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170

Phone: (734) 453-5123

Fax: (734) 453-5201

1305243
COC NO.: **PL-11689**

PAGE 1 OF 1

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 17360				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 17360			
Project Name: Gm G.R				Lab Contact: —				Lab Quote No: —				Cooler No: —			
Project Location: G.R, MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)			
Chemistry Contact: —				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other: —				Total Containers/Sample 72 L VOCs			
Sampler(s): BW															
Carrier: Drop off				Airbill No: —				Date Shipped: 5-7-13				COMMENTS/ SPECIAL INSTRUCTIONS:			
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	MS/MSD Request
1	GW-17360-050613-BW-001	5-6-13	1045	WG	G	3								3	✓
2	↓ 002	↓	1200	↓	↑	3								3	✓
3	↓ 003	↓	1300	↓	↑	3								3	✓
4	↓ 004	↓	1430	↓	↑	3								3	✓
5	↓ 005	↓	1630	↓	↑	3								3	✓
6	Top Blk 1	—	—	WG	—	1								1	
7															
8															
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: —		Notes/ Special Requirements: 24 hr TAT 4.0°C			
All Samples in Cooler must be on COC									
RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME		
[Signature]	CRA	5-7-13	0810	[Signature]	ALS	05/07/13	0810		

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)

Sample Receipt Checklist

Client Name: **CRA - PLYMOUTH**

Date/Time Received: **07-May-13 08:10**

Work Order: **1305243**

Received by: **TBB**

Checklist completed by Diane Shaw 07-May-13
eSignature Date

Reviewed by: Tom Bramish 07-May-13
eSignature Date

Matrices: Groundwater

Carrier name: Client

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>4.0 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>5/7/2013 8:45:50 AM</u>		
Water - VOA vials have zero headspace?	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒
pH adjusted?	Yes ☐	No ☐	N/A ☒
pH adjusted by:			
Login Notes:			

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:



09-May-2013

Paul Wiseman
Conestoga-Rovers & Associates
14496 Sheldon Road
Suite 200
Plymouth, MI 48170

Re: **Former GRMP (017360-T05Y13-02Y13)**

Work Order: **1305352**

Dear Paul,

ALS Environmental received 6 samples on 08-May-2013 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 36.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Beamish".

Electronically approved by: Tom Beamish

Tom Beamish
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Group An ALS Limited Company

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Work Order: 1305352

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1305352-01	GW-17360-050813-BW-006	Groundwater		05/08/13	05/08/13 16:05	☐
1305352-02	GW-17360-050813-BW-007	Groundwater		05/08/13	05/08/13 16:05	☐
1305352-03	GW-17360-050813-BW-008	Groundwater		05/08/13	05/08/13 16:05	☐
1305352-04	GW-17360-050813-BW-009	Groundwater		05/08/13	05/08/13 16:05	☐
1305352-05	GW-17360-050813-BW-010	Groundwater		05/08/13	05/08/13 16:05	☐
1305352-06	Trip Blank	Water		05/08/13	05/08/13 16:05	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
WorkOrder: 1305352

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Work Order: 1305352

Case Narrative**Analytical Comments:**

Chloroform was detected at a low level in the trip blank, but was not detected in any of the field samples.

QC Comments:

Batch R120409A, Method VOC_8260_W, Sample VLCSW2-130508: The LCS recoveries were above the upper control limit. All sample results in the batch were non-detect. No qualification is necessary for 4-Methyl-2-pentanone, Bromomethane, and Chloromethane.

ALS Group USA, Corp

Date: 09-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050813-BW-006
Collection Date: 05/08/13

Work Order: 1305352
Lab ID: 1305352-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R120409</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/09/13 08:45
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/09/13 08:45
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/09/13 08:45
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/09/13 08:45
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/09/13 08:45
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/09/13 08:45
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/09/13 08:45
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/09/13 08:45
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/09/13 08:45
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/09/13 08:45
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/09/13 08:45
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/09/13 08:45
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/09/13 08:45
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/09/13 08:45
2-Butanone	U		0.22	25	µg/L	1	05/09/13 08:45
2-Hexanone	U		0.12	50	µg/L	1	05/09/13 08:45
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/09/13 08:45
Acetone	U		0.33	50	µg/L	1	05/09/13 08:45
Benzene	U		0.18	1.0	µg/L	1	05/09/13 08:45
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/09/13 08:45
Bromoform	U		0.15	1.0	µg/L	1	05/09/13 08:45
Bromomethane	U		0.21	5.0	µg/L	1	05/09/13 08:45
Carbon disulfide	U		0.17	5.0	µg/L	1	05/09/13 08:45
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/09/13 08:45
Chlorobenzene	U		0.13	1.0	µg/L	1	05/09/13 08:45
Chloroethane	U		0.46	5.0	µg/L	1	05/09/13 08:45
Chloroform	U		0.15	1.0	µg/L	1	05/09/13 08:45
Chloromethane	U		0.16	5.0	µg/L	1	05/09/13 08:45
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/09/13 08:45
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/09/13 08:45
Cyclohexane	U		0.22	1.0	µg/L	1	05/09/13 08:45
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/09/13 08:45
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/09/13 08:45
Ethylbenzene	U		0.13	1.0	µg/L	1	05/09/13 08:45
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/09/13 08:45
Methyl acetate	U		0.19	10	µg/L	1	05/09/13 08:45
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/09/13 08:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 09-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050813-BW-006
Collection Date: 05/08/13

Work Order: 1305352
Lab ID: 1305352-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/09/13 08:45
Methylene chloride	U		0.19	5.0	µg/L	1	05/09/13 08:45
Styrene	U		0.11	1.0	µg/L	1	05/09/13 08:45
Tetrachloroethene	54		0.15	1.0	µg/L	1	05/09/13 08:45
Toluene	U		0.12	1.0	µg/L	1	05/09/13 08:45
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/09/13 08:45
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/09/13 08:45
Trichloroethene	U		0.14	1.0	µg/L	1	05/09/13 08:45
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/09/13 08:45
Vinyl chloride	U		0.17	1.0	µg/L	1	05/09/13 08:45
Xylenes, Total	U		0.29	3.0	µg/L	1	05/09/13 08:45
Surr: 1,2-Dichloroethane-d4	98.0			70-120	%REC	1	05/09/13 08:45
Surr: 4-Bromofluorobenzene	102			75-120	%REC	1	05/09/13 08:45
Surr: Dibromofluoromethane	97.6			85-115	%REC	1	05/09/13 08:45
Surr: Toluene-d8	97.4			85-120	%REC	1	05/09/13 08:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 09-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050813-BW-007
Collection Date: 05/08/13

Work Order: 1305352
Lab ID: 1305352-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: BG	
BatchID: R120409							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/09/13 09:09
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/09/13 09:09
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/09/13 09:09
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/09/13 09:09
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/09/13 09:09
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/09/13 09:09
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/09/13 09:09
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/09/13 09:09
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/09/13 09:09
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/09/13 09:09
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/09/13 09:09
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/09/13 09:09
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/09/13 09:09
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/09/13 09:09
2-Butanone	U		0.22	25	µg/L	1	05/09/13 09:09
2-Hexanone	U		0.12	50	µg/L	1	05/09/13 09:09
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/09/13 09:09
Acetone	3.0	J	0.33	50	µg/L	1	05/09/13 09:09
Benzene	U		0.18	1.0	µg/L	1	05/09/13 09:09
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/09/13 09:09
Bromoform	U		0.15	1.0	µg/L	1	05/09/13 09:09
Bromomethane	U		0.21	5.0	µg/L	1	05/09/13 09:09
Carbon disulfide	U		0.17	5.0	µg/L	1	05/09/13 09:09
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/09/13 09:09
Chlorobenzene	U		0.13	1.0	µg/L	1	05/09/13 09:09
Chloroethane	U		0.46	5.0	µg/L	1	05/09/13 09:09
Chloroform	U		0.15	1.0	µg/L	1	05/09/13 09:09
Chloromethane	U		0.16	5.0	µg/L	1	05/09/13 09:09
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/09/13 09:09
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/09/13 09:09
Cyclohexane	U		0.22	1.0	µg/L	1	05/09/13 09:09
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/09/13 09:09
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/09/13 09:09
Ethylbenzene	U		0.13	1.0	µg/L	1	05/09/13 09:09
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/09/13 09:09
Methyl acetate	U		0.19	10	µg/L	1	05/09/13 09:09
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/09/13 09:09

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 09-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050813-BW-007
Collection Date: 05/08/13

Work Order: 1305352
Lab ID: 1305352-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/09/13 09:09
Methylene chloride	U		0.19	5.0	µg/L	1	05/09/13 09:09
Styrene	U		0.11	1.0	µg/L	1	05/09/13 09:09
Toluene	U		0.12	1.0	µg/L	1	05/09/13 09:09
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/09/13 09:09
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/09/13 09:09
Trichloroethene	U		0.14	1.0	µg/L	1	05/09/13 09:09
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/09/13 09:09
Vinyl chloride	U		0.17	1.0	µg/L	1	05/09/13 09:09
Xylenes, Total	U		0.29	3.0	µg/L	1	05/09/13 09:09
Surr: 1,2-Dichloroethane-d4	97.4			70-120	%REC	1	05/09/13 09:09
Surr: 4-Bromofluorobenzene	99.6			75-120	%REC	1	05/09/13 09:09
Surr: Dibromofluoromethane	101			85-115	%REC	1	05/09/13 09:09
Surr: Toluene-d8	96.6			85-120	%REC	1	05/09/13 09:09
BatchID: R120427							
Tetrachloroethene	120		0.76	5.0	µg/L	5	05/09/13 13:02
Surr: 1,2-Dichloroethane-d4	103			70-120	%REC	5	05/09/13 13:02
Surr: 4-Bromofluorobenzene	98.0			75-120	%REC	5	05/09/13 13:02
Surr: Dibromofluoromethane	94.1			85-115	%REC	5	05/09/13 13:02
Surr: Toluene-d8	99.6			85-120	%REC	5	05/09/13 13:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 09-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050813-BW-008
Collection Date: 05/08/13

Work Order: 1305352
Lab ID: 1305352-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R120377</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/08/13 17:58
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/08/13 17:58
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/08/13 17:58
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/08/13 17:58
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/08/13 17:58
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/08/13 17:58
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/08/13 17:58
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/08/13 17:58
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/08/13 17:58
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/08/13 17:58
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/08/13 17:58
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/08/13 17:58
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/08/13 17:58
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/08/13 17:58
2-Butanone	U		0.22	25	µg/L	1	05/08/13 17:58
2-Hexanone	U		0.12	50	µg/L	1	05/08/13 17:58
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/08/13 17:58
Acetone	4.2	J	0.33	50	µg/L	1	05/08/13 17:58
Benzene	0.33	J	0.18	1.0	µg/L	1	05/08/13 17:58
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/08/13 17:58
Bromoform	U		0.15	1.0	µg/L	1	05/08/13 17:58
Bromomethane	U		0.21	5.0	µg/L	1	05/08/13 17:58
Carbon disulfide	U		0.17	5.0	µg/L	1	05/08/13 17:58
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/08/13 17:58
Chlorobenzene	U		0.13	1.0	µg/L	1	05/08/13 17:58
Chloroethane	U		0.46	5.0	µg/L	1	05/08/13 17:58
Chloroform	U		0.15	1.0	µg/L	1	05/08/13 17:58
Chloromethane	U		0.16	5.0	µg/L	1	05/08/13 17:58
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/08/13 17:58
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/08/13 17:58
Cyclohexane	U		0.22	1.0	µg/L	1	05/08/13 17:58
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/08/13 17:58
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/08/13 17:58
Ethylbenzene	U		0.13	1.0	µg/L	1	05/08/13 17:58
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/08/13 17:58
Methyl acetate	U		0.19	10	µg/L	1	05/08/13 17:58
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/08/13 17:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 09-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050813-BW-008
Collection Date: 05/08/13

Work Order: 1305352
Lab ID: 1305352-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/08/13 17:58
Methylene chloride	U		0.19	5.0	µg/L	1	05/08/13 17:58
Styrene	U		0.11	1.0	µg/L	1	05/08/13 17:58
Toluene	0.73	J	0.12	1.0	µg/L	1	05/08/13 17:58
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/08/13 17:58
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/08/13 17:58
Trichloroethene	1.6		0.14	1.0	µg/L	1	05/08/13 17:58
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/08/13 17:58
Vinyl chloride	U		0.17	1.0	µg/L	1	05/08/13 17:58
Xylenes, Total	0.33	J	0.29	3.0	µg/L	1	05/08/13 17:58
Surr: 1,2-Dichloroethane-d4	102			70-120	%REC	1	05/08/13 17:58
Surr: 4-Bromofluorobenzene	99.4			75-120	%REC	1	05/08/13 17:58
Surr: Dibromofluoromethane	96.8			85-115	%REC	1	05/08/13 17:58
Surr: Toluene-d8	97.6			85-120	%REC	1	05/08/13 17:58
<u>BatchID: R120425</u>							
Tetrachloroethene	190		1.5	10	µg/L	10	05/09/13 13:05
Surr: 1,2-Dichloroethane-d4	101			70-120	%REC	10	05/09/13 13:05
Surr: 4-Bromofluorobenzene	95.6			75-120	%REC	10	05/09/13 13:05
Surr: Dibromofluoromethane	98.5			85-115	%REC	10	05/09/13 13:05
Surr: Toluene-d8	99.0			85-120	%REC	10	05/09/13 13:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 09-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050813-BW-009
Collection Date: 05/08/13

Work Order: 1305352
Lab ID: 1305352-04
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R120377</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/08/13 18:22
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/08/13 18:22
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/08/13 18:22
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/08/13 18:22
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/08/13 18:22
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/08/13 18:22
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/08/13 18:22
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/08/13 18:22
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/08/13 18:22
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/08/13 18:22
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/08/13 18:22
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/08/13 18:22
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/08/13 18:22
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/08/13 18:22
2-Butanone	U		0.22	25	µg/L	1	05/08/13 18:22
2-Hexanone	U		0.12	50	µg/L	1	05/08/13 18:22
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/08/13 18:22
Acetone	4.5	J	0.33	50	µg/L	1	05/08/13 18:22
Benzene	U		0.18	1.0	µg/L	1	05/08/13 18:22
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/08/13 18:22
Bromoform	U		0.15	1.0	µg/L	1	05/08/13 18:22
Bromomethane	U		0.21	5.0	µg/L	1	05/08/13 18:22
Carbon disulfide	0.59	J	0.17	5.0	µg/L	1	05/08/13 18:22
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/08/13 18:22
Chlorobenzene	U		0.13	1.0	µg/L	1	05/08/13 18:22
Chloroethane	U		0.46	5.0	µg/L	1	05/08/13 18:22
Chloroform	U		0.15	1.0	µg/L	1	05/08/13 18:22
Chloromethane	U		0.16	5.0	µg/L	1	05/08/13 18:22
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/08/13 18:22
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/08/13 18:22
Cyclohexane	U		0.22	1.0	µg/L	1	05/08/13 18:22
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/08/13 18:22
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/08/13 18:22
Ethylbenzene	U		0.13	1.0	µg/L	1	05/08/13 18:22
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/08/13 18:22
Methyl acetate	U		0.19	10	µg/L	1	05/08/13 18:22
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/08/13 18:22

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 09-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050813-BW-009
Collection Date: 05/08/13

Work Order: 1305352
Lab ID: 1305352-04
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/08/13 18:22
Methylene chloride	U		0.19	5.0	µg/L	1	05/08/13 18:22
Styrene	U		0.11	1.0	µg/L	1	05/08/13 18:22
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/08/13 18:22
Toluene	U		0.12	1.0	µg/L	1	05/08/13 18:22
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/08/13 18:22
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/08/13 18:22
Trichloroethene	U		0.14	1.0	µg/L	1	05/08/13 18:22
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/08/13 18:22
Vinyl chloride	U		0.17	1.0	µg/L	1	05/08/13 18:22
Xylenes, Total	U		0.29	3.0	µg/L	1	05/08/13 18:22
Surr: 1,2-Dichloroethane-d4	104			70-120	%REC	1	05/08/13 18:22
Surr: 4-Bromofluorobenzene	101			75-120	%REC	1	05/08/13 18:22
Surr: Dibromofluoromethane	99.9			85-115	%REC	1	05/08/13 18:22
Surr: Toluene-d8	99.0			85-120	%REC	1	05/08/13 18:22

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 09-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050813-BW-010
Collection Date: 05/08/13

Work Order: 1305352
Lab ID: 1305352-05
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R120377</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/08/13 18:45
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/08/13 18:45
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/08/13 18:45
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/08/13 18:45
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/08/13 18:45
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/08/13 18:45
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/08/13 18:45
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/08/13 18:45
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/08/13 18:45
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/08/13 18:45
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/08/13 18:45
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/08/13 18:45
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/08/13 18:45
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/08/13 18:45
2-Butanone	U		0.22	25	µg/L	1	05/08/13 18:45
2-Hexanone	U		0.12	50	µg/L	1	05/08/13 18:45
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/08/13 18:45
Acetone	8.5	J	0.33	50	µg/L	1	05/08/13 18:45
Benzene	U		0.18	1.0	µg/L	1	05/08/13 18:45
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/08/13 18:45
Bromoform	U		0.15	1.0	µg/L	1	05/08/13 18:45
Bromomethane	U		0.21	5.0	µg/L	1	05/08/13 18:45
Carbon disulfide	U		0.17	5.0	µg/L	1	05/08/13 18:45
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/08/13 18:45
Chlorobenzene	U		0.13	1.0	µg/L	1	05/08/13 18:45
Chloroethane	U		0.46	5.0	µg/L	1	05/08/13 18:45
Chloroform	U		0.15	1.0	µg/L	1	05/08/13 18:45
Chloromethane	U		0.16	5.0	µg/L	1	05/08/13 18:45
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/08/13 18:45
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/08/13 18:45
Cyclohexane	U		0.22	1.0	µg/L	1	05/08/13 18:45
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/08/13 18:45
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/08/13 18:45
Ethylbenzene	U		0.13	1.0	µg/L	1	05/08/13 18:45
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/08/13 18:45
Methyl acetate	U		0.19	10	µg/L	1	05/08/13 18:45
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/08/13 18:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 09-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: GW-17360-050813-BW-010
Collection Date: 05/08/13

Work Order: 1305352
Lab ID: 1305352-05
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/08/13 18:45
Methylene chloride	U		0.19	5.0	µg/L	1	05/08/13 18:45
Styrene	U		0.11	1.0	µg/L	1	05/08/13 18:45
Tetrachloroethene	65		0.15	1.0	µg/L	1	05/08/13 18:45
Toluene	0.58	J	0.12	1.0	µg/L	1	05/08/13 18:45
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/08/13 18:45
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/08/13 18:45
Trichloroethene	U		0.14	1.0	µg/L	1	05/08/13 18:45
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/08/13 18:45
Vinyl chloride	U		0.17	1.0	µg/L	1	05/08/13 18:45
Xylenes, Total	U		0.29	3.0	µg/L	1	05/08/13 18:45
Surr: 1,2-Dichloroethane-d4	101			70-120	%REC	1	05/08/13 18:45
Surr: 4-Bromofluorobenzene	103			75-120	%REC	1	05/08/13 18:45
Surr: Dibromofluoromethane	99.3			85-115	%REC	1	05/08/13 18:45
Surr: Toluene-d8	99.0			85-120	%REC	1	05/08/13 18:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 09-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: Trip Blank
Collection Date: 05/08/13

Work Order: 1305352
Lab ID: 1305352-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: BG
<u>BatchID: R120409</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/09/13 08:22
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/09/13 08:22
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/09/13 08:22
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/09/13 08:22
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/09/13 08:22
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/09/13 08:22
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/09/13 08:22
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/09/13 08:22
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/09/13 08:22
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/09/13 08:22
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/09/13 08:22
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/09/13 08:22
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/09/13 08:22
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/09/13 08:22
2-Butanone	U		0.22	25	µg/L	1	05/09/13 08:22
2-Hexanone	U		0.12	50	µg/L	1	05/09/13 08:22
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/09/13 08:22
Acetone	U		0.33	50	µg/L	1	05/09/13 08:22
Benzene	U		0.18	1.0	µg/L	1	05/09/13 08:22
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/09/13 08:22
Bromoform	U		0.15	1.0	µg/L	1	05/09/13 08:22
Bromomethane	U		0.21	5.0	µg/L	1	05/09/13 08:22
Carbon disulfide	U		0.17	5.0	µg/L	1	05/09/13 08:22
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/09/13 08:22
Chlorobenzene	U		0.13	1.0	µg/L	1	05/09/13 08:22
Chloroethane	U		0.46	5.0	µg/L	1	05/09/13 08:22
Chloroform	1.5		0.15	1.0	µg/L	1	05/09/13 08:22
Chloromethane	U		0.16	5.0	µg/L	1	05/09/13 08:22
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/09/13 08:22
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/09/13 08:22
Cyclohexane	U		0.22	1.0	µg/L	1	05/09/13 08:22
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/09/13 08:22
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/09/13 08:22
Ethylbenzene	U		0.13	1.0	µg/L	1	05/09/13 08:22
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/09/13 08:22
Methyl acetate	U		0.19	10	µg/L	1	05/09/13 08:22
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/09/13 08:22

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 09-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-02Y13)
Sample ID: Trip Blank
Collection Date: 05/08/13

Work Order: 1305352
Lab ID: 1305352-06
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/09/13 08:22
Methylene chloride	U		0.19	5.0	µg/L	1	05/09/13 08:22
Styrene	U		0.11	1.0	µg/L	1	05/09/13 08:22
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/09/13 08:22
Toluene	U		0.12	1.0	µg/L	1	05/09/13 08:22
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/09/13 08:22
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/09/13 08:22
Trichloroethene	U		0.14	1.0	µg/L	1	05/09/13 08:22
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/09/13 08:22
Vinyl chloride	U		0.17	1.0	µg/L	1	05/09/13 08:22
Xylenes, Total	U		0.29	3.0	µg/L	1	05/09/13 08:22
Surr: 1,2-Dichloroethane-d4	98.0			70-120	%REC	1	05/09/13 08:22
Surr: 4-Bromofluorobenzene	101			75-120	%REC	1	05/09/13 08:22
Surr: Dibromofluoromethane	101			85-115	%REC	1	05/09/13 08:22
Surr: Toluene-d8	97.4			85-120	%REC	1	05/09/13 08:22

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Conestoga-Rovers & Associates

QC BATCH REPORT

Work Order: 1305352

Project: Former GRMP (017360-T05Y13-02Y13)

Batch ID: R120377A

Instrument ID VMS5

Method: SW8260

MBLK		Sample ID: VBLKW1-130508-R120377A				Units: µg/L		Analysis Date: 05/08/13 02:50 PM		
Client ID:		Run ID: VMS5_130508A				SeqNo: 2311352		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: R120377A	Instrument ID VMS5	Method: SW8260					
Toluene	U	1.0					
trans-1,2-Dichloroethene	U	1.0					
trans-1,3-Dichloropropene	U	1.0					
Trichloroethene	U	1.0					
Trichlorofluoromethane	U	1.0					
Vinyl chloride	U	1.0					
Xylenes, Total	U	3.0					
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.9</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.5</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.03</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>19.5</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.5</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>19.72</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.6</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: **R120377A** Instrument ID **VMS5** Method: **SW8260**

LCS		Sample ID: VLCSW1-130508-R120377A				Units: µg/L		Analysis Date: 05/08/13 02:03 PM		
Client ID:		Run ID: VMS5_130508A				SeqNo: 2311351		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	19.57	1.0	20	0	97.8	65-130	0			
1,1,2,2-Tetrachloroethane	17.33	1.0	20	0	86.6	65-130	0			
1,1,2-Trichloroethane	16.41	1.0	20	0	82	75-125	0			
1,1-Dichloroethane	19.15	1.0	20	0	95.8	70-135	0			
1,1-Dichloroethene	19.77	1.0	20	0	98.8	70-130	0			
1,2,4-Trichlorobenzene	16.89	1.0	20	0	84.4	65-135	0			
1,2-Dibromo-3-chloropropane	16.89	1.0	20	0	84.4	50-130	0			
1,2-Dibromoethane	17.67	1.0	20	0	88.4	80-120	0			
1,2-Dichlorobenzene	16.88	1.0	20	0	84.4	70-120	0			
1,2-Dichloroethane	18.2	1.0	20	0	91	70-130	0			
1,2-Dichloropropane	17.96	2.0	20	0	89.8	75-125	0			
1,3-Dichlorobenzene	16.34	2.0	20	0	81.7	75-125	0			
1,4-Dichlorobenzene	16.33	2.0	20	0	81.6	75-125	0			
2-Butanone	20.6	5.0	20	0	103	30-150	0			
2-Hexanone	18.25	5.0	20	0	91.2	55-130	0			
4-Methyl-2-pentanone	26.96	5.0	20	0	135	60-135	0			
Acetone	20.34	20	20	0	102	40-140	0			
Benzene	18.53	1.0	20	0	92.6	80-120	0			
Bromodichloromethane	19.23	1.0	20	0	96.2	75-120	0			
Bromoform	16.86	1.0	20	0	84.3	70-130	0			
Bromomethane	24.01	1.0	20	0	120	30-145	0			
Carbon disulfide	21.23	2.5	20	0	106	35-165	0			
Carbon tetrachloride	19.26	1.0	20	0	96.3	65-140	0			
Chlorobenzene	17.52	1.0	20	0	87.6	80-120	0			
Chloroethane	21.08	1.0	20	0	105	60-135	0			
Chloroform	18.29	1.0	20	0	91.4	65-135	0			
Chloromethane	19.88	1.0	20	0	99.4	70-125	0			
cis-1,2-Dichloroethene	19.19	1.0	20	0	96	70-125	0			
cis-1,3-Dichloropropene	18.82	1.0	20	0	94.1	70-130	0			
Dibromochloromethane	16.37	1.0	20	0	81.8	60-135	0			
Dichlorodifluoromethane	17.58	1.0	20	0	87.9	30-155	0			
Ethylbenzene	17.57	1.0	20	0	87.8	75-125	0			
Isopropylbenzene	17.47	1.0	20	0	87.4	75-125	0			
Methyl tert-butyl ether	20.49	5.0	20	0	102	65-125	0			
Methylene chloride	22.76	5.0	20	0	114	55-140	0			
Styrene	17.23	1.0	20	0	86.2	65-135	0			
Tetrachloroethene	17.05	2.0	20	0	85.2	45-150	0			
Toluene	17.12	1.0	20	0	85.6	75-120	0			
trans-1,2-Dichloroethene	19.48	1.0	20	0	97.4	60-140	0			
trans-1,3-Dichloropropene	18.47	1.0	20	0	92.4	55-140	0			
Trichloroethene	17.81	1.0	20	0	89	70-125	0			
Trichlorofluoromethane	21.61	1.0	20	0	108	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: R120377A	Instrument ID VMS5		Method: SW8260				
Vinyl chloride	19.06	1.0	20	0	95.3	50-145	0
Xylenes, Total	52.26	3.0	60	0	87.1	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.87</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.4</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.36</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.39</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>19.49</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.4</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: **R120377A** Instrument ID **VMS5** Method: **SW8260**

MS Sample ID: 1305352-03A MS				Units: µg/L			Analysis Date: 05/09/13 12:13 PM			
Client ID: GW-17360-050813-BW-008			Run ID: VMS5_130508A		SeqNo: 2311356		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.57	1.0	20	0	103	65-130	0			
1,1,2,2-Tetrachloroethane	17.1	1.0	20	0	85.5	65-130	0			
1,1,2-Trichloroethane	19.04	1.0	20	0	95.2	75-125	0			
1,1-Dichloroethane	19.53	1.0	20	0	97.6	70-135	0			
1,1-Dichloroethene	21.55	1.0	20	0	108	70-130	0			
1,2,4-Trichlorobenzene	16.86	1.0	20	0	84.3	65-135	0			
1,2-Dibromo-3-chloropropane	14.49	1.0	20	0	72.4	50-130	0			
1,2-Dibromoethane	17.6	1.0	20	0	88	80-120	0			
1,2-Dichlorobenzene	17.39	1.0	20	0	87	70-120	0			
1,2-Dichloroethane	17.91	1.0	20	0	89.6	70-130	0			
1,2-Dichloropropane	17.79	2.0	20	0	89	75-125	0			
1,3-Dichlorobenzene	16.96	2.0	20	0	84.8	75-125	0			
1,4-Dichlorobenzene	17.23	2.0	20	0	86.2	75-125	0			
2-Butanone	18.24	5.0	20	0	91.2	30-150	0			
2-Hexanone	17.59	5.0	20	0	88	55-130	0			
4-Methyl-2-pentanone	25.44	5.0	20	0	127	60-135	0			
Acetone	22.12	20	20	4.21	89.6	40-140	0			
Benzene	19.27	1.0	20	0.33	94.7	80-120	0			
Bromodichloromethane	18.32	1.0	20	0	91.6	75-120	0			
Bromoform	14.21	1.0	20	0	71	70-130	0			
Bromomethane	26.81	1.0	20	0	134	30-145	0			
Carbon disulfide	22.93	2.5	20	0	115	35-165	0			
Carbon tetrachloride	19.7	1.0	20	0	98.5	65-140	0			
Chlorobenzene	18.27	1.0	20	0	91.4	80-120	0			
Chloroethane	24.44	1.0	20	0	122	60-135	0			
Chloroform	18.74	1.0	20	0	93.7	65-135	0			
Chloromethane	24.99	1.0	20	0	125	70-125	0			
cis-1,2-Dichloroethene	19.36	1.0	20	0	96.8	70-125	0			
cis-1,3-Dichloropropene	18.44	1.0	20	0	92.2	70-130	0			
Dibromochloromethane	14.64	1.0	20	0	73.2	60-135	0			
Dichlorodifluoromethane	28.66	1.0	20	0	143	30-155	0			
Ethylbenzene	19.33	1.0	20	0	96.6	75-125	0			
Isopropylbenzene	19.42	1.0	20	0	97.1	75-125	0			
Methyl tert-butyl ether	19.51	5.0	20	0	97.6	65-125	0			
Methylene chloride	21.41	5.0	20	0	107	55-140	0			
Styrene	18.17	1.0	20	0	90.8	65-135	0			
Tetrachloroethene	323.1	2.0	20	321.5	8.3	45-150	0			SEO
Toluene	18.45	1.0	20	0.73	88.6	75-120	0			
trans-1,2-Dichloroethene	21.12	1.0	20	0	106	60-140	0			
trans-1,3-Dichloropropene	17.01	1.0	20	0	85	55-140	0			
Trichloroethene	20.64	1.0	20	1.61	95.2	70-125	0			
Trichlorofluoromethane	24.06	1.0	20	0	120	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: R120377A	Instrument ID VMS5	Method: SW8260					
Vinyl chloride	23.99	1.0	20	0	120	50-145	0
Xylenes, Total	56.31	3.0	60	0.33	93.3	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>22.65</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>113</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>24.15</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>121</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>22.86</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>114</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>23.33</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>117</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: **R120377A** Instrument ID **VMS5** Method: **SW8260**

MSD				Sample ID: 1305352-03A MSD			Units: µg/L		Analysis Date: 05/09/13 12:36 PM	
Client ID: GW-17360-050813-BW-008				Run ID: VMS5_130508A			SeqNo: 2311357		Prep Date:	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.55	1.0	20	0	103	65-130	20.57	0.0973	30	
1,1,2,2-Tetrachloroethane	17.81	1.0	20	0	89	65-130	17.1	4.07	30	
1,1,2-Trichloroethane	18.94	1.0	20	0	94.7	75-125	19.04	0.527	30	
1,1-Dichloroethane	19.34	1.0	20	0	96.7	70-135	19.53	0.978	30	
1,1-Dichloroethene	21.16	1.0	20	0	106	70-130	21.55	1.83	30	
1,2,4-Trichlorobenzene	17.82	1.0	20	0	89.1	65-135	16.86	5.54	30	
1,2-Dibromo-3-chloropropane	16.36	1.0	20	0	81.8	50-130	14.49	12.1	30	
1,2-Dibromoethane	18.43	1.0	20	0	92.2	80-120	17.6	4.61	30	
1,2-Dichlorobenzene	18.1	1.0	20	0	90.5	70-120	17.39	4	30	
1,2-Dichloroethane	17.47	1.0	20	0	87.4	70-130	17.91	2.49	30	
1,2-Dichloropropane	18.25	2.0	20	0	91.2	75-125	17.79	2.55	30	
1,3-Dichlorobenzene	17.58	2.0	20	0	87.9	75-125	16.96	3.59	30	
1,4-Dichlorobenzene	17.43	2.0	20	0	87.2	75-125	17.23	1.15	30	
2-Butanone	20.14	5.0	20	0	101	30-150	18.24	9.9	30	
2-Hexanone	18.41	5.0	20	0	92	55-130	17.59	4.56	30	
4-Methyl-2-pentanone	26.89	5.0	20	0	134	60-135	25.44	5.54	30	
Acetone	23.09	20	20	4.21	94.4	40-140	22.12	4.29	30	
Benzene	18.91	1.0	20	0.33	92.9	80-120	19.27	1.89	30	
Bromodichloromethane	18.28	1.0	20	0	91.4	75-120	18.32	0.219	30	
Bromoform	15.56	1.0	20	0	77.8	70-130	14.21	9.07	30	
Bromomethane	26.55	1.0	20	0	133	30-145	26.81	0.975	30	
Carbon disulfide	21.92	2.5	20	0	110	35-165	22.93	4.5	30	
Carbon tetrachloride	20.13	1.0	20	0	101	65-140	19.7	2.16	30	
Chlorobenzene	18.24	1.0	20	0	91.2	80-120	18.27	0.164	30	
Chloroethane	23.69	1.0	20	0	118	60-135	24.44	3.12	30	
Chloroform	19.03	1.0	20	0	95.2	65-135	18.74	1.54	30	
Chloromethane	23.91	1.0	20	0	120	70-125	24.99	4.42	30	
cis-1,2-Dichloroethene	19.05	1.0	20	0	95.2	70-125	19.36	1.61	30	
cis-1,3-Dichloropropene	18.29	1.0	20	0	91.4	70-130	18.44	0.817	30	
Dibromochloromethane	15.42	1.0	20	0	77.1	60-135	14.64	5.19	30	
Dichlorodifluoromethane	28.41	1.0	20	0	142	30-155	28.66	0.876	30	
Ethylbenzene	19.11	1.0	20	0	95.6	75-125	19.33	1.14	30	
Isopropylbenzene	19.93	1.0	20	0	99.6	75-125	19.42	2.59	30	
Methyl tert-butyl ether	19.71	5.0	20	0	98.6	65-125	19.51	1.02	30	
Methylene chloride	20.7	5.0	20	0	104	55-140	21.41	3.37	30	
Styrene	18.4	1.0	20	0	92	65-135	18.17	1.26	30	
Tetrachloroethene	328	2.0	20	321.5	32.9	45-150	323.1	1.51	30	SEO
Toluene	18.47	1.0	20	0.73	88.7	75-120	18.45	0.108	30	
trans-1,2-Dichloroethene	20.39	1.0	20	0	102	60-140	21.12	3.52	30	
trans-1,3-Dichloropropene	17.9	1.0	20	0	89.5	55-140	17.01	5.1	30	
Trichloroethene	20.35	1.0	20	1.61	93.7	70-125	20.64	1.41	30	
Trichlorofluoromethane	23.88	1.0	20	0	119	60-145	24.06	0.751	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: R120377A		Instrument ID VMS5		Method: SW8260					
Vinyl chloride	23.14	1.0	20	0	116	50-145	23.99	3.61	30
Xylenes, Total	57.04	3.0	60	0.33	94.5	75-130	56.31	1.29	30
<i>Surr: 1,2-Dichloroethane-d4</i>	23.6	0	20	0	118	70-120	22.65	4.11	30
<i>Surr: 4-Bromofluorobenzene</i>	23.64	0	20	0	118	75-120	24.15	2.13	30
<i>Surr: Dibromofluoromethane</i>	23.69	0	20	0	118	85-115	22.86	3.57	30 S
<i>Surr: Toluene-d8</i>	23.29	0	20	0	116	85-120	23.33	0.172	30

The following samples were analyzed in this batch:
 | 1305352-03A
 | 1305352-04A
 | 1305352-05A
 |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: **R120409A** Instrument ID **VMS5** Method: **SW8260**

MBLK		Sample ID: VBLKW2-130508-R120409A				Units: µg/L		Analysis Date: 05/09/13 03:20 AM		
Client ID:		Run ID: VMS5_130508B				SeqNo: 2311605		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								
Toluene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: R120409A	Instrument ID VMS5	Method: SW8260						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>18.85</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.2</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.14</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>19.72</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.6</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.34</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.7</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: **R120409A** Instrument ID **VMS5** Method: **SW8260**

LCS		Sample ID: VLCSW2-130508-R120409A				Units: µg/L		Analysis Date: 05/09/13 02:33 AM		
Client ID:		Run ID: VMS5_130508B				SeqNo: 2311604		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	21.64	1.0	20	0	108	65-130	0			
1,1,2,2-Tetrachloroethane	19.56	1.0	20	0	97.8	65-130	0			
1,1,2-Trichloroethane	18.87	1.0	20	0	94.4	75-125	0			
1,1-Dichloroethane	21.03	1.0	20	0	105	70-135	0			
1,1-Dichloroethene	22.42	1.0	20	0	112	70-130	0			
1,2,4-Trichlorobenzene	19.71	1.0	20	0	98.6	65-135	0			
1,2-Dibromo-3-chloropropane	18.95	1.0	20	0	94.8	50-130	0			
1,2-Dibromoethane	20.45	1.0	20	0	102	80-120	0			
1,2-Dichlorobenzene	20.02	1.0	20	0	100	70-120	0			
1,2-Dichloroethane	19.26	1.0	20	0	96.3	70-130	0			
1,2-Dichloropropane	19.75	2.0	20	0	98.8	75-125	0			
1,3-Dichlorobenzene	19.12	2.0	20	0	95.6	75-125	0			
1,4-Dichlorobenzene	19.25	2.0	20	0	96.2	75-125	0			
2-Butanone	21.23	5.0	20	0	106	30-150	0			
2-Hexanone	19.51	5.0	20	0	97.6	55-130	0			
4-Methyl-2-pentanone	28.97	5.0	20	0	145	60-135	0			S
Acetone	21.06	20	20	0	105	40-140	0			
Benzene	20.54	1.0	20	0	103	80-120	0			
Bromodichloromethane	20.81	1.0	20	0	104	75-120	0			
Bromoform	19.94	1.0	20	0	99.7	70-130	0			
Bromomethane	32.56	1.0	20	0	163	30-145	0			S
Carbon disulfide	24.77	2.5	20	0	124	35-165	0			
Carbon tetrachloride	21.97	1.0	20	0	110	65-140	0			
Chlorobenzene	20.09	1.0	20	0	100	80-120	0			
Chloroethane	24.96	1.0	20	0	125	60-135	0			
Chloroform	20.05	1.0	20	0	100	65-135	0			
Chloromethane	25.92	1.0	20	0	130	70-125	0			S
cis-1,2-Dichloroethene	20.63	1.0	20	0	103	70-125	0			
cis-1,3-Dichloropropene	19.94	1.0	20	0	99.7	70-130	0			
Dibromochloromethane	19.11	1.0	20	0	95.6	60-135	0			
Dichlorodifluoromethane	28.06	1.0	20	0	140	30-155	0			
Ethylbenzene	20.49	1.0	20	0	102	75-125	0			
Isopropylbenzene	21.27	1.0	20	0	106	75-125	0			
Methyl tert-butyl ether	21.58	5.0	20	0	108	65-125	0			
Methylene chloride	22.82	5.0	20	0	114	55-140	0			
Styrene	20.47	1.0	20	0	102	65-135	0			
Tetrachloroethene	20.44	2.0	20	0	102	45-150	0			
Toluene	19.58	1.0	20	0	97.9	75-120	0			
trans-1,2-Dichloroethene	22.11	1.0	20	0	111	60-140	0			
trans-1,3-Dichloropropene	19.59	1.0	20	0	98	55-140	0			
Trichloroethene	20.74	1.0	20	0	104	70-125	0			
Trichlorofluoromethane	25.3	1.0	20	0	126	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: R120409A	Instrument ID VMS5	Method: SW8260					
Vinyl chloride	24.61	1.0	20	0	123	50-145	0
Xylenes, Total	60.82	3.0	60	0	101	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>18.79</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.57</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>103</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>19.65</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.2</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>19.53</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.6</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: **R120409A** Instrument ID **VMS5** Method: **SW8260**

MS Sample ID: 1305152-01A MS				Units: µg/L			Analysis Date: 05/09/13 11:53 AM			
Client ID:		Run ID: VMS5_130508B			SeqNo: 2311618		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.64	1.0	20	0	103	65-130	0			
1,1,2,2-Tetrachloroethane	17.27	1.0	20	0	86.4	65-130	0			
1,1,2-Trichloroethane	16.97	1.0	20	0	84.8	75-125	0			
1,1-Dichloroethane	19.17	1.0	20	0	95.8	70-135	0			
1,1-Dichloroethene	21.84	1.0	20	0	109	70-130	0			
1,2,4-Trichlorobenzene	16.12	1.0	20	0	80.6	65-135	0			
1,2-Dibromo-3-chloropropane	15.01	1.0	20	0	75	50-130	0			
1,2-Dibromoethane	18.24	1.0	20	0	91.2	80-120	0			
1,2-Dichlorobenzene	17.43	1.0	20	0	87.2	70-120	0			
1,2-Dichloroethane	17.86	1.0	20	0	89.3	70-130	0			
1,2-Dichloropropane	18.89	2.0	20	0	94.4	75-125	0			
1,3-Dichlorobenzene	17.02	2.0	20	0	85.1	75-125	0			
1,4-Dichlorobenzene	17.06	2.0	20	0	85.3	75-125	0			
2-Butanone	22.71	5.0	20	3.61	95.5	30-150	0			
2-Hexanone	18.52	5.0	20	0	92.6	55-130	0			
4-Methyl-2-pentanone	26.35	5.0	20	0	132	60-135	0			
Acetone	19.36	20	20	0	96.8	40-140	0			J
Benzene	19.33	1.0	20	0	96.6	80-120	0			
Bromodichloromethane	19.3	1.0	20	0	96.5	75-120	0			
Bromoform	16.7	1.0	20	0	83.5	70-130	0			
Bromomethane	10.49	1.0	20	0	52.4	30-145	0			
Carbon disulfide	23.98	2.5	20	0.79	116	35-165	0			
Carbon tetrachloride	20.82	1.0	20	0	104	65-140	0			
Chlorobenzene	18.54	1.0	20	0	92.7	80-120	0			
Chloroethane	26.89	1.0	20	0	134	60-135	0			
Chloroform	18.89	1.0	20	0	94.4	65-135	0			
Chloromethane	22.2	1.0	20	0	111	70-125	0			
cis-1,2-Dichloroethene	19.36	1.0	20	0	96.8	70-125	0			
cis-1,3-Dichloropropene	17.38	1.0	20	0	86.9	70-130	0			
Dibromochloromethane	16.09	1.0	20	0	80.4	60-135	0			
Dichlorodifluoromethane	28.48	1.0	20	0	142	30-155	0			
Ethylbenzene	18.98	1.0	20	0	94.9	75-125	0			
Isopropylbenzene	19.6	1.0	20	0	98	75-125	0			
Methyl tert-butyl ether	19.65	5.0	20	0	98.2	65-125	0			
Methylene chloride	20.61	5.0	20	0	103	55-140	0			
Styrene	18.08	1.0	20	0	90.4	65-135	0			
Tetrachloroethene	19.55	2.0	20	0	97.8	45-150	0			
Toluene	18.4	1.0	20	0	92	75-120	0			
trans-1,2-Dichloroethene	21.11	1.0	20	0	106	60-140	0			
trans-1,3-Dichloropropene	16.83	1.0	20	0	84.2	55-140	0			
Trichloroethene	19.57	1.0	20	0	97.8	70-125	0			
Trichlorofluoromethane	24.6	1.0	20	0	123	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: R120409A	Instrument ID VMS5	Method: SW8260						
Vinyl chloride	26.25	1.0	20	2.91	117	50-145	0	
Xylenes, Total	56.88	3.0	60	0	94.8	75-130	0	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>24.11</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>121</i>	<i>70-120</i>	<i>0</i>	<i>S</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>24.4</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>122</i>	<i>75-120</i>	<i>0</i>	<i>S</i>
<i>Surr: Dibromofluoromethane</i>	<i>23.88</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>119</i>	<i>85-115</i>	<i>0</i>	<i>S</i>
<i>Surr: Toluene-d8</i>	<i>23.27</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>116</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: **R120409A** Instrument ID **VMS5** Method: **SW8260**

MSD Sample ID: 1305152-01A MSD				Units: µg/L			Analysis Date: 05/09/13 12:16 PM			
Client ID:		Run ID: VMS5_130508B			SeqNo: 2311619		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.84	1.0	20	0	104	65-130	20.64	0.964	30	
1,1,2,2-Tetrachloroethane	16.96	1.0	20	0	84.8	65-130	17.27	1.81	30	
1,1,2-Trichloroethane	16.96	1.0	20	0	84.8	75-125	16.97	0.0589	30	
1,1-Dichloroethane	19.69	1.0	20	0	98.4	70-135	19.17	2.68	30	
1,1-Dichloroethene	21.37	1.0	20	0	107	70-130	21.84	2.18	30	
1,2,4-Trichlorobenzene	17	1.0	20	0	85	65-135	16.12	5.31	30	
1,2-Dibromo-3-chloropropane	14.86	1.0	20	0	74.3	50-130	15.01	1	30	
1,2-Dibromoethane	18.37	1.0	20	0	91.8	80-120	18.24	0.71	30	
1,2-Dichlorobenzene	17.54	1.0	20	0	87.7	70-120	17.43	0.629	30	
1,2-Dichloroethane	18.06	1.0	20	0	90.3	70-130	17.86	1.11	30	
1,2-Dichloropropane	18.11	2.0	20	0	90.6	75-125	18.89	4.22	30	
1,3-Dichlorobenzene	17.06	2.0	20	0	85.3	75-125	17.02	0.235	30	
1,4-Dichlorobenzene	17.1	2.0	20	0	85.5	75-125	17.06	0.234	30	
2-Butanone	22.55	5.0	20	3.61	94.7	30-150	22.71	0.707	30	
2-Hexanone	18.62	5.0	20	0	93.1	55-130	18.52	0.539	30	
4-Methyl-2-pentanone	26.69	5.0	20	0	133	60-135	26.35	1.28	30	
Acetone	19.64	20	20	0	98.2	40-140	19.36	0	30	J
Benzene	19.13	1.0	20	0	95.6	80-120	19.33	1.04	30	
Bromodichloromethane	19.08	1.0	20	0	95.4	75-120	19.3	1.15	30	
Bromoform	16.44	1.0	20	0	82.2	70-130	16.7	1.57	30	
Bromomethane	10.25	1.0	20	0	51.2	30-145	10.49	2.31	30	
Carbon disulfide	23.15	2.5	20	0.79	112	35-165	23.98	3.52	30	
Carbon tetrachloride	20.58	1.0	20	0	103	65-140	20.82	1.16	30	
Chlorobenzene	18.35	1.0	20	0	91.8	80-120	18.54	1.03	30	
Chloroethane	24.81	1.0	20	0	124	60-135	26.89	8.05	30	
Chloroform	18.66	1.0	20	0	93.3	65-135	18.89	1.23	30	
Chloromethane	22.66	1.0	20	0	113	70-125	22.2	2.05	30	
cis-1,2-Dichloroethene	19.68	1.0	20	0	98.4	70-125	19.36	1.64	30	
cis-1,3-Dichloropropene	17.35	1.0	20	0	86.8	70-130	17.38	0.173	30	
Dibromochloromethane	16.16	1.0	20	0	80.8	60-135	16.09	0.434	30	
Dichlorodifluoromethane	28.08	1.0	20	0	140	30-155	28.48	1.41	30	
Ethylbenzene	19.21	1.0	20	0	96	75-125	18.98	1.2	30	
Isopropylbenzene	20.07	1.0	20	0	100	75-125	19.6	2.37	30	
Methyl tert-butyl ether	20.12	5.0	20	0	101	65-125	19.65	2.36	30	
Methylene chloride	20.86	5.0	20	0	104	55-140	20.61	1.21	30	
Styrene	18.12	1.0	20	0	90.6	65-135	18.08	0.221	30	
Tetrachloroethene	19.99	2.0	20	0	100	45-150	19.55	2.23	30	
Toluene	18.46	1.0	20	0	92.3	75-120	18.4	0.326	30	
trans-1,2-Dichloroethene	20.34	1.0	20	0	102	60-140	21.11	3.72	30	
trans-1,3-Dichloropropene	16.31	1.0	20	0	81.6	55-140	16.83	3.14	30	
Trichloroethene	19.38	1.0	20	0	96.9	70-125	19.57	0.976	30	
Trichlorofluoromethane	24.06	1.0	20	0	120	60-145	24.6	2.22	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: R120409A	Instrument ID VMS5			Method: SW8260					
Vinyl chloride	25.55	1.0	20	2.91	113	50-145	26.25	2.7	30
Xylenes, Total	56.96	3.0	60	0	94.9	75-130	56.88	0.141	30
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>23.71</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>119</i>	<i>70-120</i>	<i>24.11</i>	<i>1.67</i>	<i>30</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>24.52</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>123</i>	<i>75-120</i>	<i>24.4</i>	<i>0.491</i>	<i>30 S</i>
<i>Surr: Dibromofluoromethane</i>	<i>24.27</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>121</i>	<i>85-115</i>	<i>23.88</i>	<i>1.62</i>	<i>30 S</i>
<i>Surr: Toluene-d8</i>	<i>23.57</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>118</i>	<i>85-120</i>	<i>23.27</i>	<i>1.28</i>	<i>30</i>

The following samples were analyzed in this batch:

1305352-01A	1305352-02A	1305352-06A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: **R120425** Instrument ID **VMS9** Method: **SW8260**

MBLK	Sample ID: VBLKW1-130509-R120425					Units: µg/L		Analysis Date: 05/09/13 11:38 AM		
Client ID:	Run ID: VMS9_130509A				SeqNo: 2311656		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Tetrachloroethene	U	2.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	20.2	0	20	0	101	70-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	19.55	0	20	0	97.8	75-120	0			
<i>Surr: Dibromofluoromethane</i>	20.03	0	20	0	100	85-115	0			
<i>Surr: Toluene-d8</i>	19.91	0	20	0	99.6	85-120	0			

LCS	Sample ID: VLCSW1-130509-R120425					Units: µg/L		Analysis Date: 05/09/13 10:54 AM		
Client ID:	Run ID: VMS9_130509A				SeqNo: 2311655		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Tetrachloroethene	20.03	2.0	20	0	100	45-150	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	19.06	0	20	0	95.3	70-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	20.48	0	20	0	102	75-120	0			
<i>Surr: Dibromofluoromethane</i>	21.05	0	20	0	105	85-115	0			
<i>Surr: Toluene-d8</i>	20.06	0	20	0	100	85-120	0			

The following samples were analyzed in this batch:

1305352-03A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305352
Project: Former GRMP (017360-T05Y13-02Y13)

QC BATCH REPORT

Batch ID: **R120427A** Instrument ID **VMS6** Method: **SW8260**

MBLK	Sample ID: VBLKW1-130509-R120427A					Units: µg/L		Analysis Date: 05/09/13 12:13 PM		
Client ID:	Run ID: VMS6_130509A				SeqNo: 2311998		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Tetrachloroethene	U	2.0								
Surr: 1,2-Dichloroethane-d4	20.32	0	20	0	102	70-120	0			
Surr: 4-Bromofluorobenzene	19.59	0	20	0	98	75-120	0			
Surr: Dibromofluoromethane	19.85	0	20	0	99.2	85-115	0			
Surr: Toluene-d8	20.19	0	20	0	101	85-120	0			

LCS	Sample ID: VLCSW1-130509-R120427A					Units: µg/L		Analysis Date: 05/09/13 11:23 AM		
Client ID:	Run ID: VMS6_130509A				SeqNo: 2311997		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Tetrachloroethene	21.8	2.0	20	0	109	45-150	0			
Surr: 1,2-Dichloroethane-d4	19.67	0	20	0	98.4	70-120	0			
Surr: 4-Bromofluorobenzene	19.95	0	20	0	99.8	75-120	0			
Surr: Dibromofluoromethane	20.05	0	20	0	100	85-115	0			
Surr: Toluene-d8	20.17	0	20	0	101	85-120	0			

The following samples were analyzed in this batch:

1305352-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170

Fax: (734) 453-5201

COC NO.: **PL- 11690**

PAGE 1 OF 1

(See Reverse Side for Instructions)

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT — ALL FIELDS MUST BE COMPLETED ACCURATELY

WHITE — Fully Executed Copy (CRA)

YELLOW – Receiving Laboratory Copy

PINK – Shipper

GOLDENROD – Sampling Crew

CRA Form: COC-10A (20110804)

ALS Group USA, Corp

Sample Receipt Checklist

Client Name: **CRA - PLYMOUTH**

Date/Time Received: **08-May-13 16:05**

Work Order: **1305352**

Received by: **JR**

Checklist completed by Tom Bramish 08-May-13
eSignature Date

Reviewed by: Tom Bramish 08-May-13
eSignature Date

Matrices: water

Carrier name: Client

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>4.4 C</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>05/08/13 5:01:58 PM</u>		
Water - VOA vials have zero headspace?	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☒	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☒	N/A ☐
pH adjusted by:			
Login Notes:			

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:



22-May-2013

Paul Wiseman
Conestoga-Rovers & Associates
14496 Sheldon Road
Suite 200
Plymouth, MI 48170

Re: **Former GRMP (17360-T05Y13-01Y13)**

Work Order: **1305509**

Dear Paul,

ALS Environmental received 6 samples on 13-May-2013 04:45 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 30.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Beamish".

Electronically approved by: Bill Carey

Tom Beamish
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

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Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y13-01Y13)
Work Order: 1305509

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1305509-01	SO-17360-051313-EB-001	Soil		5/13/2013 12:30	5/13/2013 16:45	☐
1305509-02	SO-17360-051313-EB-001 (TCLP)	Soil		5/13/2013 12:30	5/13/2013 16:45	☐
1305509-03	SO-17360-051313-EB-002	Soil		5/13/2013 13:00	5/13/2013 16:45	☐
1305509-04	SO-17360-051313-EB-002 (TCLP)	Soil		5/13/2013 13:00	5/13/2013 16:45	☐
1305509-05	WW-17360-051313-EB-003	Wastewater		5/13/2013 16:10	5/13/2013 16:45	☐
1305509-06	WW-17360-051313-EB-003 (TCLP)	Wastewater		5/13/2013 16:10	5/13/2013 16:45	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y13-01Y13)
WorkOrder: 1305509

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
°F	Degrees Fahrenheit
µg/Kg-dry	Micrograms per Kilogram Dry Weight
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter
s.u.	Standard Units

ALS Group USA, Corp

Date: 22-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y13-01Y13)
Sample ID: SO-17360-051313-EB-001
Collection Date: 5/13/2013 12:30 PM

Work Order: 1305509
Lab ID: 1305509-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 5/17/13	Analyst: JD
<u>BatchID:</u> 48498							
Aroclor 1016	U		38	350	µg/Kg-dry	1	5/20/2013 10:07
Aroclor 1221	U		38	350	µg/Kg-dry	1	5/20/2013 10:07
Aroclor 1232	U		38	350	µg/Kg-dry	1	5/20/2013 10:07
Aroclor 1242	U		38	350	µg/Kg-dry	1	5/20/2013 10:07
Aroclor 1248	U		38	350	µg/Kg-dry	1	5/20/2013 10:07
Aroclor 1254	U		12	350	µg/Kg-dry	1	5/20/2013 10:07
Aroclor 1260	U		12	350	µg/Kg-dry	1	5/20/2013 10:07
Surr: Decachlorobiphenyl	93.1			40-140	%REC	1	5/20/2013 10:07
FLASHPOINT, OPEN-CUP							
			D92				Analyst: MB
<u>BatchID:</u> R120956							
Flashpoint, Open-cup	>200		0		°F	1	5/17/2013 15:00
MOISTURE							
			A2540 G				Analyst: KF
<u>BatchID:</u> R120755							
Moisture	11		0.025	0.050	% of sample	1	5/14/2013 16:40
PH							
			SW9045D				Analyst: KF
<u>BatchID:</u> R120702							
pH	9.9		0		s.u.	1	5/14/2013 10:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 22-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y13-01Y13)
Sample ID: SO-17360-051313-EB-001 (TCLP)
Collection Date: 5/13/2013 12:30 PM

Work Order: 1305509
Lab ID: 1305509-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
TCLP MERCURY BY CVAA							
			SW7470A			Prep: SW7470 / 5/16/13	Analyst: LR
<u>BatchID: 48473</u>							
Mercury	0.00056	J	0.000080	0.0020	mg/L	1	5/16/2013 16:30
TCLP METALS ANALYSIS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/17/13	Analyst: RH
<u>BatchID: 48496</u>							
Arsenic	U		0.0072	0.010	mg/L	1	5/17/2013 12:38
Barium	0.47		0.0027	0.050	mg/L	1	5/17/2013 12:38
Cadmium	0.0034		0.00034	0.0020	mg/L	1	5/17/2013 12:38
Chromium	0.0017	J	0.00042	0.020	mg/L	1	5/17/2013 12:38
Lead	0.018		0.00027	0.010	mg/L	1	5/17/2013 12:38
Selenium	U		0.0041	0.020	mg/L	1	5/17/2013 12:38
Silver	U		0.00025	0.0050	mg/L	1	5/17/2013 12:38
TCLP SEMI-VOLATILE ORGANICS							
			SW8270			Prep: SW3510 / 5/17/13	Analyst: HL
<u>BatchID: 48487</u>							
1,4-Dichlorobenzene	U		4.2	100	µg/L	1	5/20/2013 11:18
2,4,5-Trichlorophenol	U		2.1	100	µg/L	1	5/20/2013 11:18
2,4,6-Trichlorophenol	U		20	100	µg/L	1	5/20/2013 11:18
2,4-Dinitrotoluene	U		22	100	µg/L	1	5/20/2013 11:18
Hexachloro-1,3-butadiene	U		4.4	100	µg/L	1	5/20/2013 11:18
Hexachlorobenzene	U		3.0	100	µg/L	1	5/20/2013 11:18
Hexachloroethane	U		4.0	100	µg/L	1	5/20/2013 11:18
m-Cresol	U		1.3	100	µg/L	1	5/20/2013 11:18
Nitrobenzene	U		2.1	100	µg/L	1	5/20/2013 11:18
o-Cresol	U		2.0	100	µg/L	1	5/20/2013 11:18
p-Cresol	U		1.3	100	µg/L	1	5/20/2013 11:18
Pentachlorophenol	U		3.2	400	µg/L	1	5/20/2013 11:18
Pyridine	U		26	400	µg/L	1	5/20/2013 11:18
<i>Surr: 2,4,6-Tribromophenol</i>	<i>55.9</i>			<i>21-125</i>	<i>%REC</i>	<i>1</i>	5/20/2013 11:18
<i>Surr: 2-Fluorobiphenyl</i>	<i>62.0</i>			<i>39-94</i>	<i>%REC</i>	<i>1</i>	5/20/2013 11:18
<i>Surr: 2-Fluorophenol</i>	<i>36.6</i>			<i>10-75</i>	<i>%REC</i>	<i>1</i>	5/20/2013 11:18
<i>Surr: 4-Terphenyl-d14</i>	<i>115</i>			<i>26-119</i>	<i>%REC</i>	<i>1</i>	5/20/2013 11:18
<i>Surr: Nitrobenzene-d5</i>	<i>61.6</i>			<i>41-104</i>	<i>%REC</i>	<i>1</i>	5/20/2013 11:18
<i>Surr: Phenol-d6</i>	<i>19.6</i>			<i>11-50</i>	<i>%REC</i>	<i>1</i>	5/20/2013 11:18
TCLP VOLATILE ORGANICS							
			SW8260			Leachate: SW1311 / 5/16/13	Analyst: BG
<u>BatchID: R120978</u>							
1,1-Dichloroethene	U		3.9	20	µg/L	20	5/17/2013 21:39
1,2-Dichloroethane	U		3.0	20	µg/L	20	5/17/2013 21:39
2-Butanone	U		7.1	200	µg/L	20	5/17/2013 21:39

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp**Date:** 22-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y13-01Y13)
Sample ID: SO-17360-051313-EB-001 (TCLP)
Collection Date: 5/13/2013 12:30 PM

Work Order: 1305509
Lab ID: 1305509-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		3.6	20	µg/L	20	5/17/2013 21:39
Carbon tetrachloride	U		3.2	20	µg/L	20	5/17/2013 21:39
Chlorobenzene	U		2.9	20	µg/L	20	5/17/2013 21:39
Chloroform	U		3.8	20	µg/L	20	5/17/2013 21:39
Tetrachloroethene	U		2.7	20	µg/L	20	5/17/2013 21:39
Trichloroethene	U		3.8	20	µg/L	20	5/17/2013 21:39
Vinyl chloride	U		5.6	20	µg/L	20	5/17/2013 21:39
Surr: 1,2-Dichloroethane-d4	99.0			70-130	%REC	20	5/17/2013 21:39
Surr: 4-Bromofluorobenzene	97.2			70-130	%REC	20	5/17/2013 21:39
Surr: Dibromofluoromethane	104			70-130	%REC	20	5/17/2013 21:39
Surr: Toluene-d8	99.4			70-130	%REC	20	5/17/2013 21:39

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 22-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y13-01Y13)
Sample ID: SO-17360-051313-EB-002
Collection Date: 5/13/2013 01:00 PM

Work Order: 1305509
Lab ID: 1305509-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 5/17/13		Analyst: JD
<u>BatchID: 48498</u>							
Aroclor 1016	U		36	340	µg/Kg-dry	1	5/20/2013 11:07
Aroclor 1221	U		36	340	µg/Kg-dry	1	5/20/2013 11:07
Aroclor 1232	U		36	340	µg/Kg-dry	1	5/20/2013 11:07
Aroclor 1242	U		36	340	µg/Kg-dry	1	5/20/2013 11:07
Aroclor 1248	U		36	340	µg/Kg-dry	1	5/20/2013 11:07
Aroclor 1254	U		11	340	µg/Kg-dry	1	5/20/2013 11:07
Aroclor 1260	U		11	340	µg/Kg-dry	1	5/20/2013 11:07
Surr: Decachlorobiphenyl	102			40-140	%REC	1	5/20/2013 11:07
FLASHPOINT, OPEN-CUP							
			D92				Analyst: MB
<u>BatchID: R120956</u>							
Flashpoint, Open-cup	>200		0		°F	1	5/17/2013 15:00
MOISTURE							
			A2540 G				Analyst: KF
<u>BatchID: R120755</u>							
Moisture	4.6		0.025	0.050	% of sample	1	5/14/2013 16:40
PH							
			SW9045D				Analyst: KF
<u>BatchID: R120702</u>							
pH	9.2		0		s.u.	1	5/14/2013 10:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 22-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y13-01Y13)
Sample ID: SO-17360-051313-EB-002 (TCLP)
Collection Date: 5/13/2013 01:00 PM

Work Order: 1305509
Lab ID: 1305509-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
TCLP MERCURY BY CVAA							
			SW7470A			Prep: SW7470 / 5/16/13	Analyst: LR
<u>BatchID:</u> 48473							
Mercury	0.00056	J	0.000080	0.0020	mg/L	1	5/16/2013 16:32
TCLP METALS ANALYSIS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/17/13	Analyst: RH
<u>BatchID:</u> 48496							
Arsenic	U		0.0072	0.010	mg/L	1	5/17/2013 12:58
Barium	0.16		0.0027	0.050	mg/L	1	5/17/2013 12:58
Cadmium	0.0011	J	0.00034	0.0020	mg/L	1	5/17/2013 12:58
Chromium	0.0016	J	0.00042	0.020	mg/L	1	5/17/2013 12:58
Lead	0.013		0.00027	0.010	mg/L	1	5/17/2013 12:58
Selenium	U		0.0041	0.020	mg/L	1	5/17/2013 12:58
Silver	U		0.00025	0.0050	mg/L	1	5/17/2013 12:58
TCLP SEMI-VOLATILE ORGANICS							
			SW8270			Prep: SW3510 / 5/17/13	Analyst: HL
<u>BatchID:</u> 48487							
1,4-Dichlorobenzene	U		4.2	100	µg/L	1	5/20/2013 12:49
2,4,5-Trichlorophenol	U		2.1	100	µg/L	1	5/20/2013 12:49
2,4,6-Trichlorophenol	U		20	100	µg/L	1	5/20/2013 12:49
2,4-Dinitrotoluene	U		22	100	µg/L	1	5/20/2013 12:49
Hexachloro-1,3-butadiene	U		4.4	100	µg/L	1	5/20/2013 12:49
Hexachlorobenzene	U		3.0	100	µg/L	1	5/20/2013 12:49
Hexachloroethane	U		4.0	100	µg/L	1	5/20/2013 12:49
m-Cresol	U		1.3	100	µg/L	1	5/20/2013 12:49
Nitrobenzene	U		2.1	100	µg/L	1	5/20/2013 12:49
o-Cresol	U		2.0	100	µg/L	1	5/20/2013 12:49
p-Cresol	U		1.3	100	µg/L	1	5/20/2013 12:49
Pentachlorophenol	U		3.2	400	µg/L	1	5/20/2013 12:49
Pyridine	U		26	400	µg/L	1	5/20/2013 12:49
Surr: 2,4,6-Tribromophenol	54.5			21-125	%REC	1	5/20/2013 12:49
Surr: 2-Fluorobiphenyl	58.5			39-94	%REC	1	5/20/2013 12:49
Surr: 2-Fluorophenol	43.2			10-75	%REC	1	5/20/2013 12:49
Surr: 4-Terphenyl-d14	112			26-119	%REC	1	5/20/2013 12:49
Surr: Nitrobenzene-d5	59.9			41-104	%REC	1	5/20/2013 12:49
Surr: Phenol-d6	22.8			11-50	%REC	1	5/20/2013 12:49
TCLP VOLATILE ORGANICS							
			SW8260			Leachate: SW1311 / 5/16/13	Analyst: BG
<u>BatchID:</u> R120978							
1,1-Dichloroethene	U		3.9	20	µg/L	20	5/17/2013 22:03
1,2-Dichloroethane	U		3.0	20	µg/L	20	5/17/2013 22:03
2-Butanone	U		7.1	200	µg/L	20	5/17/2013 22:03

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp**Date:** 22-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y13-01Y13)
Sample ID: SO-17360-051313-EB-002 (TCLP)
Collection Date: 5/13/2013 01:00 PM

Work Order: 1305509
Lab ID: 1305509-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		3.6	20	µg/L	20	5/17/2013 22:03
Carbon tetrachloride	U		3.2	20	µg/L	20	5/17/2013 22:03
Chlorobenzene	U		2.9	20	µg/L	20	5/17/2013 22:03
Chloroform	U		3.8	20	µg/L	20	5/17/2013 22:03
Tetrachloroethene	U		2.7	20	µg/L	20	5/17/2013 22:03
Trichloroethene	U		3.8	20	µg/L	20	5/17/2013 22:03
Vinyl chloride	U		5.6	20	µg/L	20	5/17/2013 22:03
Surr: 1,2-Dichloroethane-d4	106			70-130	%REC	20	5/17/2013 22:03
Surr: 4-Bromofluorobenzene	97.4			70-130	%REC	20	5/17/2013 22:03
Surr: Dibromofluoromethane	102			70-130	%REC	20	5/17/2013 22:03
Surr: Toluene-d8	101			70-130	%REC	20	5/17/2013 22:03

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 22-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y13-01Y13)
Sample ID: WW-17360-051313-EB-003
Collection Date: 5/13/2013 04:10 PM

Work Order: 1305509
Lab ID: 1305509-05
Matrix: WASTEWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3510 / 5/16/13	Analyst: JD
<u>BatchID:</u> 48457							
Aroclor 1016	U		0.13	0.20	µg/L	1	5/17/2013 11:01
Aroclor 1221	U		0.13	0.20	µg/L	1	5/17/2013 11:01
Aroclor 1232	U		0.13	0.20	µg/L	1	5/17/2013 11:01
Aroclor 1242	U		0.13	0.20	µg/L	1	5/17/2013 11:01
Aroclor 1248	U		0.13	0.20	µg/L	1	5/17/2013 11:01
Aroclor 1254	U		0.025	0.20	µg/L	1	5/17/2013 11:01
Aroclor 1260	U		0.025	0.20	µg/L	1	5/17/2013 11:01
Surr: Decachlorobiphenyl	86.0			40-140	%REC	1	5/17/2013 11:01
Surr: Tetrachloro-m-xylene	66.0			25-140	%REC	1	5/17/2013 11:01
FLASHPOINT, P-M CLOSED-CUP							
			D93				Analyst: MB
<u>BatchID:</u> R121009							
Flashpoint, P-M Closed-cup	>200		0		°F	1	5/20/2013 11:10
PH							
			SW9040				Analyst: JB
<u>BatchID:</u> R120733							
pH	7.88		0		s.u.	1	5/14/2013 09:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 22-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y13-01Y13)
Sample ID: WW-17360-051313-EB-003 (TCLP)
Collection Date: 5/13/2013 04:10 PM

Work Order: 1305509
Lab ID: 1305509-06
Matrix: WASTEWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
TCLP MERCURY BY CVAA							
			SW7470A			Prep: SW7470 / 5/16/13	Analyst: LR
<u>BatchID: 48473</u>							
Mercury	0.00049	J	0.000080	0.0020	mg/L	1	5/16/2013 16:35
TCLP METALS ANALYSIS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/17/13	Analyst: RH
<u>BatchID: 48496</u>							
Arsenic	U		0.0072	0.010	mg/L	1	5/17/2013 13:04
Barium	0.023	J	0.0027	0.050	mg/L	1	5/17/2013 13:04
Cadmium	U		0.00034	0.0020	mg/L	1	5/17/2013 13:04
Chromium	U		0.00042	0.020	mg/L	1	5/17/2013 13:04
Lead	U		0.00027	0.010	mg/L	1	5/17/2013 13:04
Selenium	U		0.0041	0.020	mg/L	1	5/17/2013 13:04
Silver	U		0.00025	0.0050	mg/L	1	5/17/2013 13:04
TCLP SEMI-VOLATILE ORGANICS							
			SW8270			Prep: SW3510 / 5/17/13	Analyst: HL
<u>BatchID: 48487</u>							
1,4-Dichlorobenzene	U		4.2	100	µg/L	1	5/20/2013 11:41
2,4,5-Trichlorophenol	U		2.1	100	µg/L	1	5/20/2013 11:41
2,4,6-Trichlorophenol	U		20	100	µg/L	1	5/20/2013 11:41
2,4-Dinitrotoluene	U		22	100	µg/L	1	5/20/2013 11:41
Hexachloro-1,3-butadiene	U		4.4	100	µg/L	1	5/20/2013 11:41
Hexachlorobenzene	U		3.0	100	µg/L	1	5/20/2013 11:41
Hexachloroethane	U		4.0	100	µg/L	1	5/20/2013 11:41
m-Cresol	U		1.3	100	µg/L	1	5/20/2013 11:41
Nitrobenzene	U		2.1	100	µg/L	1	5/20/2013 11:41
o-Cresol	U		2.0	100	µg/L	1	5/20/2013 11:41
p-Cresol	U		1.3	100	µg/L	1	5/20/2013 11:41
Pentachlorophenol	U		3.2	400	µg/L	1	5/20/2013 11:41
Pyridine	U		26	400	µg/L	1	5/20/2013 11:41
Surr: 2,4,6-Tribromophenol	56.9			21-125	%REC	1	5/20/2013 11:41
Surr: 2-Fluorobiphenyl	60.9			39-94	%REC	1	5/20/2013 11:41
Surr: 2-Fluorophenol	37.2			10-75	%REC	1	5/20/2013 11:41
Surr: 4-Terphenyl-d14	111			26-119	%REC	1	5/20/2013 11:41
Surr: Nitrobenzene-d5	57.2			41-104	%REC	1	5/20/2013 11:41
Surr: Phenol-d6	17.5			11-50	%REC	1	5/20/2013 11:41
TCLP VOLATILE ORGANICS							
			SW8260			Leachate: SW1311 / 5/16/13	Analyst: BG
<u>BatchID: R120978</u>							
1,1-Dichloroethene	U		3.9	20	µg/L	20	5/17/2013 22:28
1,2-Dichloroethane	U		3.0	20	µg/L	20	5/17/2013 22:28
2-Butanone	U		7.1	200	µg/L	20	5/17/2013 22:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp**Date:** 22-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (17360-T05Y13-01Y13)
Sample ID: WW-17360-051313-EB-003 (TCLP)
Collection Date: 5/13/2013 04:10 PM

Work Order: 1305509
Lab ID: 1305509-06
Matrix: WASTEWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		3.6	20	µg/L	20	5/17/2013 22:28
Carbon tetrachloride	U		3.2	20	µg/L	20	5/17/2013 22:28
Chlorobenzene	U		2.9	20	µg/L	20	5/17/2013 22:28
Chloroform	U		3.8	20	µg/L	20	5/17/2013 22:28
Tetrachloroethene	U		2.7	20	µg/L	20	5/17/2013 22:28
Trichloroethene	U		3.8	20	µg/L	20	5/17/2013 22:28
Vinyl chloride	U		5.6	20	µg/L	20	5/17/2013 22:28
Surr: 1,2-Dichloroethane-d4	101			70-130	%REC	20	5/17/2013 22:28
Surr: 4-Bromofluorobenzene	101			70-130	%REC	20	5/17/2013 22:28
Surr: Dibromofluoromethane	100			70-130	%REC	20	5/17/2013 22:28
Surr: Toluene-d8	101			70-130	%REC	20	5/17/2013 22:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48457** Instrument ID **GC4** Method: **SW8082**

MBLK		Sample ID: PBLKW1-48457-48457				Units: µg/L		Analysis Date: 5/17/2013 10:22 AM		
Client ID:		Run ID: GC4_130517A				SeqNo: 2325042		Prep Date: 5/16/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	U	0.20								
Aroclor 1221	U	0.20								
Aroclor 1232	U	0.20								
Aroclor 1242	U	0.20								
Aroclor 1248	U	0.20								
Aroclor 1254	U	0.20								
Aroclor 1260	U	0.20								
<i>Surr: Decachlorobiphenyl</i>	<i>0.07</i>	<i>0</i>	<i>0.1</i>	<i>0</i>	<i>70</i>	<i>50-130</i>	<i>0</i>			
<i>Surr: Tetrachloro-m-xylene</i>	<i>0.054</i>	<i>0</i>	<i>0.1</i>	<i>0</i>	<i>54</i>	<i>25-140</i>	<i>0</i>			

LCS		Sample ID: PLCSW1-48457-48457				Units: µg/L		Analysis Date: 5/17/2013 10:41 AM		
Client ID:		Run ID: GC4_130517A				SeqNo: 2325043		Prep Date: 5/16/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	1.489	0.20	2.5	0	59.6	50-130	0			
Aroclor 1260	1.951	0.20	2.5	0	78	50-130	0			
<i>Surr: Decachlorobiphenyl</i>	<i>0.076</i>	<i>0</i>	<i>0.1</i>	<i>0</i>	<i>76</i>	<i>50-130</i>	<i>0</i>			
<i>Surr: Tetrachloro-m-xylene</i>	<i>0.05</i>	<i>0</i>	<i>0.1</i>	<i>0</i>	<i>50</i>	<i>25-140</i>	<i>0</i>			

The following samples were analyzed in this batch:

1305509-05A

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48498** Instrument ID **GC4** Method: **SW8082**

MBLK		Sample ID: PBLKS1-48498-48498				Units: µg/Kg		Analysis Date: 5/20/2013 09:28 AM		
Client ID:		Run ID: GC4_130520A				SeqNo: 2325664		Prep Date: 5/17/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	U	40								
Aroclor 1221	U	40								
Aroclor 1232	U	40								
Aroclor 1242	U	40								
Aroclor 1248	U	40								
Aroclor 1254	U	40								
Aroclor 1260	U	40								
<i>Surr: Decachlorobiphenyl</i>	38.33	0	33.3	0	115	40-140	0			

LCS		Sample ID: PLCSS1-48498-48498				Units: µg/Kg		Analysis Date: 5/20/2013 09:48 AM		
Client ID:		Run ID: GC4_130520A				SeqNo: 2325665		Prep Date: 5/17/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	878.7	40	833	0	105	50-130	0			
Aroclor 1260	977	40	833	0	117	50-130	0			
<i>Surr: Decachlorobiphenyl</i>	37.67	0	33.3	0	113	40-140	0			

MS		Sample ID: 1305509-01A MS				Units: µg/Kg		Analysis Date: 5/20/2013 10:27 AM		
Client ID: SO-17360-051313-EB-001		Run ID: GC4_130520A				SeqNo: 2325667		Prep Date: 5/17/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	706.6	39	813.4	0	86.9	40-140	0			
Aroclor 1260	734.9	39	813.4	0	90.4	40-140	0			
<i>Surr: Decachlorobiphenyl</i>	29.94	0	32.52	0	92.1	40-140	0			

MSD		Sample ID: 1305509-01A MSD				Units: µg/Kg		Analysis Date: 5/20/2013 10:47 AM		
Client ID: SO-17360-051313-EB-001		Run ID: GC4_130520A				SeqNo: 2325668		Prep Date: 5/17/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	741.4	39	820.2	0	90.4	40-140	706.6	4.8	50	
Aroclor 1260	775.8	39	820.2	0	94.6	40-140	734.9	5.42	50	
<i>Surr: Decachlorobiphenyl</i>	31.83	0	32.79	0	97.1	40-140	29.94	6.12	50	

The following samples were analyzed in this batch:

1305509-01A 1305509-03A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48473** Instrument ID **HG1** Method: **SW7470**

MBLK	Sample ID: MBLK-48473-48473					Units: mg/L		Analysis Date: 5/16/2013 04:18 PM		
Client ID:	Run ID: HG1_130516A				SeqNo: 2321741		Prep Date: 5/16/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury U 0.00020

LCS	Sample ID: LCS-48473-48473					Units: mg/L		Analysis Date: 5/16/2013 04:20 PM		
Client ID:	Run ID: HG1_130516A				SeqNo: 2321742		Prep Date: 5/16/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.002039 0.00020 0.002 0 102 80-120 0

MS	Sample ID: 1305509-06BMS					Units: mg/L		Analysis Date: 5/16/2013 04:37 PM		
Client ID: WW-17360-051313-EB-003 (TCLP)	Run ID: HG1_130516A				SeqNo: 2321750		Prep Date: 5/16/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.02002 0.0020 0.02 0.00049 97.6 75-125 0

MSD	Sample ID: 1305509-06BMSD					Units: mg/L		Analysis Date: 5/16/2013 04:45 PM		
Client ID: WW-17360-051313-EB-003 (TCLP)	Run ID: HG1_130516A				SeqNo: 2321754		Prep Date: 5/16/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.01993 0.0020 0.02 0.00049 97.2 75-125 0.02002 0.451 20

The following samples were analyzed in this batch:

1305509-02A	1305509-04A	1305509-06B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48496** Instrument ID **ICPMS2** Method: **SW6020A**

MBLK	Sample ID: MBLK-48496-48496					Units: mg/L		Analysis Date: 5/17/2013 12:13 PM		
Client ID:	Run ID: ICPMS2_130517A				SeqNo: 2322933		Prep Date: 5/17/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	U	0.0050								
Barium	U	0.0050								
Cadmium	U	0.0020								
Chromium	U	0.0050								
Lead	U	0.0050								
Selenium	U	0.0050								
Silver	U	0.0050								

LCS	Sample ID: LCS-48496-48496					Units: mg/L		Analysis Date: 5/17/2013 12:18 PM		
Client ID:	Run ID: ICPMS2_130517A				SeqNo: 2322934		Prep Date: 5/17/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.09565	0.0050	0.1	0	95.6	80-120	0			
Barium	0.09536	0.0050	0.1	0	95.4	80-120	0			
Cadmium	0.09579	0.0020	0.1	0	95.8	80-120	0			
Chromium	0.09393	0.0050	0.1	0	93.9	80-120	0			
Lead	0.09407	0.0050	0.1	0	94.1	80-120	0			
Selenium	0.09363	0.0050	0.1	0	93.6	80-120	0			
Silver	0.09371	0.0050	0.1	0	93.7	80-120	0			

MS	Sample ID: 1305551-01BMS					Units: mg/L		Analysis Date: 5/17/2013 12:28 PM		
Client ID:	Run ID: ICPMS2_130517A				SeqNo: 2322937		Prep Date: 5/17/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1106	0.0050	0.1	0.008251	102	75-125	0			
Barium	0.1624	0.0050	0.1	0.06207	100	75-125	0			
Cadmium	0.09591	0.0020	0.1	0.00002429	95.9	75-125	0			
Chromium	0.09617	0.0050	0.1	0.0003441	95.8	75-125	0			
Lead	0.0968	0.0050	0.1	0.00007742	96.7	75-125	0			
Selenium	0.09619	0.0050	0.1	0.0001107	96.1	75-125	0			
Silver	0.088	0.0050	0.1	0.000007214	88	75-125	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48496** Instrument ID **ICPMS2** Method: **SW6020A**

MSD		Sample ID: 1305551-01BMSD				Units: mg/L		Analysis Date: 5/17/2013 12:33 PM		
Client ID:		Run ID: ICPMS2_130517A				SeqNo: 2322938		Prep Date: 5/17/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1088	0.0050	0.1	0.008251	101	75-125	0.1106	1.64	20	
Barium	0.1591	0.0050	0.1	0.06207	97	75-125	0.1624	2.05	20	
Cadmium	0.09413	0.0020	0.1	0.00002429	94.1	75-125	0.09591	1.87	20	
Chromium	0.09468	0.0050	0.1	0.0003441	94.3	75-125	0.09617	1.56	20	
Lead	0.09564	0.0050	0.1	0.00007742	95.6	75-125	0.0968	1.21	20	
Selenium	0.09465	0.0050	0.1	0.0001107	94.5	75-125	0.09619	1.61	20	
Silver	0.08614	0.0050	0.1	0.000007214	86.1	75-125	0.088	2.14	20	

The following samples were analyzed in this batch:

1305509-02A	1305509-04A	1305509-06B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48487** Instrument ID **SVMS7** Method: **SW8270**

MBLK		Sample ID: SBLKW1-48487-48487				Units: µg/L		Analysis Date: 5/20/2013 10:11 AM		
Client ID:		Run ID: SVMS7_130520A				SeqNo: 2324896		Prep Date: 5/17/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	U	5.0								
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
Hexachloro-1,3-butadiene	U	5.0								
Hexachlorobenzene	U	5.0								
Hexachloroethane	U	5.0								
m-Cresol	U	5.0								
Nitrobenzene	U	5.0								
o-Cresol	U	5.0								
p-Cresol	U	5.0								
Pentachlorophenol	U	20								
Pyridine	U	20								
<i>Surr: 2,4,6-Tribromophenol</i>	<i>26.02</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>52</i>	<i>21-125</i>	<i>0</i>			
<i>Surr: 2-Fluorobiphenyl</i>	<i>29.91</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>59.8</i>	<i>36-94</i>	<i>0</i>			
<i>Surr: 2-Fluorophenol</i>	<i>19.07</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>38.1</i>	<i>10-75</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>56.15</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>112</i>	<i>26-119</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>29.74</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>59.5</i>	<i>41-104</i>	<i>0</i>			
<i>Surr: Phenol-d6</i>	<i>9.31</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>18.6</i>	<i>11-50</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48487** Instrument ID **SVMS7** Method: **SW8270**

LCS Sample ID: SLCSW1-48487-48487				Units: µg/L			Analysis Date: 5/20/2013 09:48 AM			
Client ID:		Run ID: SVMS7_130520A			SeqNo: 2324894		Prep Date: 5/17/2013		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	13.41	5.0	20	0	67	30-110	0			
2,4,5-Trichlorophenol	12.74	5.0	20	0	63.7	50-110	0			
2,4,6-Trichlorophenol	12.63	5.0	20	0	63.2	50-115	0			
2,4-Dinitrotoluene	12.33	5.0	20	0	61.6	50-120	0			
Hexachloro-1,3-butadiene	12.81	5.0	20	0	64	25-105	0			
Hexachlorobenzene	12.92	5.0	20	0	64.6	50-110	0			
Hexachloroethane	13.8	5.0	20	0	69	30-95	0			
m-Cresol	9.29	5.0	20	0	46.4	30-110	0			
Nitrobenzene	11.63	5.0	20	0	58.2	45-110	0			
o-Cresol	10.46	5.0	20	0	52.3	40-110	0			
p-Cresol	9.29	5.0	20	0	46.4	30-110	0			
Pentachlorophenol	13.63	20	20	0	68.2	40-115	0			J
Pyridine	6.09	20	20	0	30.4	10-71	0			J
<i>Surr: 2,4,6-Tribromophenol</i>	<i>30.41</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>60.8</i>	<i>21-125</i>	<i>0</i>			
<i>Surr: 2-Fluorobiphenyl</i>	<i>31.8</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>63.6</i>	<i>36-94</i>	<i>0</i>			
<i>Surr: 2-Fluorophenol</i>	<i>19.35</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>38.7</i>	<i>10-75</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>54.84</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>110</i>	<i>26-119</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>32.11</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>64.2</i>	<i>41-104</i>	<i>0</i>			
<i>Surr: Phenol-d6</i>	<i>11.4</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>22.8</i>	<i>11-50</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48487** Instrument ID **SVMS7** Method: **SW8270**

MS Sample ID: 1305509-02A MS				Units: µg/L			Analysis Date: 5/20/2013 10:33 AM			
Client ID: SO-17360-051313-EB-001 (TCLP)				Run ID: SVMS7_130520A		SeqNo: 2324897		Prep Date: 5/17/2013		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	270	100	400	0	67.5	30-110	0			
2,4,5-Trichlorophenol	257.4	100	400	0	64.4	50-110	0			
2,4,6-Trichlorophenol	253.4	100	400	0	63.4	50-115	0			
2,4-Dinitrotoluene	244.2	100	400	0	61	50-120	0			
Hexachloro-1,3-butadiene	255	100	400	0	63.8	25-105	0			
Hexachlorobenzene	259.4	100	400	0	64.8	50-110	0			
Hexachloroethane	279	100	400	0	69.8	30-95	0			
m-Cresol	192.6	100	400	0	48.2	30-110	0			
Nitrobenzene	238.4	100	400	0	59.6	45-110	0			
o-Cresol	216.8	100	400	0	54.2	40-110	0			
p-Cresol	192.6	100	400	0	48.2	30-110	0			
Pentachlorophenol	268.8	400	400	0	67.2	40-115	0			J
Pyridine	136.2	400	400	0	34	10-80	0			J
<i>Surr: 2,4,6-Tribromophenol</i>	<i>632.4</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>63.2</i>	<i>21-125</i>	<i>0</i>			
<i>Surr: 2-Fluorobiphenyl</i>	<i>650.6</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>65.1</i>	<i>36-94</i>	<i>0</i>			
<i>Surr: 2-Fluorophenol</i>	<i>387</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>38.7</i>	<i>10-75</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>1104</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>110</i>	<i>26-119</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>646.8</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>64.7</i>	<i>41-104</i>	<i>0</i>			
<i>Surr: Phenol-d6</i>	<i>218.4</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>21.8</i>	<i>11-50</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48487** Instrument ID **SVMS7** Method: **SW8270**

MSD				Sample ID: 1305509-02A MSD			Units: µg/L		Analysis Date: 5/20/2013 10:55 AM	
Client ID: SO-17360-051313-EB-001 (TCLP)				Run ID: SVMS7_130520A			SeqNo: 2324906		Prep Date: 5/17/2013	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	255.6	100	400	0	63.9	30-110	270	5.48	30	
2,4,5-Trichlorophenol	250.4	100	400	0	62.6	50-110	257.4	2.76	30	
2,4,6-Trichlorophenol	242.6	100	400	0	60.6	50-115	253.4	4.35	30	
2,4-Dinitrotoluene	243.2	100	400	0	60.8	50-120	244.2	0.41	30	
Hexachloro-1,3-butadiene	243	100	400	0	60.8	25-105	255	4.82	30	
Hexachlorobenzene	260	100	400	0	65	50-110	259.4	0.231	30	
Hexachloroethane	262.8	100	400	0	65.7	30-95	279	5.98	30	
m-Cresol	190.8	100	400	0	47.7	30-110	192.6	0.939	30	
Nitrobenzene	226.6	100	400	0	56.6	45-110	238.4	5.08	30	
o-Cresol	216.4	100	400	0	54.1	40-110	216.8	0.185	30	
p-Cresol	190.8	100	400	0	47.7	30-110	192.6	0.939	30	
Pentachlorophenol	274	400	400	0	68.5	40-115	268.8	0	30	J
Pyridine	129.4	400	400	0	32.4	10-80	136.2	0	30	J
<i>Surr: 2,4,6-Tribromophenol</i>	<i>623.4</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>62.3</i>	<i>21-125</i>	<i>632.4</i>	<i>1.43</i>	<i>0</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>607.6</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>60.8</i>	<i>36-94</i>	<i>650.6</i>	<i>6.84</i>	<i>0</i>	
<i>Surr: 2-Fluorophenol</i>	<i>390.8</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>39.1</i>	<i>10-75</i>	<i>387</i>	<i>0.977</i>	<i>0</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>1091</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>109</i>	<i>26-119</i>	<i>1104</i>	<i>1.22</i>	<i>0</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>621.6</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>62.2</i>	<i>41-104</i>	<i>646.8</i>	<i>3.97</i>	<i>0</i>	
<i>Surr: Phenol-d6</i>	<i>227.4</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>22.7</i>	<i>11-50</i>	<i>218.4</i>	<i>4.04</i>	<i>0</i>	

The following samples were analyzed in this batch:

1305509-02A 1305509-04A 1305509-06B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R120978A** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: VBLKW1-130517-R120978A				Units: µg/L		Analysis Date: 5/17/2013 02:40 PM		
Client ID:		Run ID: VMS6_130517A				SeqNo: 2324257		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	U	1.0								
1,2-Dichloroethane	U	1.0								
2-Butanone	U	5.0								
Benzene	U	1.0								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroform	U	1.0								
Tetrachloroethene	U	2.0								
Trichloroethene	U	1.0								
Vinyl chloride	U	1.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.91</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.6</i>	<i>70-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.62</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.1</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>20.39</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.95</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.8</i>	<i>85-120</i>	<i>0</i>			

LCS		Sample ID: VLCSW1-130517-R120978A				Units: µg/L		Analysis Date: 5/17/2013 01:51 PM		
Client ID:		Run ID: VMS6_130517A				SeqNo: 2324256		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	18.41	1.0	20	0	92	70-130	0			
1,2-Dichloroethane	18.26	1.0	20	0	91.3	70-130	0			
2-Butanone	19.47	5.0	20	0	97.4	30-150	0			
Benzene	18.64	1.0	20	0	93.2	80-120	0			
Carbon tetrachloride	19.37	1.0	20	0	96.8	65-140	0			
Chlorobenzene	19.92	1.0	20	0	99.6	80-120	0			
Chloroform	18.98	1.0	20	0	94.9	65-135	0			
Tetrachloroethene	20.5	2.0	20	0	102	45-150	0			
Trichloroethene	19.53	1.0	20	0	97.6	70-125	0			
Vinyl chloride	14.52	1.0	20	0	72.6	50-145	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.04</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.2</i>	<i>70-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.07</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.47</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.4</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.85</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.2</i>	<i>85-120</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R120978A** Instrument ID **VMS6** Method: **SW8260**

MS Sample ID: 1305566-01A MS				Units: µg/L			Analysis Date: 5/17/2013 10:52 PM			
Client ID:		Run ID: VMS6_130517A		SeqNo: 2324277		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	17.44	1.0	20	0	87.2	70-130	0			
1,2-Dichloroethane	17.05	1.0	20	0	85.2	70-130	0			
2-Butanone	18.74	5.0	20	0	93.7	30-150	0			
Benzene	18.29	1.0	20	0	91.4	80-120	0			
Carbon tetrachloride	19.26	1.0	20	0	96.3	65-140	0			
Chlorobenzene	18.81	1.0	20	0	94	80-120	0			
Chloroform	18.02	1.0	20	0	90.1	65-135	0			
Tetrachloroethene	20.68	2.0	20	0	103	45-150	0			
Trichloroethene	19.08	1.0	20	0	95.4	70-125	0			
Vinyl chloride	14.31	1.0	20	0	71.6	50-145	0			
Surr: 1,2-Dichloroethane-d4	20.06	0	20	0	100	70-120	0			
Surr: 4-Bromofluorobenzene	20.13	0	20	0	101	75-120	0			
Surr: Dibromofluoromethane	20.93	0	20	0	105	85-115	0			
Surr: Toluene-d8	20.31	0	20	0	102	85-120	0			

MSD Sample ID: 1305566-01A MSD				Units: µg/L			Analysis Date: 5/17/2013 11:17 PM			
Client ID:		Run ID: VMS6_130517A		SeqNo: 2324279		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1-Dichloroethene	16.69	1.0	20	0	83.4	70-130	17.44	4.39	30	
1,2-Dichloroethane	17.18	1.0	20	0	85.9	70-130	17.05	0.76	30	
2-Butanone	22.22	5.0	20	0	111	30-150	18.74	17	30	
Benzene	17.14	1.0	20	0	85.7	80-120	18.29	6.49	30	
Carbon tetrachloride	17.36	1.0	20	0	86.8	65-140	19.26	10.4	30	
Chlorobenzene	17.9	1.0	20	0	89.5	80-120	18.81	4.96	30	
Chloroform	17.45	1.0	20	0	87.2	65-135	18.02	3.21	30	
Tetrachloroethene	19.48	2.0	20	0	97.4	45-150	20.68	5.98	30	
Trichloroethene	18.3	1.0	20	0	91.5	70-125	19.08	4.17	30	
Vinyl chloride	13.39	1.0	20	0	67	50-145	14.31	6.64	30	
Surr: 1,2-Dichloroethane-d4	19.41	0	20	0	97	70-120	20.06	3.29	30	
Surr: 4-Bromofluorobenzene	20.28	0	20	0	101	75-120	20.13	0.742	30	
Surr: Dibromofluoromethane	20.62	0	20	0	103	85-115	20.93	1.49	30	
Surr: Toluene-d8	19.84	0	20	0	99.2	85-120	20.31	2.34	30	

The following samples were analyzed in this batch:

1305509-02B 1305509-04B 1305509-06A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R120702** Instrument ID **WETCHEM** Method: **SW9045D**

LCS					Sample ID: LCS-R120702-R120702					Units: s.u.			Analysis Date: 5/14/2013 10:00 AM				
Client ID:					Run ID: WETCHEM_130514F					SeqNo: 2317373			Prep Date:			DF: 1	
Analyte					Result		PQL	SPK Val	SPK Ref Value	%REC		Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
pH					4.43		0	4.4	0	101		90-110	0				

DUP					Sample ID: 1305509-01A DUP					Units: s.u.			Analysis Date: 5/14/2013 10:00 AM			
Client ID: SO-17360-051313-EB-001					Run ID: WETCHEM_130514F					SeqNo: 2317375			Prep Date:		DF: 1	
Analyte					Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
pH					9.89	0	0	0	0	0-0	9.89	0	20			

The following samples were analyzed in this batch:

1305509-01A 1305509-03A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R120733** Instrument ID **WETCHEM** Method: **A4500-H B**

LCS		Sample ID: WLCSW1-130514-R120733				Units: s.u.		Analysis Date: 5/14/2013 09:10 AM		
Client ID:		Run ID: WETCHEM_130514I				SeqNo: 2318150		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 4.3 0 4.4 0 97.7 90-110 0

LCS		Sample ID: WLCSW1-130514-R120733				Units: s.u.		Analysis Date: 5/14/2013 09:10 AM		
Client ID:		Run ID: WETCHEM_130514I				SeqNo: 2318154		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 4.3 0 4.4 0 97.7 90-110 0

LCS		Sample ID: WLCSW1-130514-R120733				Units: s.u.		Analysis Date: 5/14/2013 09:10 AM		
Client ID:		Run ID: WETCHEM_130514I				SeqNo: 2318164		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 4.3 0 4.4 0 97.7 90-110 0

DUP		Sample ID: 1305532-01C DUP				Units: s.u.		Analysis Date: 5/14/2013 09:10 AM		
Client ID:		Run ID: WETCHEM_130514I				SeqNo: 2318152		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 7.14 0 0 0 0 0-0 7.14 0 20

DUP		Sample ID: 1305509-05B DUP				Units: s.u.		Analysis Date: 5/14/2013 09:10 AM		
Client ID: WW-17360-051313-EB-003		Run ID: WETCHEM_130514I				SeqNo: 2318162		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 7.88 0 0 0 0 0-0 7.88 0 20

DUP		Sample ID: 1305533-04A DUP				Units: s.u.		Analysis Date: 5/14/2013 09:10 AM		
Client ID:		Run ID: WETCHEM_130514I				SeqNo: 2318169		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

pH 8.09 0 0 0 0 0-0 8.09 0 20

The following samples were analyzed in this batch:

1305509-05B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R120755** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS-R120755				Units: % of sample			Analysis Date: 5/14/2013 04:40 PM		
Client ID:	Run ID: MOIST_130514A				SeqNo: 2318760		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	0.04	0.050								J

LCS	Sample ID: LCS-R120755				Units: % of sample			Analysis Date: 5/14/2013 04:40 PM		
Client ID:	Run ID: MOIST_130514A				SeqNo: 2318759		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100	0	100	99.5-100.5	0			

DUP	Sample ID: 1305509-03ADUP				Units: % of sample			Analysis Date: 5/14/2013 04:40 PM		
Client ID: SO-17360-051313-EB-002	Run ID: MOIST_130514A				SeqNo: 2318747		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	4.75	0.050	0	0	0	0-0	4.62	2.77	20	

DUP	Sample ID: 1305540-02ADUP				Units: % of sample			Analysis Date: 5/14/2013 04:40 PM		
Client ID:	Run ID: MOIST_130514A				SeqNo: 2318757		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	24.26	0.050	0	0	0	0-0	21.35	12.8	20	

The following samples were analyzed in this batch:

1305509-01A	1305509-03A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R120956** Instrument ID **WETCHEM** Method: **D92**

LCS					Sample ID: LCS-R120956-R120956					Units: °F			Analysis Date: 5/17/2013 03:00 PM				
Client ID:					Run ID: WETCHEM_130517I					SeqNo: 2323406			Prep Date:			DF: 1	
Analyte					Result		PQL	SPK Val	SPK Ref Value	%REC		Control Limit	RPD Ref Value		%RPD	RPD Limit	Qual
Flashpoint, Open-cup					82		0	81	0	101		97-103	0				

The following samples were analyzed in this batch:

1305509-01A	1305509-03A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305509
Project: Former GRMP (17360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R121009** Instrument ID **WETCHEM** Method: **D93**

LCS					Sample ID: LCS-R121009-R121009					Units: °F			Analysis Date: 5/20/2013 11:10 AM				
Client ID:					Run ID: WETCHEM_130520C					SeqNo: 2324628			Prep Date:			DF: 1	
Analyte					Result		PQL	SPK Val	SPK Ref Value	%REC		Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Flashpoint, P-M Closed-cup					81		0	81	0	100		97-103	0				

DUP					Sample ID: 1305575-01A DUP					Units: °F			Analysis Date: 5/20/2013 11:10 AM			
Client ID:					Run ID: WETCHEM_130520C					SeqNo: 2324630			Prep Date:		DF: 1	
Analyte					Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		
Flashpoint, P-M Closed-cup					148	0	0	0	0	0-0	136	8.45	10			

The following samples were analyzed in this batch:

1305509-05B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170

Fax: (734) 453-5201

(See Reverse Side for Instructions)

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

CRA Form: COC-10A (20110804)

Sample Receipt Checklist

Client Name: **CRA - PLYMOUTH**

Date/Time Received: **13-May-13 16:45**

Work Order: **1305509**

Received by: **DS**

Checklist completed by Diane Shaw 14-May-13
eSignature Date

Reviewed by: Tom Bramish 14-May-13
eSignature Date

Matrices: **Soil, Wastewater**

Carrier name: **Client**

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>4.2 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>5/14/2013 8:46:34 AM</u>		
Water - VOA vials have zero headspace?	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒
pH adjusted?	Yes ☐	No ☐	N/A ☒
pH adjusted by:			
Login Notes:			

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:



20-May-2013

Paul Wiseman
Conestoga-Rovers & Associates
14496 Sheldon Road
Suite 200
Plymouth, MI 48170

Re: **Former GRMP (017360-T01Y13)**

Work Order: **1305241**

Dear Paul,

ALS Environmental received 65 samples from 06-May-2013 through 08-May-2013 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 244.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Beamish".

Electronically approved by: Tom Beamish

Tom Beamish
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Group An ALS Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Work Order: 1305241

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1305241-01	WG-17360-043013-MR-001	Groundwater		04/30/13 12:45	05/06/13 10:50	☐
1305241-02	WG-17360-043013-MR-002	Groundwater		04/30/13 14:08	05/06/13 10:50	☐
1305241-03	WG-17360-043013-MR-003	Groundwater		04/30/13 15:29	05/06/13 10:50	☐
1305241-04	WG-17360-043013-MR-004	Groundwater		04/30/13 15:39	05/06/13 10:50	☐
1305241-05	WG-17360-043013-MR-005	Groundwater		04/30/13 16:43	05/06/13 10:50	☐
1305241-06	WG-17360-050113-MR-006	Groundwater		05/01/13 08:30	05/06/13 10:50	☐
1305241-07	WG-17360-050113-MR-007	Groundwater		05/01/13 10:10	05/06/13 10:50	☐
1305241-08	WG-17360-050113-MR-008	Groundwater		05/01/13 11:59	05/06/13 10:50	☐
1305241-09	WS-17360-050113-MR-009	Groundwater		05/01/13 12:15	05/06/13 10:50	☐
1305241-10	WG-17360-050113-MR-010	Groundwater		05/01/13 12:52	05/06/13 10:50	☐
1305241-11	WG-17360-050113-MR-011	Groundwater		05/01/13 13:55	05/06/13 10:50	☐
1305241-12	WG-17360-050113-MR-012	Groundwater		05/01/13 14:20	05/06/13 10:50	☐
1305241-13	WG-17360-050113-MR-013	Groundwater		05/01/13 14:35	05/06/13 10:50	☐
1305241-14	WG-17360-050113-MR-014	Groundwater		05/01/13 15:39	05/06/13 10:50	☐
1305241-15	WG-17360-050113-MR-015	Groundwater		05/01/13 15:49	05/06/13 10:50	☐
1305241-16	WG-17360-050113-MR-016	Groundwater		05/01/13 16:09	05/06/13 10:50	☐
1305241-17	WG-17360-050113-MR-017	Groundwater		05/01/13 17:00	05/06/13 10:50	☐
1305241-18	WG-17360-050113-MR-018	Groundwater		05/01/13 18:42	05/06/13 10:50	☐
1305241-19	WG-17360-050213-MR-019	Groundwater		05/02/13 08:59	05/06/13 10:50	☐
1305241-20	WG-17360-050213-MR-020	Groundwater		05/02/13 10:04	05/06/13 10:50	☐
1305241-21	WG-17360-050213-MR-021	Groundwater		05/02/13 10:39	05/06/13 10:50	☐
1305241-22	WG-17360-050213-MR-022	Groundwater		05/02/13 12:35	05/06/13 10:50	☐
1305241-23	WG-17360-050213-MR-023	Groundwater		05/02/13 13:18	05/06/13 10:50	☐
1305241-24	WG-17360-050213-MR-024	Groundwater		05/02/13 13:54	05/06/13 10:50	☐
1305241-25	WG-17360-050213-MR-025	Groundwater		05/02/13 14:04	05/06/13 10:50	☐
1305241-26	WG-17360-050213-MR-026	Groundwater		05/02/13 15:31	05/06/13 10:50	☐
1305241-27	WG-17360-050213-MR-027	Groundwater		05/02/13 16:22	05/06/13 10:50	☐
1305241-28	WG-17360-050213-MR-028	Groundwater		05/02/13 17:02	05/06/13 10:50	☐
1305241-29	WG-17360-050313-MR-029	Groundwater		05/03/13 10:40	05/06/13 10:50	☐
1305241-30	WG-17360-050313-MR-030	Groundwater		05/03/13 11:40	05/06/13 10:50	☐
1305241-31	WG-17360-050313-MR-031	Groundwater		05/03/13 10:21	05/06/13 10:50	☐
1305241-32	WG-17360-050313-MR-032	Groundwater		05/03/13 11:42	05/06/13 10:50	☐
1305241-33	WG-17360-050313-MR-033	Groundwater		05/03/13 11:55	05/06/13 10:50	☐
1305241-34	WG-17360-050313-MR-034	Groundwater		05/03/13 12:20	05/06/13 10:50	☐
1305241-35	WG-17360-050313-MR-035	Groundwater		05/03/13 16:52	05/06/13 10:50	☐
1305241-36	WG-17360-050313-MR-036	Groundwater		05/03/13 16:17	05/06/13 10:50	☐
1305241-37	WG-17360-050313-MR-037	Groundwater		05/03/13 16:40	05/06/13 10:50	☐
1305241-38	WG-17360-050313-MR-038	Groundwater		05/03/13 16:50	05/06/13 10:50	☐
1305241-39	WG-17360-050313-MR-039	Groundwater		05/03/13 17:20	05/06/13 10:50	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Work Order: 1305241

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1305241-40	TB-17360-050313-MR-040	Water		05/03/13	05/06/13 10:50	☐
1305241-41	TB-17360-050313-MR-041	Water		05/03/13	05/06/13 10:50	☐
1305241-42	TB-17360-050313-MR-042	Water		05/03/13	05/06/13 10:50	☐
1305241-43	WG-17360-050613-EB-040	Groundwater		05/06/13 11:55	05/08/13 16:05	☐
1305241-44	WG-17360-050613-EB-041	Groundwater		05/06/13 12:25	05/08/13 16:05	☐
1305241-45	WG-17360-050613-EB-042	Groundwater		05/06/13 12:50	05/08/13 16:05	☐
1305241-46	WG-17360-050613-EB-043	Groundwater		05/06/13 13:15	05/08/13 16:05	☐
1305241-47	WG-17360-050613-EB-044	Groundwater		05/06/13 14:28	05/08/13 16:05	☐
1305241-48	WG-17360-050613-EB-045	Groundwater		05/06/13 15:50	05/08/13 16:05	☐
1305241-49	WG-17360-050713-EB-046	Groundwater		05/07/13 10:45	05/08/13 16:05	☐
1305241-50	WG-17360-050713-EB-047	Groundwater		05/07/13 12:05	05/08/13 16:05	☐
1305241-51	GW-17360-050713-BW-048	Groundwater		05/07/13 10:34	05/08/13 16:05	☐
1305241-52	GW-17360-050713-BW-049	Groundwater		05/07/13 11:25	05/08/13 16:05	☐
1305241-53	GW-17360-050713-BW-050	Groundwater		05/07/13 12:20	05/08/13 16:05	☐
1305241-54	WG-17360-050713-MR-051	Groundwater		05/07/13 10:50	05/08/13 16:05	☐
1305241-55	WG-17360-050713-MR-052	Groundwater		05/07/13 11:25	05/08/13 16:05	☐
1305241-56	GW-17360-050713-BW-053	Groundwater		05/07/13 14:26	05/08/13 16:05	☐
1305241-57	GW-17360-050713-BW-054	Groundwater		05/07/13 13:55	05/08/13 16:05	☐
1305241-58	GW-17360-050713-BW-055	Groundwater		05/07/13 13:15	05/08/13 16:05	☐
1305241-59	WG-17360-050713-MR-056	Groundwater		05/07/13 13:55	05/08/13 16:05	☐
1305241-60	WG-17360-050713-MR-057	Groundwater		05/07/13 14:25	05/08/13 16:05	☐
1305241-61	WG-17360-050713-MR-060	Groundwater		05/07/13 15:10	05/08/13 16:05	☐
1305241-62	WG-17360-050713-EB-058	Groundwater		05/07/13 14:30	05/08/13 16:05	☐
1305241-63	WG-17360-050713-EB-059	Groundwater		05/07/13 15:30	05/08/13 16:05	☐
1305241-64	WG-17360-050713-EB-061	Groundwater		05/07/13 18:35	05/08/13 16:05	☐
1305241-65	TB-17360-050813-EB-062	Water		05/06/13	05/08/13 16:05	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
WorkOrder: 1305241

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter
mg/L	Milligrams per Liter

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Work Order: 1305241

Case Narrative**Analytical Comments:**

Batch 48246, Method SVO_8270_W, Sample 1305241-39B: An SVOC surrogate is out due to matrix interference.

Batch R120585, Method VOC_8260_W, Sample 1305241-37A: The VOC analysis was run at dilution due to matrix interference.

Batch R120709A, Method VOC_8260_W, Sample 1305241-38A: The VOC analysis was run at dilution due to matrix interference.

QC Comments:

Batch 48246, Method SVO_8270_W, Sample 1305241-32C MSD: The matrix spike duplicate recovery was outside of the control limit. However, the matrix spike recovery and the RPD between the MS and MSD were in control. No qualification is required for Di-n-octyl phthalate.

Batch 48313, Method SVO_8270_W, Sample SLCSW1-48313: The LCS recovery was below the lower control limit. The sample results may be biased low for Hexachlorocyclopentadiene.

Batch R120585, Method VOC_8260_W, Sample VLCSW2-130511: The LCS recovery was above the upper control limit. All sample results in the batch were non-detect. No qualification is necessary for Bromomethane.

Batch R120585, Method VOC_8260_W, Sample 1305241-20A MS: The MS and MSD recoveries were above the upper control limit. The corresponding results in the parent sample were non-detect. No qualification is required for Bromomethane and Chloromethane.

Batch R120665A, Method VOC_8260_W, Sample VLCSW2-130513: The LCS recoveries were above the upper control limit. The sample results may be biased high for 1,2-Dibromo-3-chloropropane, 4-Methyl-2-pentanone, Acetone, and Chloromethane.

Batch R120665A, Method VOC_8260_W, Sample 1305241-32A MSD: The MS recovery was below the lower control limit. The corresponding result in the parent sample may be biased low for Isopropylbenzene.

Batch R120665A, Method VOC_8260_W, Sample 1305241-32A MS: The MS and MSD

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Work Order: 1305241

Case Narrative

recoveries were above the upper control limit. The corresponding results in the parent sample may be biased high for 4-Methyl-2-pentanone, Acetone, and Bromomethane.

Batch R120692, Method VOC_8260_W, Sample VLCSW1-130514: The LCS recovery was outside of the upper control limit but within the Sporadic Marginal Exceedence limit. No qualification is necessary for 4-Methyl-2-pentanone.

Batch R120709A, Method VOC_8260_W, Sample VLCSW1-130514: The LCS recovery was above the upper control limit. All sample results in the batch were non-detect. No qualification is necessary for 4-Methyl-2-pentanone.

Batch R120709A, Method VOC_8260_W, Sample 1305241-32A MS: The MS and MSD recoveries were above the upper control limit. The corresponding result in the parent sample was non-detect. No qualification is necessary for 4-Methyl-2-pentanone.

Batch R120709A, Method VOC_8260_W, Sample 1305241-32A MSD: The MS and MSD recoveries were below the lower control limit. The corresponding result in the parent sample may be biased low for Chloromethane.

Batch R120735, Method VOC_8260_W, Sample VLCSW1-130514: The LCS recovery was outside of the upper control limit but within the Sporadic Marginal Exceedence limit. No qualification is necessary for 4-Methyl-2-pentanone.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-043013-MR-001
Collection Date: 04/30/13 12:45 PM

Work Order: 1305241
Lab ID: 1305241-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120587</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/11/13 22:28
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/11/13 22:28
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/11/13 22:28
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/11/13 22:28
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/11/13 22:28
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/11/13 22:28
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/11/13 22:28
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/11/13 22:28
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/11/13 22:28
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/11/13 22:28
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/11/13 22:28
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/11/13 22:28
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/11/13 22:28
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/11/13 22:28
2-Butanone	U		0.22	25	µg/L	1	05/11/13 22:28
2-Hexanone	U		0.12	50	µg/L	1	05/11/13 22:28
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/11/13 22:28
Acetone	U		0.33	50	µg/L	1	05/11/13 22:28
Benzene	U		0.18	1.0	µg/L	1	05/11/13 22:28
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/11/13 22:28
Bromoform	U		0.15	1.0	µg/L	1	05/11/13 22:28
Bromomethane	U		0.21	5.0	µg/L	1	05/11/13 22:28
Carbon disulfide	U		0.17	5.0	µg/L	1	05/11/13 22:28
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/11/13 22:28
Chlorobenzene	U		0.13	1.0	µg/L	1	05/11/13 22:28
Chloroethane	U		0.46	5.0	µg/L	1	05/11/13 22:28
Chloroform	U		0.15	1.0	µg/L	1	05/11/13 22:28
Chloromethane	U		0.16	5.0	µg/L	1	05/11/13 22:28
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/11/13 22:28
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/11/13 22:28
Cyclohexane	U		0.22	1.0	µg/L	1	05/11/13 22:28
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/11/13 22:28
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/11/13 22:28
Ethylbenzene	U		0.13	1.0	µg/L	1	05/11/13 22:28
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/11/13 22:28
Methyl acetate	U		0.19	10	µg/L	1	05/11/13 22:28
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/11/13 22:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-043013-MR-001
Collection Date: 04/30/13 12:45 PM

Work Order: 1305241
Lab ID: 1305241-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/11/13 22:28
Methylene chloride	U		0.19	5.0	µg/L	1	05/11/13 22:28
Styrene	U		0.11	1.0	µg/L	1	05/11/13 22:28
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/11/13 22:28
Toluene	U		0.12	1.0	µg/L	1	05/11/13 22:28
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/11/13 22:28
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/11/13 22:28
Trichloroethene	U		0.14	1.0	µg/L	1	05/11/13 22:28
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/11/13 22:28
Vinyl chloride	U		0.17	1.0	µg/L	1	05/11/13 22:28
Xylenes, Total	U		0.29	3.0	µg/L	1	05/11/13 22:28
Surr: 1,2-Dichloroethane-d4	96.8			70-120	%REC	1	05/11/13 22:28
Surr: 4-Bromofluorobenzene	98.6			75-120	%REC	1	05/11/13 22:28
Surr: Dibromofluoromethane	104			85-115	%REC	1	05/11/13 22:28
Surr: Toluene-d8	97.2			85-120	%REC	1	05/11/13 22:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-043013-MR-002
Collection Date: 04/30/13 02:08 PM

Work Order: 1305241
Lab ID: 1305241-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120587</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/11/13 22:49
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/11/13 22:49
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/11/13 22:49
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/11/13 22:49
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/11/13 22:49
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/11/13 22:49
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/11/13 22:49
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/11/13 22:49
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/11/13 22:49
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/11/13 22:49
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/11/13 22:49
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/11/13 22:49
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/11/13 22:49
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/11/13 22:49
2-Butanone	U		0.22	25	µg/L	1	05/11/13 22:49
2-Hexanone	U		0.12	50	µg/L	1	05/11/13 22:49
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/11/13 22:49
Acetone	U		0.33	50	µg/L	1	05/11/13 22:49
Benzene	U		0.18	1.0	µg/L	1	05/11/13 22:49
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/11/13 22:49
Bromoform	U		0.15	1.0	µg/L	1	05/11/13 22:49
Bromomethane	U		0.21	5.0	µg/L	1	05/11/13 22:49
Carbon disulfide	U		0.17	5.0	µg/L	1	05/11/13 22:49
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/11/13 22:49
Chlorobenzene	U		0.13	1.0	µg/L	1	05/11/13 22:49
Chloroethane	U		0.46	5.0	µg/L	1	05/11/13 22:49
Chloroform	U		0.15	1.0	µg/L	1	05/11/13 22:49
Chloromethane	U		0.16	5.0	µg/L	1	05/11/13 22:49
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/11/13 22:49
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/11/13 22:49
Cyclohexane	U		0.22	1.0	µg/L	1	05/11/13 22:49
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/11/13 22:49
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/11/13 22:49
Ethylbenzene	U		0.13	1.0	µg/L	1	05/11/13 22:49
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/11/13 22:49
Methyl acetate	U		0.19	10	µg/L	1	05/11/13 22:49
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/11/13 22:49

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-043013-MR-002
Collection Date: 04/30/13 02:08 PM

Work Order: 1305241
Lab ID: 1305241-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/11/13 22:49
Methylene chloride	U		0.19	5.0	µg/L	1	05/11/13 22:49
Styrene	U		0.11	1.0	µg/L	1	05/11/13 22:49
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/11/13 22:49
Toluene	U		0.12	1.0	µg/L	1	05/11/13 22:49
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/11/13 22:49
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/11/13 22:49
Trichloroethene	U		0.14	1.0	µg/L	1	05/11/13 22:49
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/11/13 22:49
Vinyl chloride	U		0.17	1.0	µg/L	1	05/11/13 22:49
Xylenes, Total	U		0.29	3.0	µg/L	1	05/11/13 22:49
Surr: 1,2-Dichloroethane-d4	96.6			70-120	%REC	1	05/11/13 22:49
Surr: 4-Bromofluorobenzene	96.2			75-120	%REC	1	05/11/13 22:49
Surr: Dibromofluoromethane	103			85-115	%REC	1	05/11/13 22:49
Surr: Toluene-d8	96.1			85-120	%REC	1	05/11/13 22:49

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-043013-MR-003
Collection Date: 04/30/13 03:29 PM

Work Order: 1305241
Lab ID: 1305241-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120587</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/11/13 23:11
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/11/13 23:11
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/11/13 23:11
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/11/13 23:11
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/11/13 23:11
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/11/13 23:11
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/11/13 23:11
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/11/13 23:11
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/11/13 23:11
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/11/13 23:11
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/11/13 23:11
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/11/13 23:11
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/11/13 23:11
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/11/13 23:11
2-Butanone	U		0.22	25	µg/L	1	05/11/13 23:11
2-Hexanone	U		0.12	50	µg/L	1	05/11/13 23:11
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/11/13 23:11
Acetone	U		0.33	50	µg/L	1	05/11/13 23:11
Benzene	U		0.18	1.0	µg/L	1	05/11/13 23:11
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/11/13 23:11
Bromoform	U		0.15	1.0	µg/L	1	05/11/13 23:11
Bromomethane	U		0.21	5.0	µg/L	1	05/11/13 23:11
Carbon disulfide	U		0.17	5.0	µg/L	1	05/11/13 23:11
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/11/13 23:11
Chlorobenzene	U		0.13	1.0	µg/L	1	05/11/13 23:11
Chloroethane	U		0.46	5.0	µg/L	1	05/11/13 23:11
Chloroform	13		0.15	1.0	µg/L	1	05/11/13 23:11
Chloromethane	U		0.16	5.0	µg/L	1	05/11/13 23:11
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/11/13 23:11
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/11/13 23:11
Cyclohexane	U		0.22	1.0	µg/L	1	05/11/13 23:11
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/11/13 23:11
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/11/13 23:11
Ethylbenzene	U		0.13	1.0	µg/L	1	05/11/13 23:11
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/11/13 23:11
Methyl acetate	U		0.19	10	µg/L	1	05/11/13 23:11
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/11/13 23:11

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-043013-MR-003
Collection Date: 04/30/13 03:29 PM

Work Order: 1305241
Lab ID: 1305241-03
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/11/13 23:11
Methylene chloride	U		0.19	5.0	µg/L	1	05/11/13 23:11
Styrene	U		0.11	1.0	µg/L	1	05/11/13 23:11
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/11/13 23:11
Toluene	U		0.12	1.0	µg/L	1	05/11/13 23:11
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/11/13 23:11
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/11/13 23:11
Trichloroethene	U		0.14	1.0	µg/L	1	05/11/13 23:11
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/11/13 23:11
Vinyl chloride	U		0.17	1.0	µg/L	1	05/11/13 23:11
Xylenes, Total	U		0.29	3.0	µg/L	1	05/11/13 23:11
Surr: 1,2-Dichloroethane-d4	99.0			70-120	%REC	1	05/11/13 23:11
Surr: 4-Bromofluorobenzene	95.9			75-120	%REC	1	05/11/13 23:11
Surr: Dibromofluoromethane	103			85-115	%REC	1	05/11/13 23:11
Surr: Toluene-d8	96.4			85-120	%REC	1	05/11/13 23:11

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-043013-MR-004
Collection Date: 04/30/13 03:39 PM

Work Order: 1305241
Lab ID: 1305241-04
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120587</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/11/13 23:32
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/11/13 23:32
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/11/13 23:32
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/11/13 23:32
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/11/13 23:32
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/11/13 23:32
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/11/13 23:32
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/11/13 23:32
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/11/13 23:32
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/11/13 23:32
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/11/13 23:32
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/11/13 23:32
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/11/13 23:32
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/11/13 23:32
2-Butanone	U		0.22	25	µg/L	1	05/11/13 23:32
2-Hexanone	U		0.12	50	µg/L	1	05/11/13 23:32
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/11/13 23:32
Acetone	U		0.33	50	µg/L	1	05/11/13 23:32
Benzene	U		0.18	1.0	µg/L	1	05/11/13 23:32
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/11/13 23:32
Bromoform	U		0.15	1.0	µg/L	1	05/11/13 23:32
Bromomethane	U		0.21	5.0	µg/L	1	05/11/13 23:32
Carbon disulfide	U		0.17	5.0	µg/L	1	05/11/13 23:32
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/11/13 23:32
Chlorobenzene	U		0.13	1.0	µg/L	1	05/11/13 23:32
Chloroethane	U		0.46	5.0	µg/L	1	05/11/13 23:32
Chloroform	13		0.15	1.0	µg/L	1	05/11/13 23:32
Chloromethane	U		0.16	5.0	µg/L	1	05/11/13 23:32
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/11/13 23:32
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/11/13 23:32
Cyclohexane	U		0.22	1.0	µg/L	1	05/11/13 23:32
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/11/13 23:32
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/11/13 23:32
Ethylbenzene	U		0.13	1.0	µg/L	1	05/11/13 23:32
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/11/13 23:32
Methyl acetate	U		0.19	10	µg/L	1	05/11/13 23:32
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/11/13 23:32

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-043013-MR-004
Collection Date: 04/30/13 03:39 PM

Work Order: 1305241
Lab ID: 1305241-04
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/11/13 23:32
Methylene chloride	U		0.19	5.0	µg/L	1	05/11/13 23:32
Styrene	U		0.11	1.0	µg/L	1	05/11/13 23:32
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/11/13 23:32
Toluene	U		0.12	1.0	µg/L	1	05/11/13 23:32
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/11/13 23:32
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/11/13 23:32
Trichloroethene	U		0.14	1.0	µg/L	1	05/11/13 23:32
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/11/13 23:32
Vinyl chloride	U		0.17	1.0	µg/L	1	05/11/13 23:32
Xylenes, Total	U		0.29	3.0	µg/L	1	05/11/13 23:32
Surr: 1,2-Dichloroethane-d4	97.0			70-120	%REC	1	05/11/13 23:32
Surr: 4-Bromofluorobenzene	97.3			75-120	%REC	1	05/11/13 23:32
Surr: Dibromofluoromethane	104			85-115	%REC	1	05/11/13 23:32
Surr: Toluene-d8	96.8			85-120	%REC	1	05/11/13 23:32

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-043013-MR-005
Collection Date: 04/30/13 04:43 PM

Work Order: 1305241
Lab ID: 1305241-05
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120587</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/11/13 23:53
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/11/13 23:53
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/11/13 23:53
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/11/13 23:53
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/11/13 23:53
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/11/13 23:53
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/11/13 23:53
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/11/13 23:53
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/11/13 23:53
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/11/13 23:53
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/11/13 23:53
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/11/13 23:53
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/11/13 23:53
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/11/13 23:53
2-Butanone	U		0.22	25	µg/L	1	05/11/13 23:53
2-Hexanone	U		0.12	50	µg/L	1	05/11/13 23:53
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/11/13 23:53
Acetone	U		0.33	50	µg/L	1	05/11/13 23:53
Benzene	U		0.18	1.0	µg/L	1	05/11/13 23:53
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/11/13 23:53
Bromoform	U		0.15	1.0	µg/L	1	05/11/13 23:53
Bromomethane	U		0.21	5.0	µg/L	1	05/11/13 23:53
Carbon disulfide	U		0.17	5.0	µg/L	1	05/11/13 23:53
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/11/13 23:53
Chlorobenzene	U		0.13	1.0	µg/L	1	05/11/13 23:53
Chloroethane	U		0.46	5.0	µg/L	1	05/11/13 23:53
Chloroform	U		0.15	1.0	µg/L	1	05/11/13 23:53
Chloromethane	U		0.16	5.0	µg/L	1	05/11/13 23:53
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/11/13 23:53
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/11/13 23:53
Cyclohexane	U		0.22	1.0	µg/L	1	05/11/13 23:53
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/11/13 23:53
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/11/13 23:53
Ethylbenzene	U		0.13	1.0	µg/L	1	05/11/13 23:53
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/11/13 23:53
Methyl acetate	U		0.19	10	µg/L	1	05/11/13 23:53
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/11/13 23:53

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-043013-MR-005
Collection Date: 04/30/13 04:43 PM

Work Order: 1305241
Lab ID: 1305241-05
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/11/13 23:53
Methylene chloride	U		0.19	5.0	µg/L	1	05/11/13 23:53
Styrene	U		0.11	1.0	µg/L	1	05/11/13 23:53
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/11/13 23:53
Toluene	U		0.12	1.0	µg/L	1	05/11/13 23:53
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/11/13 23:53
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/11/13 23:53
Trichloroethene	U		0.14	1.0	µg/L	1	05/11/13 23:53
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/11/13 23:53
Vinyl chloride	U		0.17	1.0	µg/L	1	05/11/13 23:53
Xylenes, Total	U		0.29	3.0	µg/L	1	05/11/13 23:53
Surr: 1,2-Dichloroethane-d4	97.0			70-120	%REC	1	05/11/13 23:53
Surr: 4-Bromofluorobenzene	95.6			75-120	%REC	1	05/11/13 23:53
Surr: Dibromofluoromethane	104			85-115	%REC	1	05/11/13 23:53
Surr: Toluene-d8	96.4			85-120	%REC	1	05/11/13 23:53

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-006
Collection Date: 05/01/13 08:30 AM

Work Order: 1305241
Lab ID: 1305241-06
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: RS	
BatchID: R120587							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 12:15
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 12:15
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 12:15
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 12:15
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 12:15
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 12:15
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 12:15
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 12:15
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 12:15
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 12:15
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 12:15
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 12:15
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 12:15
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 12:15
2-Butanone	U		0.22	25	µg/L	1	05/12/13 12:15
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 12:15
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 12:15
Acetone	U		0.33	50	µg/L	1	05/12/13 12:15
Benzene	U		0.18	1.0	µg/L	1	05/12/13 12:15
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 12:15
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 12:15
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 12:15
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 12:15
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 12:15
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 12:15
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 12:15
Chloroform	31		0.15	1.0	µg/L	1	05/12/13 12:15
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 12:15
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 12:15
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 12:15
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 12:15
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 12:15
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 12:15
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 12:15
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 12:15
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 12:15
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 12:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-006
Collection Date: 05/01/13 08:30 AM

Work Order: 1305241
Lab ID: 1305241-06
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 12:15
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 12:15
Styrene	U		0.11	1.0	µg/L	1	05/12/13 12:15
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 12:15
Toluene	U		0.12	1.0	µg/L	1	05/12/13 12:15
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 12:15
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 12:15
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 12:15
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 12:15
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 12:15
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 12:15
Surr: 1,2-Dichloroethane-d4	99.4			70-120	%REC	1	05/12/13 12:15
Surr: 4-Bromofluorobenzene	97.6			75-120	%REC	1	05/12/13 12:15
Surr: Dibromofluoromethane	108			85-115	%REC	1	05/12/13 12:15
Surr: Toluene-d8	94.8			85-120	%REC	1	05/12/13 12:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-007
Collection Date: 05/01/13 10:10 AM

Work Order: 1305241
Lab ID: 1305241-07
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120587</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 12:36
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 12:36
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 12:36
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 12:36
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 12:36
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 12:36
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 12:36
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 12:36
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 12:36
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 12:36
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 12:36
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 12:36
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 12:36
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 12:36
2-Butanone	U		0.22	25	µg/L	1	05/12/13 12:36
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 12:36
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 12:36
Acetone	U		0.33	50	µg/L	1	05/12/13 12:36
Benzene	U		0.18	1.0	µg/L	1	05/12/13 12:36
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 12:36
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 12:36
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 12:36
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 12:36
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 12:36
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 12:36
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 12:36
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 12:36
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 12:36
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 12:36
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 12:36
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 12:36
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 12:36
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 12:36
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 12:36
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 12:36
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 12:36
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 12:36

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-007
Collection Date: 05/01/13 10:10 AM

Work Order: 1305241
Lab ID: 1305241-07
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 12:36
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 12:36
Styrene	U		0.11	1.0	µg/L	1	05/12/13 12:36
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 12:36
Toluene	U		0.12	1.0	µg/L	1	05/12/13 12:36
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 12:36
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 12:36
Trichloroethene	3.8		0.14	1.0	µg/L	1	05/12/13 12:36
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 12:36
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 12:36
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 12:36
Surr: 1,2-Dichloroethane-d4	96.6			70-120	%REC	1	05/12/13 12:36
Surr: 4-Bromofluorobenzene	96.9			75-120	%REC	1	05/12/13 12:36
Surr: Dibromofluoromethane	101			85-115	%REC	1	05/12/13 12:36
Surr: Toluene-d8	97.0			85-120	%REC	1	05/12/13 12:36

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-008
Collection Date: 05/01/13 11:59 AM

Work Order: 1305241
Lab ID: 1305241-08
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470			Prep: SW7470 / 5/13/13	Analyst: LR
<u>BatchID:</u> 48372							
Mercury	U		0.00010	0.00020	mg/L	1	05/13/13 14:46
METALS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/11/13	Analyst: ML
<u>BatchID:</u> 48339							
Antimony	0.00012	J	0.000036	0.0050	mg/L	1	05/15/13 14:34
Arsenic	U		0.00058	0.0050	mg/L	1	05/15/13 14:34
Barium	0.11		0.000063	0.0050	mg/L	1	05/15/13 14:34
Beryllium	U		0.000082	0.0020	mg/L	1	05/15/13 14:34
Cadmium	0.00039	J	0.000045	0.0020	mg/L	1	05/15/13 14:34
Chromium	0.00036	J	0.00027	0.0050	mg/L	1	05/15/13 14:34
Cobalt	0.00036	J	0.000041	0.0050	mg/L	1	05/15/13 14:34
Copper	U		0.00053	0.0050	mg/L	1	05/15/13 14:34
Lead	0.00083	J	0.000051	0.0050	mg/L	1	05/15/13 14:34
Manganese	0.079		0.000054	0.0050	mg/L	1	05/15/13 14:34
Molybdenum	0.00060	J	0.000088	0.0050	mg/L	1	05/15/13 14:34
Nickel	0.0020	J	0.00025	0.0050	mg/L	1	05/15/13 14:34
Selenium	U		0.00064	0.0050	mg/L	1	05/15/13 14:34
Silver	U		0.000042	0.0050	mg/L	1	05/15/13 14:34
Thallium	U		0.000062	0.0050	mg/L	1	05/15/13 14:34
Vanadium	U		0.00016	0.0050	mg/L	1	05/15/13 14:34
Zinc	0.38		0.00048	0.010	mg/L	1	05/15/13 14:34
VOLATILE ORGANIC COMPOUNDS							
			SW8260				Analyst: RS
<u>BatchID:</u> R120587							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 12:58
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 12:58
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 12:58
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 12:58
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 12:58
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 12:58
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 12:58
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 12:58
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 12:58
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 12:58
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 12:58
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 12:58
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 12:58
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 12:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-008
Collection Date: 05/01/13 11:59 AM

Work Order: 1305241
Lab ID: 1305241-08
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.22	25	µg/L	1	05/12/13 12:58
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 12:58
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 12:58
Acetone	U		0.33	50	µg/L	1	05/12/13 12:58
Benzene	U		0.18	1.0	µg/L	1	05/12/13 12:58
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 12:58
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 12:58
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 12:58
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 12:58
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 12:58
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 12:58
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 12:58
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 12:58
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 12:58
cis-1,2-Dichloroethene	20		0.11	1.0	µg/L	1	05/12/13 12:58
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 12:58
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 12:58
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 12:58
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 12:58
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 12:58
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 12:58
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 12:58
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 12:58
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 12:58
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 12:58
Styrene	U		0.11	1.0	µg/L	1	05/12/13 12:58
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 12:58
Toluene	U		0.12	1.0	µg/L	1	05/12/13 12:58
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 12:58
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 12:58
Trichloroethene	10		0.14	1.0	µg/L	1	05/12/13 12:58
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 12:58
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 12:58
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 12:58
Surr: 1,2-Dichloroethane-d4	98.5			70-120	%REC	1	05/12/13 12:58
Surr: 4-Bromofluorobenzene	98.4			75-120	%REC	1	05/12/13 12:58
Surr: Dibromofluoromethane	106			85-115	%REC	1	05/12/13 12:58
Surr: Toluene-d8	97.2			85-120	%REC	1	05/12/13 12:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WS-17360-050113-MR-009
Collection Date: 05/01/13 12:15 PM

Work Order: 1305241
Lab ID: 1305241-09
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120587</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 01:19
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 01:19
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 01:19
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 01:19
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 01:19
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 01:19
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 01:19
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 01:19
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 01:19
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 01:19
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 01:19
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 01:19
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 01:19
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 01:19
2-Butanone	U		0.22	25	µg/L	1	05/12/13 01:19
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 01:19
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 01:19
Acetone	U		0.33	50	µg/L	1	05/12/13 01:19
Benzene	U		0.18	1.0	µg/L	1	05/12/13 01:19
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 01:19
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 01:19
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 01:19
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 01:19
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 01:19
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 01:19
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 01:19
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 01:19
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 01:19
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 01:19
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 01:19
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 01:19
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 01:19
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 01:19
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 01:19
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 01:19
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 01:19
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 01:19

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WS-17360-050113-MR-009
Collection Date: 05/01/13 12:15 PM

Work Order: 1305241
Lab ID: 1305241-09
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 01:19
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 01:19
Styrene	U		0.11	1.0	µg/L	1	05/12/13 01:19
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 01:19
Toluene	U		0.12	1.0	µg/L	1	05/12/13 01:19
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 01:19
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 01:19
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 01:19
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 01:19
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 01:19
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 01:19
Surr: 1,2-Dichloroethane-d4	97.5			70-120	%REC	1	05/12/13 01:19
Surr: 4-Bromofluorobenzene	93.9			75-120	%REC	1	05/12/13 01:19
Surr: Dibromofluoromethane	106			85-115	%REC	1	05/12/13 01:19
Surr: Toluene-d8	94.2			85-120	%REC	1	05/12/13 01:19

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-010
Collection Date: 05/01/13 12:52 PM

Work Order: 1305241
Lab ID: 1305241-10
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120587</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 01:40
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 01:40
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 01:40
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 01:40
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 01:40
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 01:40
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 01:40
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 01:40
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 01:40
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 01:40
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 01:40
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 01:40
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 01:40
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 01:40
2-Butanone	U		0.22	25	µg/L	1	05/12/13 01:40
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 01:40
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 01:40
Acetone	U		0.33	50	µg/L	1	05/12/13 01:40
Benzene	U		0.18	1.0	µg/L	1	05/12/13 01:40
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 01:40
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 01:40
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 01:40
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 01:40
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 01:40
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 01:40
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 01:40
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 01:40
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 01:40
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 01:40
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 01:40
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 01:40
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 01:40
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 01:40
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 01:40
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 01:40
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 01:40
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 01:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-010
Collection Date: 05/01/13 12:52 PM

Work Order: 1305241
Lab ID: 1305241-10
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 01:40
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 01:40
Styrene	U		0.11	1.0	µg/L	1	05/12/13 01:40
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 01:40
Toluene	U		0.12	1.0	µg/L	1	05/12/13 01:40
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 01:40
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 01:40
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 01:40
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 01:40
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 01:40
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 01:40
Surr: 1,2-Dichloroethane-d4	97.6			70-120	%REC	1	05/12/13 01:40
Surr: 4-Bromofluorobenzene	96.0			75-120	%REC	1	05/12/13 01:40
Surr: Dibromofluoromethane	102			85-115	%REC	1	05/12/13 01:40
Surr: Toluene-d8	95.8			85-120	%REC	1	05/12/13 01:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-011
Collection Date: 05/01/13 01:55 PM

Work Order: 1305241
Lab ID: 1305241-11
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120588</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 11:13
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 11:13
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 11:13
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 11:13
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 11:13
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 11:13
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 11:13
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 11:13
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 11:13
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 11:13
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 11:13
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 11:13
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 11:13
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 11:13
2-Butanone	U		0.22	25	µg/L	1	05/12/13 11:13
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 11:13
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 11:13
Acetone	U		0.33	50	µg/L	1	05/12/13 11:13
Benzene	U		0.18	1.0	µg/L	1	05/12/13 11:13
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 11:13
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 11:13
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 11:13
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 11:13
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 11:13
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 11:13
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 11:13
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 11:13
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 11:13
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 11:13
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 11:13
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 11:13
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 11:13
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 11:13
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 11:13
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 11:13
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 11:13
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 11:13

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-011
Collection Date: 05/01/13 01:55 PM

Work Order: 1305241
Lab ID: 1305241-11
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 11:13
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 11:13
Styrene	U		0.11	1.0	µg/L	1	05/12/13 11:13
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 11:13
Toluene	U		0.12	1.0	µg/L	1	05/12/13 11:13
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 11:13
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 11:13
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 11:13
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 11:13
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 11:13
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 11:13
Surr: 1,2-Dichloroethane-d4	96.8			70-120	%REC	1	05/12/13 11:13
Surr: 4-Bromofluorobenzene	95.8			75-120	%REC	1	05/12/13 11:13
Surr: Dibromofluoromethane	104			85-115	%REC	1	05/12/13 11:13
Surr: Toluene-d8	97.7			85-120	%REC	1	05/12/13 11:13

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-012
Collection Date: 05/01/13 02:20 PM

Work Order: 1305241
Lab ID: 1305241-12
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120587</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 02:25
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 02:25
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 02:25
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 02:25
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 02:25
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 02:25
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 02:25
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 02:25
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 02:25
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 02:25
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 02:25
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 02:25
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 02:25
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 02:25
2-Butanone	U		0.22	25	µg/L	1	05/12/13 02:25
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 02:25
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 02:25
Acetone	U		0.33	50	µg/L	1	05/12/13 02:25
Benzene	U		0.18	1.0	µg/L	1	05/12/13 02:25
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 02:25
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 02:25
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 02:25
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 02:25
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 02:25
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 02:25
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 02:25
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 02:25
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 02:25
cis-1,2-Dichloroethene	2.4		0.11	1.0	µg/L	1	05/12/13 02:25
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 02:25
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 02:25
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 02:25
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 02:25
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 02:25
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 02:25
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 02:25
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 02:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-012
Collection Date: 05/01/13 02:20 PM

Work Order: 1305241
Lab ID: 1305241-12
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 02:25
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 02:25
Styrene	U		0.11	1.0	µg/L	1	05/12/13 02:25
Tetrachloroethene	2.1		0.15	1.0	µg/L	1	05/12/13 02:25
Toluene	U		0.12	1.0	µg/L	1	05/12/13 02:25
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 02:25
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 02:25
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 02:25
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 02:25
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 02:25
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 02:25
Surr: 1,2-Dichloroethane-d4	96.8			70-120	%REC	1	05/12/13 02:25
Surr: 4-Bromofluorobenzene	97.4			75-120	%REC	1	05/12/13 02:25
Surr: Dibromofluoromethane	104			85-115	%REC	1	05/12/13 02:25
Surr: Toluene-d8	101			85-120	%REC	1	05/12/13 02:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-013
Collection Date: 05/01/13 02:35 PM

Work Order: 1305241
Lab ID: 1305241-13
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120587</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 02:46
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 02:46
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 02:46
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 02:46
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 02:46
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 02:46
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 02:46
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 02:46
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 02:46
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 02:46
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 02:46
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 02:46
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 02:46
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 02:46
2-Butanone	U		0.22	25	µg/L	1	05/12/13 02:46
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 02:46
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 02:46
Acetone	U		0.33	50	µg/L	1	05/12/13 02:46
Benzene	U		0.18	1.0	µg/L	1	05/12/13 02:46
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 02:46
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 02:46
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 02:46
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 02:46
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 02:46
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 02:46
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 02:46
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 02:46
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 02:46
cis-1,2-Dichloroethene	3.6		0.11	1.0	µg/L	1	05/12/13 02:46
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 02:46
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 02:46
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 02:46
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 02:46
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 02:46
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 02:46
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 02:46
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 02:46

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-013
Collection Date: 05/01/13 02:35 PM

Work Order: 1305241
Lab ID: 1305241-13
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 02:46
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 02:46
Styrene	U		0.11	1.0	µg/L	1	05/12/13 02:46
Tetrachloroethene	7.4		0.15	1.0	µg/L	1	05/12/13 02:46
Toluene	U		0.12	1.0	µg/L	1	05/12/13 02:46
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 02:46
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 02:46
Trichloroethene	2.3		0.14	1.0	µg/L	1	05/12/13 02:46
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 02:46
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 02:46
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 02:46
Surr: 1,2-Dichloroethane-d4	97.5			70-120	%REC	1	05/12/13 02:46
Surr: 4-Bromofluorobenzene	97.2			75-120	%REC	1	05/12/13 02:46
Surr: Dibromofluoromethane	107			85-115	%REC	1	05/12/13 02:46
Surr: Toluene-d8	96.4			85-120	%REC	1	05/12/13 02:46

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-014
Collection Date: 05/01/13 03:39 PM

Work Order: 1305241
Lab ID: 1305241-14
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120587</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 03:08
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 03:08
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 03:08
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 03:08
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 03:08
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 03:08
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 03:08
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 03:08
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 03:08
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 03:08
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 03:08
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 03:08
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 03:08
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 03:08
2-Butanone	U		0.22	25	µg/L	1	05/12/13 03:08
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 03:08
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 03:08
Acetone	U		0.33	50	µg/L	1	05/12/13 03:08
Benzene	U		0.18	1.0	µg/L	1	05/12/13 03:08
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 03:08
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 03:08
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 03:08
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 03:08
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 03:08
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 03:08
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 03:08
Chloroform	1.6		0.15	1.0	µg/L	1	05/12/13 03:08
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 03:08
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 03:08
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 03:08
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 03:08
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 03:08
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 03:08
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 03:08
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 03:08
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 03:08
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 03:08

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-014
Collection Date: 05/01/13 03:39 PM

Work Order: 1305241
Lab ID: 1305241-14
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 03:08
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 03:08
Styrene	U		0.11	1.0	µg/L	1	05/12/13 03:08
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 03:08
Toluene	U		0.12	1.0	µg/L	1	05/12/13 03:08
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 03:08
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 03:08
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 03:08
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 03:08
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 03:08
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 03:08
Surr: 1,2-Dichloroethane-d4	98.1			70-120	%REC	1	05/12/13 03:08
Surr: 4-Bromofluorobenzene	96.8			75-120	%REC	1	05/12/13 03:08
Surr: Dibromofluoromethane	104			85-115	%REC	1	05/12/13 03:08
Surr: Toluene-d8	98.5			85-120	%REC	1	05/12/13 03:08

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-015
Collection Date: 05/01/13 03:49 PM

Work Order: 1305241
Lab ID: 1305241-15
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: RS	
BatchID: R120587							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 03:29
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 03:29
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 03:29
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 03:29
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 03:29
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 03:29
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 03:29
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 03:29
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 03:29
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 03:29
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 03:29
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 03:29
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 03:29
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 03:29
2-Butanone	U		0.22	25	µg/L	1	05/12/13 03:29
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 03:29
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 03:29
Acetone	U		0.33	50	µg/L	1	05/12/13 03:29
Benzene	U		0.18	1.0	µg/L	1	05/12/13 03:29
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 03:29
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 03:29
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 03:29
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 03:29
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 03:29
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 03:29
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 03:29
Chloroform	1.6		0.15	1.0	µg/L	1	05/12/13 03:29
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 03:29
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 03:29
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 03:29
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 03:29
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 03:29
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 03:29
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 03:29
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 03:29
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 03:29
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 03:29

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-015
Collection Date: 05/01/13 03:49 PM

Work Order: 1305241
Lab ID: 1305241-15
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 03:29
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 03:29
Styrene	U		0.11	1.0	µg/L	1	05/12/13 03:29
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 03:29
Toluene	U		0.12	1.0	µg/L	1	05/12/13 03:29
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 03:29
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 03:29
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 03:29
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 03:29
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 03:29
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 03:29
Surr: 1,2-Dichloroethane-d4	98.0			70-120	%REC	1	05/12/13 03:29
Surr: 4-Bromofluorobenzene	97.0			75-120	%REC	1	05/12/13 03:29
Surr: Dibromofluoromethane	105			85-115	%REC	1	05/12/13 03:29
Surr: Toluene-d8	96.6			85-120	%REC	1	05/12/13 03:29

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-016
Collection Date: 05/01/13 04:09 PM

Work Order: 1305241
Lab ID: 1305241-16
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120587</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 03:50
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 03:50
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 03:50
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 03:50
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 03:50
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 03:50
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 03:50
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 03:50
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 03:50
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 03:50
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 03:50
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 03:50
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 03:50
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 03:50
2-Butanone	U		0.22	25	µg/L	1	05/12/13 03:50
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 03:50
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 03:50
Acetone	U		0.33	50	µg/L	1	05/12/13 03:50
Benzene	U		0.18	1.0	µg/L	1	05/12/13 03:50
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 03:50
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 03:50
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 03:50
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 03:50
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 03:50
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 03:50
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 03:50
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 03:50
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 03:50
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 03:50
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 03:50
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 03:50
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 03:50
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 03:50
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 03:50
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 03:50
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 03:50
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 03:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-016
Collection Date: 05/01/13 04:09 PM

Work Order: 1305241
Lab ID: 1305241-16
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 03:50
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 03:50
Styrene	U		0.11	1.0	µg/L	1	05/12/13 03:50
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 03:50
Toluene	U		0.12	1.0	µg/L	1	05/12/13 03:50
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 03:50
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 03:50
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 03:50
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 03:50
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 03:50
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 03:50
Surr: 1,2-Dichloroethane-d4	98.3			70-120	%REC	1	05/12/13 03:50
Surr: 4-Bromofluorobenzene	96.2			75-120	%REC	1	05/12/13 03:50
Surr: Dibromofluoromethane	103			85-115	%REC	1	05/12/13 03:50
Surr: Toluene-d8	96.0			85-120	%REC	1	05/12/13 03:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-017
Collection Date: 05/01/13 05:00 PM

Work Order: 1305241
Lab ID: 1305241-17
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 12:37
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 12:37
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 12:37
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 12:37
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 12:37
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 12:37
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 12:37
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 12:37
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 12:37
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 12:37
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 12:37
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 12:37
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 12:37
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 12:37
2-Butanone	U		0.22	25	µg/L	1	05/12/13 12:37
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 12:37
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 12:37
Acetone	U		0.33	50	µg/L	1	05/12/13 12:37
Benzene	U		0.18	1.0	µg/L	1	05/12/13 12:37
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 12:37
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 12:37
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 12:37
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 12:37
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 12:37
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 12:37
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 12:37
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 12:37
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 12:37
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 12:37
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 12:37
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 12:37
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 12:37
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 12:37
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 12:37
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 12:37
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 12:37
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 12:37

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-017
Collection Date: 05/01/13 05:00 PM

Work Order: 1305241
Lab ID: 1305241-17
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 12:37
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 12:37
Styrene	U		0.11	1.0	µg/L	1	05/12/13 12:37
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 12:37
Toluene	U		0.12	1.0	µg/L	1	05/12/13 12:37
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 12:37
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 12:37
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 12:37
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 12:37
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 12:37
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 12:37
Surr: 1,2-Dichloroethane-d4	95.3			70-120	%REC	1	05/12/13 12:37
Surr: 4-Bromofluorobenzene	88.4			75-120	%REC	1	05/12/13 12:37
Surr: Dibromofluoromethane	89.6			85-115	%REC	1	05/12/13 12:37
Surr: Toluene-d8	96.2			85-120	%REC	1	05/12/13 12:37

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-018
Collection Date: 05/01/13 06:42 PM

Work Order: 1305241
Lab ID: 1305241-18
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 01:02
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 01:02
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 01:02
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 01:02
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 01:02
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 01:02
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 01:02
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 01:02
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 01:02
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 01:02
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 01:02
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 01:02
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 01:02
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 01:02
2-Butanone	U		0.22	25	µg/L	1	05/12/13 01:02
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 01:02
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 01:02
Acetone	U		0.33	50	µg/L	1	05/12/13 01:02
Benzene	U		0.18	1.0	µg/L	1	05/12/13 01:02
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 01:02
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 01:02
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 01:02
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 01:02
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 01:02
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 01:02
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 01:02
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 01:02
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 01:02
cis-1,2-Dichloroethene	1.2		0.11	1.0	µg/L	1	05/12/13 01:02
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 01:02
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 01:02
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 01:02
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 01:02
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 01:02
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 01:02
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 01:02
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 01:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050113-MR-018
Collection Date: 05/01/13 06:42 PM

Work Order: 1305241
Lab ID: 1305241-18
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 01:02
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 01:02
Styrene	U		0.11	1.0	µg/L	1	05/12/13 01:02
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 01:02
Toluene	U		0.12	1.0	µg/L	1	05/12/13 01:02
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 01:02
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 01:02
Trichloroethene	7.9		0.14	1.0	µg/L	1	05/12/13 01:02
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 01:02
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 01:02
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 01:02
Surr: 1,2-Dichloroethane-d4	95.8			70-120	%REC	1	05/12/13 01:02
Surr: 4-Bromofluorobenzene	93.0			75-120	%REC	1	05/12/13 01:02
Surr: Dibromofluoromethane	92.0			85-115	%REC	1	05/12/13 01:02
Surr: Toluene-d8	97.4			85-120	%REC	1	05/12/13 01:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-019
Collection Date: 05/02/13 08:59 AM

Work Order: 1305241
Lab ID: 1305241-19
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 01:28
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 01:28
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 01:28
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 01:28
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 01:28
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 01:28
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 01:28
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 01:28
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 01:28
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 01:28
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 01:28
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 01:28
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 01:28
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 01:28
2-Butanone	U		0.22	25	µg/L	1	05/12/13 01:28
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 01:28
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 01:28
Acetone	U		0.33	50	µg/L	1	05/12/13 01:28
Benzene	U		0.18	1.0	µg/L	1	05/12/13 01:28
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 01:28
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 01:28
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 01:28
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 01:28
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 01:28
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 01:28
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 01:28
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 01:28
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 01:28
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 01:28
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 01:28
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 01:28
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 01:28
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 01:28
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 01:28
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 01:28
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 01:28
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 01:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-019
Collection Date: 05/02/13 08:59 AM

Work Order: 1305241
Lab ID: 1305241-19
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 01:28
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 01:28
Styrene	U		0.11	1.0	µg/L	1	05/12/13 01:28
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 01:28
Toluene	U		0.12	1.0	µg/L	1	05/12/13 01:28
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 01:28
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 01:28
Trichloroethene	4.3		0.14	1.0	µg/L	1	05/12/13 01:28
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 01:28
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 01:28
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 01:28
Surr: 1,2-Dichloroethane-d4	96.0			70-120	%REC	1	05/12/13 01:28
Surr: 4-Bromofluorobenzene	98.6			75-120	%REC	1	05/12/13 01:28
Surr: Dibromofluoromethane	94.8			85-115	%REC	1	05/12/13 01:28
Surr: Toluene-d8	101			85-120	%REC	1	05/12/13 01:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-020
Collection Date: 05/02/13 10:04 AM

Work Order: 1305241
Lab ID: 1305241-20
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 01:53
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 01:53
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 01:53
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 01:53
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 01:53
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 01:53
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 01:53
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 01:53
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 01:53
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 01:53
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 01:53
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 01:53
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 01:53
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 01:53
2-Butanone	U		0.22	25	µg/L	1	05/12/13 01:53
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 01:53
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 01:53
Acetone	U		0.33	50	µg/L	1	05/12/13 01:53
Benzene	U		0.18	1.0	µg/L	1	05/12/13 01:53
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 01:53
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 01:53
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 01:53
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 01:53
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 01:53
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 01:53
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 01:53
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 01:53
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 01:53
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 01:53
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 01:53
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 01:53
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 01:53
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 01:53
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 01:53
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 01:53
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 01:53
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 01:53

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-020
Collection Date: 05/02/13 10:04 AM

Work Order: 1305241
Lab ID: 1305241-20
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 01:53
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 01:53
Styrene	U		0.11	1.0	µg/L	1	05/12/13 01:53
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 01:53
Toluene	U		0.12	1.0	µg/L	1	05/12/13 01:53
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 01:53
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 01:53
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 01:53
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 01:53
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 01:53
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 01:53
Surr: 1,2-Dichloroethane-d4	92.2			70-120	%REC	1	05/12/13 01:53
Surr: 4-Bromofluorobenzene	95.4			75-120	%REC	1	05/12/13 01:53
Surr: Dibromofluoromethane	94.4			85-115	%REC	1	05/12/13 01:53
Surr: Toluene-d8	97.2			85-120	%REC	1	05/12/13 01:53

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-021
Collection Date: 05/02/13 10:39 AM

Work Order: 1305241
Lab ID: 1305241-21
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
BatchID: R120585							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 02:18
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 02:18
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 02:18
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 02:18
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 02:18
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 02:18
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 02:18
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 02:18
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 02:18
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 02:18
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 02:18
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 02:18
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 02:18
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 02:18
2-Butanone	U		0.22	25	µg/L	1	05/12/13 02:18
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 02:18
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 02:18
Acetone	U		0.33	50	µg/L	1	05/12/13 02:18
Benzene	U		0.18	1.0	µg/L	1	05/12/13 02:18
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 02:18
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 02:18
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 02:18
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 02:18
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 02:18
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 02:18
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 02:18
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 02:18
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 02:18
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 02:18
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 02:18
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 02:18
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 02:18
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 02:18
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 02:18
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 02:18
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 02:18
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 02:18

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-021
Collection Date: 05/02/13 10:39 AM

Work Order: 1305241
Lab ID: 1305241-21
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 02:18
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 02:18
Styrene	U		0.11	1.0	µg/L	1	05/12/13 02:18
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 02:18
Toluene	U		0.12	1.0	µg/L	1	05/12/13 02:18
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 02:18
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 02:18
Trichloroethene	1.8		0.14	1.0	µg/L	1	05/12/13 02:18
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 02:18
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 02:18
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 02:18
Surr: 1,2-Dichloroethane-d4	95.2			70-120	%REC	1	05/12/13 02:18
Surr: 4-Bromofluorobenzene	94.6			75-120	%REC	1	05/12/13 02:18
Surr: Dibromofluoromethane	93.0			85-115	%REC	1	05/12/13 02:18
Surr: Toluene-d8	99.0			85-120	%REC	1	05/12/13 02:18

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-022
Collection Date: 05/02/13 12:35 PM

Work Order: 1305241
Lab ID: 1305241-22
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 02:43
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 02:43
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 02:43
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 02:43
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 02:43
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 02:43
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 02:43
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 02:43
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 02:43
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 02:43
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 02:43
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 02:43
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 02:43
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 02:43
2-Butanone	U		0.22	25	µg/L	1	05/12/13 02:43
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 02:43
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 02:43
Acetone	U		0.33	50	µg/L	1	05/12/13 02:43
Benzene	U		0.18	1.0	µg/L	1	05/12/13 02:43
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 02:43
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 02:43
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 02:43
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 02:43
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 02:43
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 02:43
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 02:43
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 02:43
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 02:43
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 02:43
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 02:43
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 02:43
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 02:43
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 02:43
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 02:43
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 02:43
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 02:43
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 02:43

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-022
Collection Date: 05/02/13 12:35 PM

Work Order: 1305241
Lab ID: 1305241-22
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 02:43
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 02:43
Styrene	U		0.11	1.0	µg/L	1	05/12/13 02:43
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 02:43
Toluene	U		0.12	1.0	µg/L	1	05/12/13 02:43
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 02:43
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 02:43
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 02:43
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 02:43
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 02:43
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 02:43
Surr: 1,2-Dichloroethane-d4	97.0			70-120	%REC	1	05/12/13 02:43
Surr: 4-Bromofluorobenzene	93.4			75-120	%REC	1	05/12/13 02:43
Surr: Dibromofluoromethane	93.4			85-115	%REC	1	05/12/13 02:43
Surr: Toluene-d8	97.0			85-120	%REC	1	05/12/13 02:43

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-023
Collection Date: 05/02/13 01:18 PM

Work Order: 1305241
Lab ID: 1305241-23
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 03:08
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 03:08
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 03:08
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 03:08
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 03:08
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 03:08
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 03:08
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 03:08
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 03:08
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 03:08
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 03:08
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 03:08
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 03:08
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 03:08
2-Butanone	U		0.22	25	µg/L	1	05/12/13 03:08
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 03:08
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 03:08
Acetone	U		0.33	50	µg/L	1	05/12/13 03:08
Benzene	U		0.18	1.0	µg/L	1	05/12/13 03:08
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 03:08
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 03:08
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 03:08
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 03:08
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 03:08
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 03:08
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 03:08
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 03:08
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 03:08
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 03:08
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 03:08
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 03:08
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 03:08
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 03:08
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 03:08
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 03:08
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 03:08
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 03:08

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-023
Collection Date: 05/02/13 01:18 PM

Work Order: 1305241
Lab ID: 1305241-23
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 03:08
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 03:08
Styrene	U		0.11	1.0	µg/L	1	05/12/13 03:08
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 03:08
Toluene	U		0.12	1.0	µg/L	1	05/12/13 03:08
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 03:08
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 03:08
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 03:08
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 03:08
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 03:08
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 03:08
Surr: 1,2-Dichloroethane-d4	94.8			70-120	%REC	1	05/12/13 03:08
Surr: 4-Bromofluorobenzene	93.4			75-120	%REC	1	05/12/13 03:08
Surr: Dibromofluoromethane	94.2			85-115	%REC	1	05/12/13 03:08
Surr: Toluene-d8	96.8			85-120	%REC	1	05/12/13 03:08

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-024
Collection Date: 05/02/13 01:54 PM

Work Order: 1305241
Lab ID: 1305241-24
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 03:33
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 03:33
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 03:33
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 03:33
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 03:33
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 03:33
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 03:33
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 03:33
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 03:33
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 03:33
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 03:33
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 03:33
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 03:33
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 03:33
2-Butanone	U		0.22	25	µg/L	1	05/12/13 03:33
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 03:33
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 03:33
Acetone	U		0.33	50	µg/L	1	05/12/13 03:33
Benzene	U		0.18	1.0	µg/L	1	05/12/13 03:33
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 03:33
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 03:33
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 03:33
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 03:33
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 03:33
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 03:33
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 03:33
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 03:33
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 03:33
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 03:33
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 03:33
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 03:33
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 03:33
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 03:33
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 03:33
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 03:33
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 03:33
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 03:33

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-024
Collection Date: 05/02/13 01:54 PM

Work Order: 1305241
Lab ID: 1305241-24
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 03:33
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 03:33
Styrene	U		0.11	1.0	µg/L	1	05/12/13 03:33
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 03:33
Toluene	U		0.12	1.0	µg/L	1	05/12/13 03:33
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 03:33
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 03:33
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 03:33
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 03:33
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 03:33
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 03:33
Surr: 1,2-Dichloroethane-d4	96.2			70-120	%REC	1	05/12/13 03:33
Surr: 4-Bromofluorobenzene	92.6			75-120	%REC	1	05/12/13 03:33
Surr: Dibromofluoromethane	93.6			85-115	%REC	1	05/12/13 03:33
Surr: Toluene-d8	98.2			85-120	%REC	1	05/12/13 03:33

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-025
Collection Date: 05/02/13 02:04 PM

Work Order: 1305241
Lab ID: 1305241-25
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 03:58
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 03:58
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 03:58
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 03:58
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 03:58
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 03:58
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 03:58
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 03:58
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 03:58
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 03:58
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 03:58
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 03:58
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 03:58
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 03:58
2-Butanone	U		0.22	25	µg/L	1	05/12/13 03:58
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 03:58
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 03:58
Acetone	U		0.33	50	µg/L	1	05/12/13 03:58
Benzene	U		0.18	1.0	µg/L	1	05/12/13 03:58
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 03:58
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 03:58
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 03:58
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 03:58
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 03:58
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 03:58
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 03:58
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 03:58
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 03:58
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 03:58
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 03:58
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 03:58
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 03:58
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 03:58
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 03:58
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 03:58
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 03:58
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 03:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-025
Collection Date: 05/02/13 02:04 PM

Work Order: 1305241
Lab ID: 1305241-25
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 03:58
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 03:58
Styrene	U		0.11	1.0	µg/L	1	05/12/13 03:58
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 03:58
Toluene	U		0.12	1.0	µg/L	1	05/12/13 03:58
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 03:58
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 03:58
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 03:58
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 03:58
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 03:58
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 03:58
Surr: 1,2-Dichloroethane-d4	95.2			70-120	%REC	1	05/12/13 03:58
Surr: 4-Bromofluorobenzene	99.0			75-120	%REC	1	05/12/13 03:58
Surr: Dibromofluoromethane	94.6			85-115	%REC	1	05/12/13 03:58
Surr: Toluene-d8	97.4			85-120	%REC	1	05/12/13 03:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-026
Collection Date: 05/02/13 03:31 PM

Work Order: 1305241
Lab ID: 1305241-26
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 04:25
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 04:25
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 04:25
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 04:25
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 04:25
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 04:25
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 04:25
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 04:25
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 04:25
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 04:25
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 04:25
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 04:25
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 04:25
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 04:25
2-Butanone	U		0.22	25	µg/L	1	05/12/13 04:25
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 04:25
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 04:25
Acetone	U		0.33	50	µg/L	1	05/12/13 04:25
Benzene	U		0.18	1.0	µg/L	1	05/12/13 04:25
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 04:25
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 04:25
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 04:25
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 04:25
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 04:25
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 04:25
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 04:25
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 04:25
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 04:25
cis-1,2-Dichloroethene	65		0.11	1.0	µg/L	1	05/12/13 04:25
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 04:25
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 04:25
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 04:25
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 04:25
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 04:25
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 04:25
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 04:25
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 04:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-026
Collection Date: 05/02/13 03:31 PM

Work Order: 1305241
Lab ID: 1305241-26
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 04:25
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 04:25
Styrene	U		0.11	1.0	µg/L	1	05/12/13 04:25
Tetrachloroethene	79		0.15	1.0	µg/L	1	05/12/13 04:25
Toluene	U		0.12	1.0	µg/L	1	05/12/13 04:25
trans-1,2-Dichloroethene	1.2		0.12	1.0	µg/L	1	05/12/13 04:25
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 04:25
Trichloroethene	7.6		0.14	1.0	µg/L	1	05/12/13 04:25
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 04:25
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 04:25
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 04:25
Surr: 1,2-Dichloroethane-d4	96.4			70-120	%REC	1	05/12/13 04:25
Surr: 4-Bromofluorobenzene	98.9			75-120	%REC	1	05/12/13 04:25
Surr: Dibromofluoromethane	94.6			85-115	%REC	1	05/12/13 04:25
Surr: Toluene-d8	100			85-120	%REC	1	05/12/13 04:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-027
Collection Date: 05/02/13 04:22 PM

Work Order: 1305241
Lab ID: 1305241-27
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 04:50
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 04:50
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 04:50
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 04:50
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 04:50
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 04:50
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 04:50
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 04:50
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 04:50
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 04:50
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 04:50
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 04:50
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 04:50
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 04:50
2-Butanone	U		0.22	25	µg/L	1	05/12/13 04:50
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 04:50
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 04:50
Acetone	U		0.33	50	µg/L	1	05/12/13 04:50
Benzene	U		0.18	1.0	µg/L	1	05/12/13 04:50
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 04:50
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 04:50
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 04:50
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 04:50
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 04:50
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 04:50
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 04:50
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 04:50
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 04:50
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 04:50
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 04:50
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 04:50
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 04:50
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 04:50
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 04:50
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 04:50
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 04:50
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 04:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-027
Collection Date: 05/02/13 04:22 PM

Work Order: 1305241
Lab ID: 1305241-27
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 04:50
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 04:50
Styrene	U		0.11	1.0	µg/L	1	05/12/13 04:50
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 04:50
Toluene	U		0.12	1.0	µg/L	1	05/12/13 04:50
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 04:50
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 04:50
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 04:50
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 04:50
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 04:50
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 04:50
Surr: 1,2-Dichloroethane-d4	97.6			70-120	%REC	1	05/12/13 04:50
Surr: 4-Bromofluorobenzene	98.4			75-120	%REC	1	05/12/13 04:50
Surr: Dibromofluoromethane	95.1			85-115	%REC	1	05/12/13 04:50
Surr: Toluene-d8	99.4			85-120	%REC	1	05/12/13 04:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-028
Collection Date: 05/02/13 05:02 PM

Work Order: 1305241
Lab ID: 1305241-28
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 05:15
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 05:15
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 05:15
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 05:15
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 05:15
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 05:15
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 05:15
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 05:15
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 05:15
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 05:15
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 05:15
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 05:15
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 05:15
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 05:15
2-Butanone	U		0.22	25	µg/L	1	05/12/13 05:15
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 05:15
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 05:15
Acetone	U		0.33	50	µg/L	1	05/12/13 05:15
Benzene	U		0.18	1.0	µg/L	1	05/12/13 05:15
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 05:15
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 05:15
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 05:15
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 05:15
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 05:15
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 05:15
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 05:15
Chloroform	3.0		0.15	1.0	µg/L	1	05/12/13 05:15
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 05:15
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 05:15
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 05:15
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 05:15
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 05:15
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 05:15
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 05:15
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 05:15
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 05:15
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 05:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050213-MR-028
Collection Date: 05/02/13 05:02 PM

Work Order: 1305241
Lab ID: 1305241-28
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 05:15
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 05:15
Styrene	U		0.11	1.0	µg/L	1	05/12/13 05:15
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 05:15
Toluene	U		0.12	1.0	µg/L	1	05/12/13 05:15
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 05:15
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 05:15
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 05:15
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 05:15
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 05:15
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 05:15
Surr: 1,2-Dichloroethane-d4	96.8			70-120	%REC	1	05/12/13 05:15
Surr: 4-Bromofluorobenzene	92.8			75-120	%REC	1	05/12/13 05:15
Surr: Dibromofluoromethane	96.0			85-115	%REC	1	05/12/13 05:15
Surr: Toluene-d8	98.6			85-120	%REC	1	05/12/13 05:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-029
Collection Date: 05/03/13 10:40 AM

Work Order: 1305241
Lab ID: 1305241-29
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 05:40
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 05:40
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 05:40
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 05:40
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 05:40
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 05:40
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 05:40
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 05:40
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 05:40
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 05:40
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 05:40
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 05:40
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 05:40
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 05:40
2-Butanone	U		0.22	25	µg/L	1	05/12/13 05:40
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 05:40
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 05:40
Acetone	U		0.33	50	µg/L	1	05/12/13 05:40
Benzene	U		0.18	1.0	µg/L	1	05/12/13 05:40
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 05:40
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 05:40
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 05:40
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 05:40
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 05:40
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 05:40
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 05:40
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 05:40
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 05:40
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 05:40
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 05:40
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 05:40
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 05:40
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 05:40
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 05:40
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 05:40
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 05:40
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 05:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-029
Collection Date: 05/03/13 10:40 AM

Work Order: 1305241
Lab ID: 1305241-29
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 05:40
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 05:40
Styrene	U		0.11	1.0	µg/L	1	05/12/13 05:40
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 05:40
Toluene	U		0.12	1.0	µg/L	1	05/12/13 05:40
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 05:40
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 05:40
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 05:40
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 05:40
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 05:40
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 05:40
Surr: 1,2-Dichloroethane-d4	96.9			70-120	%REC	1	05/12/13 05:40
Surr: 4-Bromofluorobenzene	95.1			75-120	%REC	1	05/12/13 05:40
Surr: Dibromofluoromethane	93.4			85-115	%REC	1	05/12/13 05:40
Surr: Toluene-d8	96.1			85-120	%REC	1	05/12/13 05:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-030
Collection Date: 05/03/13 11:40 AM

Work Order: 1305241
Lab ID: 1305241-30
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 06:04
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 06:04
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 06:04
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 06:04
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 06:04
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 06:04
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 06:04
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 06:04
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 06:04
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 06:04
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 06:04
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 06:04
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 06:04
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 06:04
2-Butanone	U		0.22	25	µg/L	1	05/12/13 06:04
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 06:04
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 06:04
Acetone	U		0.33	50	µg/L	1	05/12/13 06:04
Benzene	U		0.18	1.0	µg/L	1	05/12/13 06:04
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 06:04
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 06:04
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 06:04
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 06:04
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 06:04
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 06:04
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 06:04
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 06:04
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 06:04
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 06:04
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 06:04
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 06:04
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 06:04
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 06:04
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 06:04
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 06:04
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 06:04
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 06:04

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-030
Collection Date: 05/03/13 11:40 AM

Work Order: 1305241
Lab ID: 1305241-30
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 06:04
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 06:04
Styrene	U		0.11	1.0	µg/L	1	05/12/13 06:04
Tetrachloroethene	1.8		0.15	1.0	µg/L	1	05/12/13 06:04
Toluene	U		0.12	1.0	µg/L	1	05/12/13 06:04
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 06:04
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 06:04
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 06:04
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 06:04
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 06:04
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 06:04
Surr: 1,2-Dichloroethane-d4	90.6			70-120	%REC	1	05/12/13 06:04
Surr: 4-Bromofluorobenzene	91.6			75-120	%REC	1	05/12/13 06:04
Surr: Dibromofluoromethane	89.6			85-115	%REC	1	05/12/13 06:04
Surr: Toluene-d8	93.4			85-120	%REC	1	05/12/13 06:04

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-031
Collection Date: 05/03/13 10:21 AM

Work Order: 1305241
Lab ID: 1305241-31
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470			Prep: SW7470 / 5/13/13	Analyst: LR
<u>BatchID: 48372</u>							
Mercury	U		0.00010	0.00020	mg/L	1	05/13/13 14:55
METALS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/11/13	Analyst: ML
<u>BatchID: 48339</u>							
Antimony	0.00016	J	0.000036	0.0050	mg/L	1	05/15/13 14:40
Arsenic	0.00064	J	0.00058	0.0050	mg/L	1	05/15/13 14:40
Barium	0.055		0.000063	0.0050	mg/L	1	05/15/13 14:40
Beryllium	U		0.000082	0.0020	mg/L	1	05/15/13 14:40
Cadmium	0.000061	J	0.000045	0.0020	mg/L	1	05/15/13 14:40
Chromium	U		0.00027	0.0050	mg/L	1	05/15/13 14:40
Cobalt	0.0029	J	0.000041	0.0050	mg/L	1	05/15/13 14:40
Copper	0.011		0.00053	0.0050	mg/L	1	05/15/13 14:40
Lead	0.00043	J	0.000051	0.0050	mg/L	1	05/15/13 14:40
Manganese	0.91		0.000054	0.0050	mg/L	1	05/15/13 14:40
Molybdenum	0.0014	J	0.000088	0.0050	mg/L	1	05/15/13 14:40
Nickel	0.0087		0.00025	0.0050	mg/L	1	05/15/13 14:40
Selenium	0.0029	J	0.00064	0.0050	mg/L	1	05/15/13 14:40
Silver	U		0.000042	0.0050	mg/L	1	05/15/13 14:40
Thallium	U		0.000062	0.0050	mg/L	1	05/15/13 14:40
Vanadium	0.00018	J	0.00016	0.0050	mg/L	1	05/15/13 14:40
Zinc	0.0018	J	0.00048	0.010	mg/L	1	05/15/13 14:40
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3510 / 5/8/13	Analyst: RM
<u>BatchID: 48246</u>							
1,1'-Biphenyl	U		0.095	5.0	µg/L	1	05/09/13 13:05
2,4,5-Trichlorophenol	U		0.12	5.0	µg/L	1	05/09/13 13:05
2,4,6-Trichlorophenol	U		0.11	4.0	µg/L	1	05/09/13 13:05
2,4-Dichlorophenol	U		0.22	10	µg/L	1	05/09/13 13:05
2,4-Dimethylphenol	U		0.24	5.0	µg/L	1	05/09/13 13:05
2,4-Dinitrophenol	U		0.76	5.0	µg/L	1	05/09/13 13:05
2,4-Dinitrotoluene	U		0.78	5.0	µg/L	1	05/09/13 13:05
2,6-Dinitrotoluene	U		0.82	5.0	µg/L	1	05/09/13 13:05
2-Chloronaphthalene	U		0.13	5.0	µg/L	1	05/09/13 13:05
2-Chlorophenol	U		0.73	5.0	µg/L	1	05/09/13 13:05
2-Methylnaphthalene	U		0.13	5.0	µg/L	1	05/09/13 13:05
2-Methylphenol	U		0.60	5.0	µg/L	1	05/09/13 13:05
2-Nitroaniline	U		0.11	20	µg/L	1	05/09/13 13:05
2-Nitrophenol	U		0.19	5.0	µg/L	1	05/09/13 13:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-031
Collection Date: 05/03/13 10:21 AM

Work Order: 1305241
Lab ID: 1305241-31
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
3,3'-Dichlorobenzidine	U		0.54	1.0	µg/L	1	05/09/13 13:05
3-Nitroaniline	U		2.5	20	µg/L	1	05/09/13 13:05
4,6-Dinitro-2-methylphenol	U		0.34	20	µg/L	1	05/09/13 13:05
4-Bromophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/09/13 13:05
4-Chloro-3-methylphenol	U		0.65	5.0	µg/L	1	05/09/13 13:05
4-Chloroaniline	U		1.1	10	µg/L	1	05/09/13 13:05
4-Chlorophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/09/13 13:05
4-Methylphenol	U		0.55	5.0	µg/L	1	05/09/13 13:05
4-Nitroaniline	U		1.5	20	µg/L	1	05/09/13 13:05
4-Nitrophenol	U		1.6	20	µg/L	1	05/09/13 13:05
Acenaphthene	U		0.11	5.0	µg/L	1	05/09/13 13:05
Acenaphthylene	U		0.12	5.0	µg/L	1	05/09/13 13:05
Acetophenone	U		0.090	1.0	µg/L	1	05/09/13 13:05
Anthracene	U		0.72	5.0	µg/L	1	05/09/13 13:05
Atrazine	U		0.13	3.0	µg/L	1	05/09/13 13:05
Benzaldehyde	U		0.46	1.0	µg/L	1	05/09/13 13:05
Benzo(a)anthracene	U		0.57	1.0	µg/L	1	05/09/13 13:05
Benzo(a)pyrene	U		0.10	1.0	µg/L	1	05/09/13 13:05
Benzo(b)fluoranthene	U		0.74	1.0	µg/L	1	05/09/13 13:05
Benzo(g,h,i)perylene	U		0.70	1.0	µg/L	1	05/09/13 13:05
Benzo(k)fluoranthene	U		0.17	1.0	µg/L	1	05/09/13 13:05
Bis(2-chloroethoxy)methane	U		0.13	5.0	µg/L	1	05/09/13 13:05
Bis(2-chloroethyl)ether	U		0.11	1.0	µg/L	1	05/09/13 13:05
Bis(2-chloroisopropyl)ether	U		0.12	5.0	µg/L	1	05/09/13 13:05
Bis(2-ethylhexyl)phthalate	U		0.12	5.0	µg/L	1	05/09/13 13:05
Butyl benzyl phthalate	U		0.11	5.0	µg/L	1	05/09/13 13:05
Caprolactam	U		4.7	10	µg/L	1	05/09/13 13:05
Carbazole	U		0.84	10	µg/L	1	05/09/13 13:05
Chrysene	U		0.71	1.0	µg/L	1	05/09/13 13:05
Dibenzo(a,h)anthracene	U		0.67	2.0	µg/L	1	05/09/13 13:05
Dibenzofuran	U		0.11	4.0	µg/L	1	05/09/13 13:05
Diethyl phthalate	U		0.69	5.0	µg/L	1	05/09/13 13:05
Dimethyl phthalate	U		0.14	5.0	µg/L	1	05/09/13 13:05
Di-n-butyl phthalate	U		0.71	5.0	µg/L	1	05/09/13 13:05
Di-n-octyl phthalate	U		0.12	5.0	µg/L	1	05/09/13 13:05
Fluoranthene	U		0.77	1.0	µg/L	1	05/09/13 13:05
Fluorene	U		0.10	5.0	µg/L	1	05/09/13 13:05
Hexachlorobenzene	U		0.10	1.0	µg/L	1	05/09/13 13:05
Hexachlorobutadiene	U		0.12	1.0	µg/L	1	05/09/13 13:05
Hexachlorocyclopentadiene	U		0.18	5.0	µg/L	1	05/09/13 13:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-031
Collection Date: 05/03/13 10:21 AM

Work Order: 1305241
Lab ID: 1305241-31
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachloroethane	U		0.13	5.0	µg/L	1	05/09/13 13:05
Indeno(1,2,3-cd)pyrene	U		0.69	2.0	µg/L	1	05/09/13 13:05
Isophorone	U		0.12	5.0	µg/L	1	05/09/13 13:05
Naphthalene	U		0.12	5.0	µg/L	1	05/09/13 13:05
Nitrobenzene	U		0.10	3.0	µg/L	1	05/09/13 13:05
N-Nitrosodi-n-propylamine	U		0.13	5.0	µg/L	1	05/09/13 13:05
N-Nitrosodiphenylamine	U		0.81	5.0	µg/L	1	05/09/13 13:05
Pentachlorophenol	U		0.11	1.0	µg/L	1	05/09/13 13:05
Phenanthrene	U		0.86	2.0	µg/L	1	05/09/13 13:05
Phenol	U		0.094	5.0	µg/L	1	05/09/13 13:05
Pyrene	U		0.65	5.0	µg/L	1	05/09/13 13:05
Surr: 2,4,6-Tribromophenol	65.7			32-115	%REC	1	05/09/13 13:05
Surr: 2-Fluorobiphenyl	60.5			32-100	%REC	1	05/09/13 13:05
Surr: 2-Fluorophenol	30.2			22-59	%REC	1	05/09/13 13:05
Surr: 4-Terphenyl-d14	86.7			23-112	%REC	1	05/09/13 13:05
Surr: Nitrobenzene-d5	57.7			31-93	%REC	1	05/09/13 13:05
Surr: Phenol-d6	20.6			13-36	%REC	1	05/09/13 13:05

VOLATILE ORGANIC COMPOUNDS

SW8260

Analyst: RS

BatchID: R120585

1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 07:14
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 07:14
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 07:14
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 07:14
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 07:14
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 07:14
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 07:14
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 07:14
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 07:14
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 07:14
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 07:14
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 07:14
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 07:14
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 07:14
2-Butanone	U		0.22	25	µg/L	1	05/12/13 07:14
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 07:14
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 07:14
Acetone	U		0.33	50	µg/L	1	05/12/13 07:14
Benzene	U		0.18	1.0	µg/L	1	05/12/13 07:14
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 07:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-031
Collection Date: 05/03/13 10:21 AM

Work Order: 1305241
Lab ID: 1305241-31
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 07:14
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 07:14
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 07:14
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 07:14
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 07:14
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 07:14
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 07:14
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 07:14
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 07:14
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 07:14
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 07:14
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 07:14
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 07:14
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 07:14
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 07:14
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 07:14
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 07:14
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 07:14
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 07:14
Styrene	U		0.11	1.0	µg/L	1	05/12/13 07:14
Tetrachloroethene	1.9		0.15	1.0	µg/L	1	05/12/13 07:14
Toluene	U		0.12	1.0	µg/L	1	05/12/13 07:14
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 07:14
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 07:14
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 07:14
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 07:14
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 07:14
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 07:14
Surr: 1,2-Dichloroethane-d4	93.9			70-120	%REC	1	05/12/13 07:14
Surr: 4-Bromofluorobenzene	94.3			75-120	%REC	1	05/12/13 07:14
Surr: Dibromofluoromethane	95.2			85-115	%REC	1	05/12/13 07:14
Surr: Toluene-d8	95.2			85-120	%REC	1	05/12/13 07:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-032
Collection Date: 05/03/13 11:42 AM

Work Order: 1305241
Lab ID: 1305241-32
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			SW7470			Prep: SW7470 / 5/13/13	Analyst: LR
BatchID: <u>48372</u>							
Mercury	U		0.00010	0.00020	mg/L	1	05/13/13 14:57
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/11/13	Analyst: ML
BatchID: <u>48339</u>							
Antimony	0.00075	J	0.000036	0.0050	mg/L	1	05/15/13 14:46
Arsenic	0.012		0.00058	0.0050	mg/L	1	05/15/13 14:46
Barium	0.042		0.000063	0.0050	mg/L	1	05/15/13 14:46
Beryllium	U		0.000082	0.0020	mg/L	1	05/15/13 14:46
Cadmium	0.00028	J	0.000045	0.0020	mg/L	1	05/15/13 14:46
Chromium	0.00043	J	0.00027	0.0050	mg/L	1	05/15/13 14:46
Cobalt	0.0057		0.000041	0.0050	mg/L	1	05/15/13 14:46
Copper	0.021		0.00053	0.0050	mg/L	1	05/15/13 14:46
Lead	0.0052		0.000051	0.0050	mg/L	1	05/15/13 14:46
Manganese	0.64		0.000054	0.0050	mg/L	1	05/15/13 14:46
Molybdenum	0.027		0.000088	0.0050	mg/L	1	05/15/13 14:46
Nickel	0.019		0.00025	0.0050	mg/L	1	05/15/13 14:46
Selenium	0.0012	J	0.00064	0.0050	mg/L	1	05/15/13 14:46
Silver	U		0.000042	0.0050	mg/L	1	05/15/13 14:46
Thallium	U		0.000062	0.0050	mg/L	1	05/15/13 14:46
Vanadium	0.00065	J	0.00016	0.0050	mg/L	1	05/15/13 14:46
Zinc	0.0068	J	0.00048	0.010	mg/L	1	05/15/13 14:46
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270			Prep: SW3510 / 5/8/13	Analyst: RM
BatchID: <u>48246</u>							
1,1'-Biphenyl	U		0.095	5.0	µg/L	1	05/09/13 09:47
2,4,5-Trichlorophenol	U		0.12	5.0	µg/L	1	05/09/13 09:47
2,4,6-Trichlorophenol	U		0.11	4.0	µg/L	1	05/09/13 09:47
2,4-Dichlorophenol	U		0.22	10	µg/L	1	05/09/13 09:47
2,4-Dimethylphenol	U		0.24	5.0	µg/L	1	05/09/13 09:47
2,4-Dinitrophenol	U		0.76	5.0	µg/L	1	05/09/13 09:47
2,4-Dinitrotoluene	U		0.78	5.0	µg/L	1	05/09/13 09:47
2,6-Dinitrotoluene	U		0.82	5.0	µg/L	1	05/09/13 09:47
2-Chloronaphthalene	U		0.13	5.0	µg/L	1	05/09/13 09:47
2-Chlorophenol	U		0.73	5.0	µg/L	1	05/09/13 09:47
2-Methylnaphthalene	U		0.13	5.0	µg/L	1	05/09/13 09:47
2-Methylphenol	U		0.60	5.0	µg/L	1	05/09/13 09:47
2-Nitroaniline	U		0.11	20	µg/L	1	05/09/13 09:47
2-Nitrophenol	U		0.19	5.0	µg/L	1	05/09/13 09:47

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-032
Collection Date: 05/03/13 11:42 AM

Work Order: 1305241
Lab ID: 1305241-32
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
3,3'-Dichlorobenzidine	U		0.54	1.0	µg/L	1	05/09/13 09:47
3-Nitroaniline	U		2.5	20	µg/L	1	05/09/13 09:47
4,6-Dinitro-2-methylphenol	U		0.34	20	µg/L	1	05/09/13 09:47
4-Bromophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/09/13 09:47
4-Chloro-3-methylphenol	U		0.65	5.0	µg/L	1	05/09/13 09:47
4-Chloroaniline	U		1.1	10	µg/L	1	05/09/13 09:47
4-Chlorophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/09/13 09:47
4-Methylphenol	U		0.55	5.0	µg/L	1	05/09/13 09:47
4-Nitroaniline	U		1.5	20	µg/L	1	05/09/13 09:47
4-Nitrophenol	U		1.6	20	µg/L	1	05/09/13 09:47
Acenaphthene	U		0.11	5.0	µg/L	1	05/09/13 09:47
Acenaphthylene	U		0.12	5.0	µg/L	1	05/09/13 09:47
Acetophenone	U		0.090	1.0	µg/L	1	05/09/13 09:47
Anthracene	U		0.72	5.0	µg/L	1	05/09/13 09:47
Atrazine	U		0.13	3.0	µg/L	1	05/09/13 09:47
Benzaldehyde	U		0.46	1.0	µg/L	1	05/09/13 09:47
Benzo(a)anthracene	U		0.57	1.0	µg/L	1	05/09/13 09:47
Benzo(a)pyrene	U		0.10	1.0	µg/L	1	05/09/13 09:47
Benzo(b)fluoranthene	U		0.74	1.0	µg/L	1	05/09/13 09:47
Benzo(g,h,i)perylene	U		0.70	1.0	µg/L	1	05/09/13 09:47
Benzo(k)fluoranthene	U		0.17	1.0	µg/L	1	05/09/13 09:47
Bis(2-chloroethoxy)methane	U		0.13	5.0	µg/L	1	05/09/13 09:47
Bis(2-chloroethyl)ether	U		0.11	1.0	µg/L	1	05/09/13 09:47
Bis(2-chloroisopropyl)ether	U		0.12	5.0	µg/L	1	05/09/13 09:47
Bis(2-ethylhexyl)phthalate	U		0.12	5.0	µg/L	1	05/09/13 09:47
Butyl benzyl phthalate	U		0.11	5.0	µg/L	1	05/09/13 09:47
Caprolactam	U		4.7	10	µg/L	1	05/09/13 09:47
Carbazole	U		0.84	10	µg/L	1	05/09/13 09:47
Chrysene	U		0.71	1.0	µg/L	1	05/09/13 09:47
Dibenzo(a,h)anthracene	U		0.67	2.0	µg/L	1	05/09/13 09:47
Dibenzofuran	U		0.11	4.0	µg/L	1	05/09/13 09:47
Diethyl phthalate	U		0.69	5.0	µg/L	1	05/09/13 09:47
Dimethyl phthalate	U		0.14	5.0	µg/L	1	05/09/13 09:47
Di-n-butyl phthalate	U		0.71	5.0	µg/L	1	05/09/13 09:47
Di-n-octyl phthalate	U		0.12	5.0	µg/L	1	05/09/13 09:47
Fluoranthene	U		0.77	1.0	µg/L	1	05/09/13 09:47
Fluorene	U		0.10	5.0	µg/L	1	05/09/13 09:47
Hexachlorobenzene	U		0.10	1.0	µg/L	1	05/09/13 09:47
Hexachlorobutadiene	U		0.12	1.0	µg/L	1	05/09/13 09:47
Hexachlorocyclopentadiene	U		0.18	5.0	µg/L	1	05/09/13 09:47

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-032
Collection Date: 05/03/13 11:42 AM

Work Order: 1305241
Lab ID: 1305241-32
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachloroethane	U		0.13	5.0	µg/L	1	05/09/13 09:47
Indeno(1,2,3-cd)pyrene	U		0.69	2.0	µg/L	1	05/09/13 09:47
Isophorone	U		0.12	5.0	µg/L	1	05/09/13 09:47
Naphthalene	U		0.12	5.0	µg/L	1	05/09/13 09:47
Nitrobenzene	U		0.10	3.0	µg/L	1	05/09/13 09:47
N-Nitrosodi-n-propylamine	U		0.13	5.0	µg/L	1	05/09/13 09:47
N-Nitrosodiphenylamine	U		0.81	5.0	µg/L	1	05/09/13 09:47
Pentachlorophenol	U		0.11	1.0	µg/L	1	05/09/13 09:47
Phenanthrene	U		0.86	2.0	µg/L	1	05/09/13 09:47
Phenol	U		0.094	5.0	µg/L	1	05/09/13 09:47
Pyrene	U		0.65	5.0	µg/L	1	05/09/13 09:47
Surr: 2,4,6-Tribromophenol	59.4			32-115	%REC	1	05/09/13 09:47
Surr: 2-Fluorobiphenyl	68.1			32-100	%REC	1	05/09/13 09:47
Surr: 2-Fluorophenol	28.6			22-59	%REC	1	05/09/13 09:47
Surr: 4-Terphenyl-d14	97.7			23-112	%REC	1	05/09/13 09:47
Surr: Nitrobenzene-d5	61.2			31-93	%REC	1	05/09/13 09:47
Surr: Phenol-d6	20.3			13-36	%REC	1	05/09/13 09:47

VOLATILE ORGANIC COMPOUNDS

SW8260

Analyst: RS

BatchID: R120709

1,1,1-Trichloroethane	U		0.68	5.0	µg/L	5	05/14/13 21:40
1,1,2,2-Tetrachloroethane	U		0.65	5.0	µg/L	5	05/14/13 21:40
1,1,2-Trichloroethane	U		0.42	5.0	µg/L	5	05/14/13 21:40
1,1,2-Trichlorotrifluoroethane	U		0.90	5.0	µg/L	5	05/14/13 21:40
1,1-Dichloroethane	U		0.55	5.0	µg/L	5	05/14/13 21:40
1,1-Dichloroethene	U		0.58	5.0	µg/L	5	05/14/13 21:40
1,2,4-Trichlorobenzene	U		0.82	25	µg/L	5	05/14/13 21:40
1,2-Dibromo-3-chloropropane	U		1.6	5.0	µg/L	5	05/14/13 21:40
1,2-Dibromoethane	U		0.82	5.0	µg/L	5	05/14/13 21:40
1,2-Dichlorobenzene	U		0.66	5.0	µg/L	5	05/14/13 21:40
1,2-Dichloroethane	U		0.76	5.0	µg/L	5	05/14/13 21:40
1,2-Dichloropropane	U		0.66	5.0	µg/L	5	05/14/13 21:40
1,3-Dichlorobenzene	U		0.80	5.0	µg/L	5	05/14/13 21:40
1,4-Dichlorobenzene	U		0.73	5.0	µg/L	5	05/14/13 21:40
2-Butanone	U		1.1	120	µg/L	5	05/14/13 21:40
2-Hexanone	U		0.60	250	µg/L	5	05/14/13 21:40
4-Methyl-2-pentanone	15	J	0.48	250	µg/L	5	05/14/13 21:40
Acetone	U		1.6	250	µg/L	5	05/14/13 21:40
Benzene	U		0.92	5.0	µg/L	5	05/14/13 21:40
Bromodichloromethane	U		0.58	5.0	µg/L	5	05/14/13 21:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-032
Collection Date: 05/03/13 11:42 AM

Work Order: 1305241
Lab ID: 1305241-32
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		0.74	5.0	µg/L	5	05/14/13 21:40
Bromomethane	U		1.1	25	µg/L	5	05/14/13 21:40
Carbon disulfide	U		0.87	25	µg/L	5	05/14/13 21:40
Carbon tetrachloride	U		0.62	5.0	µg/L	5	05/14/13 21:40
Chlorobenzene	U		0.63	5.0	µg/L	5	05/14/13 21:40
Chloroethane	U		2.3	25	µg/L	5	05/14/13 21:40
Chloroform	U		0.76	5.0	µg/L	5	05/14/13 21:40
Chloromethane	U		0.80	25	µg/L	5	05/14/13 21:40
cis-1,2-Dichloroethene	U		0.56	5.0	µg/L	5	05/14/13 21:40
cis-1,3-Dichloropropene	U		0.40	5.0	µg/L	5	05/14/13 21:40
Cyclohexane	U		1.1	5.0	µg/L	5	05/14/13 21:40
Dibromochloromethane	U		0.66	25	µg/L	5	05/14/13 21:40
Dichlorodifluoromethane	U		0.99	25	µg/L	5	05/14/13 21:40
Ethylbenzene	U		0.67	5.0	µg/L	5	05/14/13 21:40
Isopropylbenzene	U		0.68	25	µg/L	5	05/14/13 21:40
Methyl acetate	U		0.96	50	µg/L	5	05/14/13 21:40
Methyl tert-butyl ether	U		0.35	25	µg/L	5	05/14/13 21:40
Methylcyclohexane	U		4.9	5.0	µg/L	5	05/14/13 21:40
Methylene chloride	U		0.93	25	µg/L	5	05/14/13 21:40
Styrene	U		0.54	5.0	µg/L	5	05/14/13 21:40
Tetrachloroethene	U		0.76	5.0	µg/L	5	05/14/13 21:40
Toluene	U		0.61	5.0	µg/L	5	05/14/13 21:40
trans-1,2-Dichloroethene	U		0.62	5.0	µg/L	5	05/14/13 21:40
trans-1,3-Dichloropropene	U		0.74	5.0	µg/L	5	05/14/13 21:40
Trichloroethene	U		0.68	5.0	µg/L	5	05/14/13 21:40
Trichlorofluoromethane	U		0.90	5.0	µg/L	5	05/14/13 21:40
Vinyl chloride	U		0.86	5.0	µg/L	5	05/14/13 21:40
Xylenes, Total	U		1.4	15	µg/L	5	05/14/13 21:40
Surr: 1,2-Dichloroethane-d4	100			70-120	%REC	5	05/14/13 21:40
Surr: 4-Bromofluorobenzene	98.0			75-120	%REC	5	05/14/13 21:40
Surr: Dibromofluoromethane	101			85-115	%REC	5	05/14/13 21:40
Surr: Toluene-d8	99.4			85-120	%REC	5	05/14/13 21:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-033
Collection Date: 05/03/13 11:55 AM

Work Order: 1305241
Lab ID: 1305241-33
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120585</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 07:40
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 07:40
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 07:40
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 07:40
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 07:40
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 07:40
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 07:40
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 07:40
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 07:40
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 07:40
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 07:40
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 07:40
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 07:40
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 07:40
2-Butanone	U		0.22	25	µg/L	1	05/12/13 07:40
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 07:40
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 07:40
Acetone	U		0.33	50	µg/L	1	05/12/13 07:40
Benzene	U		0.18	1.0	µg/L	1	05/12/13 07:40
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 07:40
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 07:40
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 07:40
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 07:40
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 07:40
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 07:40
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 07:40
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 07:40
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 07:40
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 07:40
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 07:40
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 07:40
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 07:40
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 07:40
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 07:40
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 07:40
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 07:40
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 07:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-033
Collection Date: 05/03/13 11:55 AM

Work Order: 1305241
Lab ID: 1305241-33
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 07:40
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 07:40
Styrene	U		0.11	1.0	µg/L	1	05/12/13 07:40
Tetrachloroethene	4.4		0.15	1.0	µg/L	1	05/12/13 07:40
Toluene	U		0.12	1.0	µg/L	1	05/12/13 07:40
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 07:40
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 07:40
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 07:40
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 07:40
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 07:40
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 07:40
Surr: 1,2-Dichloroethane-d4	97.6			70-120	%REC	1	05/12/13 07:40
Surr: 4-Bromofluorobenzene	96.0			75-120	%REC	1	05/12/13 07:40
Surr: Dibromofluoromethane	93.0			85-115	%REC	1	05/12/13 07:40
Surr: Toluene-d8	99.0			85-120	%REC	1	05/12/13 07:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-034
Collection Date: 05/03/13 12:20 PM

Work Order: 1305241
Lab ID: 1305241-34
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep: SW3510 / 5/8/13		Analyst: RM
<u>BatchID: 48246</u>							
1,1'-Biphenyl	U		0.095	5.0	µg/L	1	05/09/13 13:25
2,4,5-Trichlorophenol	U		0.12	5.0	µg/L	1	05/09/13 13:25
2,4,6-Trichlorophenol	U		0.11	4.0	µg/L	1	05/09/13 13:25
2,4-Dichlorophenol	U		0.22	10	µg/L	1	05/09/13 13:25
2,4-Dimethylphenol	U		0.24	5.0	µg/L	1	05/09/13 13:25
2,4-Dinitrophenol	U		0.76	5.0	µg/L	1	05/09/13 13:25
2,4-Dinitrotoluene	U		0.78	5.0	µg/L	1	05/09/13 13:25
2,6-Dinitrotoluene	U		0.82	5.0	µg/L	1	05/09/13 13:25
2-Chloronaphthalene	U		0.13	5.0	µg/L	1	05/09/13 13:25
2-Chlorophenol	U		0.73	5.0	µg/L	1	05/09/13 13:25
2-Methylnaphthalene	U		0.13	5.0	µg/L	1	05/09/13 13:25
2-Methylphenol	U		0.60	5.0	µg/L	1	05/09/13 13:25
2-Nitroaniline	U		0.11	20	µg/L	1	05/09/13 13:25
2-Nitrophenol	U		0.19	5.0	µg/L	1	05/09/13 13:25
3,3'-Dichlorobenzidine	U		0.54	1.0	µg/L	1	05/09/13 13:25
3-Nitroaniline	U		2.5	20	µg/L	1	05/09/13 13:25
4,6-Dinitro-2-methylphenol	U		0.34	20	µg/L	1	05/09/13 13:25
4-Bromophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/09/13 13:25
4-Chloro-3-methylphenol	U		0.65	5.0	µg/L	1	05/09/13 13:25
4-Chloroaniline	U		1.1	10	µg/L	1	05/09/13 13:25
4-Chlorophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/09/13 13:25
4-Methylphenol	U		0.55	5.0	µg/L	1	05/09/13 13:25
4-Nitroaniline	U		1.5	20	µg/L	1	05/09/13 13:25
4-Nitrophenol	U		1.6	20	µg/L	1	05/09/13 13:25
Acenaphthene	U		0.11	5.0	µg/L	1	05/09/13 13:25
Acenaphthylene	U		0.12	5.0	µg/L	1	05/09/13 13:25
Acetophenone	U		0.090	1.0	µg/L	1	05/09/13 13:25
Anthracene	U		0.72	5.0	µg/L	1	05/09/13 13:25
Atrazine	U		0.13	3.0	µg/L	1	05/09/13 13:25
Benzaldehyde	U		0.46	1.0	µg/L	1	05/09/13 13:25
Benzo(a)anthracene	U		0.57	1.0	µg/L	1	05/09/13 13:25
Benzo(a)pyrene	U		0.10	1.0	µg/L	1	05/09/13 13:25
Benzo(b)fluoranthene	U		0.74	1.0	µg/L	1	05/09/13 13:25
Benzo(g,h,i)perylene	U		0.70	1.0	µg/L	1	05/09/13 13:25
Benzo(k)fluoranthene	U		0.17	1.0	µg/L	1	05/09/13 13:25
Bis(2-chloroethoxy)methane	U		0.13	5.0	µg/L	1	05/09/13 13:25
Bis(2-chloroethyl)ether	U		0.11	1.0	µg/L	1	05/09/13 13:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-034
Collection Date: 05/03/13 12:20 PM

Work Order: 1305241
Lab ID: 1305241-34
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.12	5.0	µg/L	1	05/09/13 13:25
Bis(2-ethylhexyl)phthalate	U		0.12	5.0	µg/L	1	05/09/13 13:25
Butyl benzyl phthalate	U		0.11	5.0	µg/L	1	05/09/13 13:25
Caprolactam	U		4.7	10	µg/L	1	05/09/13 13:25
Carbazole	U		0.84	10	µg/L	1	05/09/13 13:25
Chrysene	U		0.71	1.0	µg/L	1	05/09/13 13:25
Dibenzo(a,h)anthracene	U		0.67	2.0	µg/L	1	05/09/13 13:25
Dibenzofuran	U		0.11	4.0	µg/L	1	05/09/13 13:25
Diethyl phthalate	U		0.69	5.0	µg/L	1	05/09/13 13:25
Dimethyl phthalate	U		0.14	5.0	µg/L	1	05/09/13 13:25
Di-n-butyl phthalate	U		0.71	5.0	µg/L	1	05/09/13 13:25
Di-n-octyl phthalate	U		0.12	5.0	µg/L	1	05/09/13 13:25
Fluoranthene	U		0.77	1.0	µg/L	1	05/09/13 13:25
Fluorene	U		0.10	5.0	µg/L	1	05/09/13 13:25
Hexachlorobenzene	U		0.10	1.0	µg/L	1	05/09/13 13:25
Hexachlorobutadiene	U		0.12	1.0	µg/L	1	05/09/13 13:25
Hexachlorocyclopentadiene	U		0.18	5.0	µg/L	1	05/09/13 13:25
Hexachloroethane	U		0.13	5.0	µg/L	1	05/09/13 13:25
Indeno(1,2,3-cd)pyrene	U		0.69	2.0	µg/L	1	05/09/13 13:25
Isophorone	U		0.12	5.0	µg/L	1	05/09/13 13:25
Naphthalene	U		0.12	5.0	µg/L	1	05/09/13 13:25
Nitrobenzene	U		0.10	3.0	µg/L	1	05/09/13 13:25
N-Nitrosodi-n-propylamine	U		0.13	5.0	µg/L	1	05/09/13 13:25
N-Nitrosodiphenylamine	U		0.81	5.0	µg/L	1	05/09/13 13:25
Pentachlorophenol	U		0.11	1.0	µg/L	1	05/09/13 13:25
Phenanthrene	U		0.86	2.0	µg/L	1	05/09/13 13:25
Phenol	U		0.094	5.0	µg/L	1	05/09/13 13:25
Pyrene	U		0.65	5.0	µg/L	1	05/09/13 13:25
Surr: 2,4,6-Tribromophenol	60.9			32-115	%REC	1	05/09/13 13:25
Surr: 2-Fluorobiphenyl	44.8			32-100	%REC	1	05/09/13 13:25
Surr: 2-Fluorophenol	29.9			22-59	%REC	1	05/09/13 13:25
Surr: 4-Terphenyl-d14	83.4			23-112	%REC	1	05/09/13 13:25
Surr: Nitrobenzene-d5	45.5			31-93	%REC	1	05/09/13 13:25
Surr: Phenol-d6	18.9			13-36	%REC	1	05/09/13 13:25
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: AK	
BatchID: R120665							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 11:25
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 11:25
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 11:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-034
Collection Date: 05/03/13 12:20 PM

Work Order: 1305241
Lab ID: 1305241-34
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 11:25
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 11:25
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 11:25
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 11:25
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 11:25
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 11:25
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 11:25
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 11:25
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 11:25
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 11:25
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 11:25
2-Butanone	U		0.22	25	µg/L	1	05/14/13 11:25
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 11:25
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 11:25
Acetone	U		0.33	50	µg/L	1	05/14/13 11:25
Benzene	U		0.18	1.0	µg/L	1	05/14/13 11:25
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 11:25
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 11:25
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 11:25
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 11:25
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 11:25
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 11:25
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 11:25
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 11:25
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 11:25
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 11:25
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 11:25
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 11:25
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 11:25
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 11:25
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 11:25
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 11:25
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 11:25
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 11:25
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 11:25
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 11:25
Styrene	U		0.11	1.0	µg/L	1	05/14/13 11:25
Tetrachloroethene	4.2		0.15	1.0	µg/L	1	05/14/13 11:25
Toluene	U		0.12	1.0	µg/L	1	05/14/13 11:25
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 11:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-034
Collection Date: 05/03/13 12:20 PM

Work Order: 1305241
Lab ID: 1305241-34
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 11:25
Trichloroethene	1.4		0.14	1.0	µg/L	1	05/14/13 11:25
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 11:25
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 11:25
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 11:25
Surr: 1,2-Dichloroethane-d4	101			70-120	%REC	1	05/14/13 11:25
Surr: 4-Bromofluorobenzene	93.3			75-120	%REC	1	05/14/13 11:25
Surr: Dibromofluoromethane	96.4			85-115	%REC	1	05/14/13 11:25
Surr: Toluene-d8	96.0			85-120	%REC	1	05/14/13 11:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-035
Collection Date: 05/03/13 04:52 PM

Work Order: 1305241
Lab ID: 1305241-35
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			SW7470			Prep: SW7470 / 5/13/13	Analyst: LR
<u>BatchID: 48372</u>							
Mercury	U		0.00010	0.00020	mg/L	1	05/13/13 15:03
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/11/13	Analyst: ML
<u>BatchID: 48339</u>							
Antimony	0.00011	J	0.000036	0.0050	mg/L	1	05/15/13 15:37
Arsenic	0.0066		0.00058	0.0050	mg/L	1	05/15/13 15:37
Barium	0.14		0.000063	0.0050	mg/L	1	05/15/13 15:37
Beryllium	U		0.000082	0.0020	mg/L	1	05/15/13 15:37
Cadmium	0.000075	J	0.000045	0.0020	mg/L	1	05/15/13 15:37
Chromium	0.00043	J	0.00027	0.0050	mg/L	1	05/15/13 15:37
Cobalt	0.00029	J	0.000041	0.0050	mg/L	1	05/15/13 15:37
Copper	U		0.00053	0.0050	mg/L	1	05/15/13 15:37
Lead	0.00018	J	0.000051	0.0050	mg/L	1	05/15/13 15:37
Manganese	0.083		0.000054	0.0050	mg/L	1	05/15/13 15:37
Molybdenum	0.00082	J	0.000088	0.0050	mg/L	1	05/15/13 15:37
Nickel	0.0013	J	0.00025	0.0050	mg/L	1	05/15/13 15:37
Selenium	0.00087	J	0.00064	0.0050	mg/L	1	05/15/13 15:37
Silver	0.000057	J	0.000042	0.0050	mg/L	1	05/15/13 15:37
Thallium	U		0.000062	0.0050	mg/L	1	05/15/13 15:37
Vanadium	U		0.00016	0.0050	mg/L	1	05/15/13 15:37
Zinc	0.0028	J	0.00048	0.010	mg/L	1	05/15/13 15:37
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120588</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 11:34
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 11:34
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 11:34
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 11:34
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 11:34
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 11:34
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 11:34
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 11:34
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 11:34
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 11:34
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 11:34
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 11:34
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 11:34
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 11:34

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-035
Collection Date: 05/03/13 04:52 PM

Work Order: 1305241
Lab ID: 1305241-35
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.22	25	µg/L	1	05/12/13 11:34
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 11:34
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 11:34
Acetone	U		0.33	50	µg/L	1	05/12/13 11:34
Benzene	U		0.18	1.0	µg/L	1	05/12/13 11:34
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 11:34
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 11:34
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 11:34
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 11:34
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 11:34
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 11:34
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 11:34
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 11:34
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 11:34
cis-1,2-Dichloroethene	9.3		0.11	1.0	µg/L	1	05/12/13 11:34
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 11:34
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 11:34
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 11:34
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 11:34
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 11:34
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 11:34
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 11:34
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 11:34
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 11:34
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 11:34
Styrene	U		0.11	1.0	µg/L	1	05/12/13 11:34
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 11:34
Toluene	U		0.12	1.0	µg/L	1	05/12/13 11:34
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 11:34
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 11:34
Trichloroethene	3.7		0.14	1.0	µg/L	1	05/12/13 11:34
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 11:34
Vinyl chloride	14		0.17	1.0	µg/L	1	05/12/13 11:34
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 11:34
Surr: 1,2-Dichloroethane-d4	97.3			70-120	%REC	1	05/12/13 11:34
Surr: 4-Bromofluorobenzene	96.2			75-120	%REC	1	05/12/13 11:34
Surr: Dibromofluoromethane	104			85-115	%REC	1	05/12/13 11:34
Surr: Toluene-d8	96.2			85-120	%REC	1	05/12/13 11:34

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-036
Collection Date: 05/03/13 04:17 PM

Work Order: 1305241
Lab ID: 1305241-36
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470			Prep: SW7470 / 5/13/13	Analyst: LR
<u>BatchID:</u> 48372							
Mercury	U		0.00010	0.00020	mg/L	1	05/13/13 15:05
METALS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/11/13	Analyst: ML
<u>BatchID:</u> 48339							
Antimony	0.00011	J	0.000036	0.0050	mg/L	1	05/15/13 15:43
Arsenic	U		0.00058	0.0050	mg/L	1	05/15/13 15:43
Barium	0.080		0.000063	0.0050	mg/L	1	05/15/13 15:43
Beryllium	U		0.000082	0.0020	mg/L	1	05/15/13 15:43
Cadmium	0.000053	J	0.000045	0.0020	mg/L	1	05/15/13 15:43
Chromium	0.0027	J	0.00027	0.0050	mg/L	1	05/15/13 15:43
Cobalt	0.0023	J	0.000041	0.0050	mg/L	1	05/15/13 15:43
Copper	0.0011	J	0.00053	0.0050	mg/L	1	05/15/13 15:43
Lead	0.00028	J	0.000051	0.0050	mg/L	1	05/15/13 15:43
Manganese	0.038		0.000054	0.0050	mg/L	1	05/15/13 15:43
Molybdenum	0.00037	J	0.000088	0.0050	mg/L	1	05/15/13 15:43
Nickel	0.0061		0.00025	0.0050	mg/L	1	05/15/13 15:43
Selenium	0.0022	J	0.00064	0.0050	mg/L	1	05/15/13 15:43
Silver	U		0.000042	0.0050	mg/L	1	05/15/13 15:43
Thallium	U		0.000062	0.0050	mg/L	1	05/15/13 15:43
Vanadium	U		0.00016	0.0050	mg/L	1	05/15/13 15:43
Zinc	0.0014	J	0.00048	0.010	mg/L	1	05/15/13 15:43
VOLATILE ORGANIC COMPOUNDS							
			SW8260				Analyst: RS
<u>BatchID:</u> R120588							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 11:55
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 11:55
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 11:55
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 11:55
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 11:55
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 11:55
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 11:55
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 11:55
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 11:55
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 11:55
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 11:55
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 11:55
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 11:55
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 11:55

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-036
Collection Date: 05/03/13 04:17 PM

Work Order: 1305241
Lab ID: 1305241-36
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.22	25	µg/L	1	05/12/13 11:55
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 11:55
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 11:55
Acetone	U		0.33	50	µg/L	1	05/12/13 11:55
Benzene	U		0.18	1.0	µg/L	1	05/12/13 11:55
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 11:55
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 11:55
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 11:55
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 11:55
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 11:55
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 11:55
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 11:55
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 11:55
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 11:55
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 11:55
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 11:55
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 11:55
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 11:55
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 11:55
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 11:55
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 11:55
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 11:55
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 11:55
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 11:55
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 11:55
Styrene	U		0.11	1.0	µg/L	1	05/12/13 11:55
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 11:55
Toluene	U		0.12	1.0	µg/L	1	05/12/13 11:55
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 11:55
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 11:55
Trichloroethene	17		0.14	1.0	µg/L	1	05/12/13 11:55
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 11:55
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 11:55
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 11:55
Surr: 1,2-Dichloroethane-d4	96.7			70-120	%REC	1	05/12/13 11:55
Surr: 4-Bromofluorobenzene	95.7			75-120	%REC	1	05/12/13 11:55
Surr: Dibromofluoromethane	102			85-115	%REC	1	05/12/13 11:55
Surr: Toluene-d8	98.7			85-120	%REC	1	05/12/13 11:55

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-037
Collection Date: 05/03/13 04:40 PM

Work Order: 1305241
Lab ID: 1305241-37
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270	Prep: SW3510 / 5/8/13			Analyst: RM
BatchID: 48246							
1,1`-Biphenyl	U		0.095	5.0	µg/L	1	05/09/13 13:45
2,4,5-Trichlorophenol	U		0.12	5.0	µg/L	1	05/09/13 13:45
2,4,6-Trichlorophenol	U		0.11	4.0	µg/L	1	05/09/13 13:45
2,4-Dichlorophenol	U		0.22	10	µg/L	1	05/09/13 13:45
2,4-Dimethylphenol	U		0.24	5.0	µg/L	1	05/09/13 13:45
2,4-Dinitrophenol	U		0.76	5.0	µg/L	1	05/09/13 13:45
2,4-Dinitrotoluene	U		0.78	5.0	µg/L	1	05/09/13 13:45
2,6-Dinitrotoluene	U		0.82	5.0	µg/L	1	05/09/13 13:45
2-Chloronaphthalene	U		0.13	5.0	µg/L	1	05/09/13 13:45
2-Chlorophenol	U		0.73	5.0	µg/L	1	05/09/13 13:45
2-Methylnaphthalene	U		0.13	5.0	µg/L	1	05/09/13 13:45
2-Methylphenol	U		0.60	5.0	µg/L	1	05/09/13 13:45
2-Nitroaniline	U		0.11	20	µg/L	1	05/09/13 13:45
2-Nitrophenol	U		0.19	5.0	µg/L	1	05/09/13 13:45
3,3`-Dichlorobenzidine	U		0.54	1.0	µg/L	1	05/09/13 13:45
3-Nitroaniline	U		2.5	20	µg/L	1	05/09/13 13:45
4,6-Dinitro-2-methylphenol	U		0.34	20	µg/L	1	05/09/13 13:45
4-Bromophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/09/13 13:45
4-Chloro-3-methylphenol	U		0.65	5.0	µg/L	1	05/09/13 13:45
4-Chloroaniline	U		1.1	10	µg/L	1	05/09/13 13:45
4-Chlorophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/09/13 13:45
4-Methylphenol	1.9	J	0.55	5.0	µg/L	1	05/09/13 13:45
4-Nitroaniline	U		1.5	20	µg/L	1	05/09/13 13:45
4-Nitrophenol	U		1.6	20	µg/L	1	05/09/13 13:45
Acenaphthene	U		0.11	5.0	µg/L	1	05/09/13 13:45
Acenaphthylene	U		0.12	5.0	µg/L	1	05/09/13 13:45
Acetophenone	0.89	J	0.090	1.0	µg/L	1	05/09/13 13:45
Anthracene	U		0.72	5.0	µg/L	1	05/09/13 13:45
Atrazine	U		0.13	3.0	µg/L	1	05/09/13 13:45
Benzaldehyde	U		0.46	1.0	µg/L	1	05/09/13 13:45
Benzo(a)anthracene	U		0.57	1.0	µg/L	1	05/09/13 13:45
Benzo(a)pyrene	U		0.10	1.0	µg/L	1	05/09/13 13:45
Benzo(b)fluoranthene	U		0.74	1.0	µg/L	1	05/09/13 13:45
Benzo(g,h,i)perylene	U		0.70	1.0	µg/L	1	05/09/13 13:45
Benzo(k)fluoranthene	U		0.17	1.0	µg/L	1	05/09/13 13:45
Bis(2-chloroethoxy)methane	U		0.13	5.0	µg/L	1	05/09/13 13:45
Bis(2-chloroethyl)ether	U		0.11	1.0	µg/L	1	05/09/13 13:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-037
Collection Date: 05/03/13 04:40 PM

Work Order: 1305241
Lab ID: 1305241-37
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.12	5.0	µg/L	1	05/09/13 13:45
Bis(2-ethylhexyl)phthalate	U		0.12	5.0	µg/L	1	05/09/13 13:45
Butyl benzyl phthalate	U		0.11	5.0	µg/L	1	05/09/13 13:45
Caprolactam	U		4.7	10	µg/L	1	05/09/13 13:45
Carbazole	U		0.84	10	µg/L	1	05/09/13 13:45
Chrysene	U		0.71	1.0	µg/L	1	05/09/13 13:45
Dibenzo(a,h)anthracene	U		0.67	2.0	µg/L	1	05/09/13 13:45
Dibenzofuran	U		0.11	4.0	µg/L	1	05/09/13 13:45
Diethyl phthalate	U		0.69	5.0	µg/L	1	05/09/13 13:45
Dimethyl phthalate	U		0.14	5.0	µg/L	1	05/09/13 13:45
Di-n-butyl phthalate	U		0.71	5.0	µg/L	1	05/09/13 13:45
Di-n-octyl phthalate	U		0.12	5.0	µg/L	1	05/09/13 13:45
Fluoranthene	U		0.77	1.0	µg/L	1	05/09/13 13:45
Fluorene	U		0.10	5.0	µg/L	1	05/09/13 13:45
Hexachlorobenzene	U		0.10	1.0	µg/L	1	05/09/13 13:45
Hexachlorobutadiene	U		0.12	1.0	µg/L	1	05/09/13 13:45
Hexachlorocyclopentadiene	U		0.18	5.0	µg/L	1	05/09/13 13:45
Hexachloroethane	U		0.13	5.0	µg/L	1	05/09/13 13:45
Indeno(1,2,3-cd)pyrene	U		0.69	2.0	µg/L	1	05/09/13 13:45
Isophorone	U		0.12	5.0	µg/L	1	05/09/13 13:45
Naphthalene	1.0	J	0.12	5.0	µg/L	1	05/09/13 13:45
Nitrobenzene	U		0.10	3.0	µg/L	1	05/09/13 13:45
N-Nitrosodi-n-propylamine	U		0.13	5.0	µg/L	1	05/09/13 13:45
N-Nitrosodiphenylamine	U		0.81	5.0	µg/L	1	05/09/13 13:45
Pentachlorophenol	U		0.11	1.0	µg/L	1	05/09/13 13:45
Phenanthrene	U		0.86	2.0	µg/L	1	05/09/13 13:45
Phenol	3.8	J	0.094	5.0	µg/L	1	05/09/13 13:45
Pyrene	U		0.65	5.0	µg/L	1	05/09/13 13:45
Surr: 2,4,6-Tribromophenol	64.7			32-115	%REC	1	05/09/13 13:45
Surr: 2-Fluorobiphenyl	62.2			32-100	%REC	1	05/09/13 13:45
Surr: 2-Fluorophenol	31.4			22-59	%REC	1	05/09/13 13:45
Surr: 4-Terphenyl-d14	96.0			23-112	%REC	1	05/09/13 13:45
Surr: Nitrobenzene-d5	60.9			31-93	%REC	1	05/09/13 13:45
Surr: Phenol-d6	19.4			13-36	%REC	1	05/09/13 13:45
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: RS	
BatchID: R120585							
1,1,1-Trichloroethane	U		0.68	5.0	µg/L	5	05/12/13 12:12
1,1,2,2-Tetrachloroethane	U		0.65	5.0	µg/L	5	05/12/13 12:12
1,1,2-Trichloroethane	U		0.42	5.0	µg/L	5	05/12/13 12:12

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-037
Collection Date: 05/03/13 04:40 PM

Work Order: 1305241
Lab ID: 1305241-37
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.90	5.0	µg/L	5	05/12/13 12:12
1,1-Dichloroethane	U		0.55	5.0	µg/L	5	05/12/13 12:12
1,1-Dichloroethene	U		0.58	5.0	µg/L	5	05/12/13 12:12
1,2,4-Trichlorobenzene	U		0.82	25	µg/L	5	05/12/13 12:12
1,2-Dibromo-3-chloropropane	U		1.6	5.0	µg/L	5	05/12/13 12:12
1,2-Dibromoethane	U		0.82	5.0	µg/L	5	05/12/13 12:12
1,2-Dichlorobenzene	U		0.66	5.0	µg/L	5	05/12/13 12:12
1,2-Dichloroethane	U		0.76	5.0	µg/L	5	05/12/13 12:12
1,2-Dichloropropane	U		0.66	5.0	µg/L	5	05/12/13 12:12
1,3-Dichlorobenzene	U		0.80	5.0	µg/L	5	05/12/13 12:12
1,4-Dichlorobenzene	U		0.73	5.0	µg/L	5	05/12/13 12:12
2-Butanone	U		1.1	120	µg/L	5	05/12/13 12:12
2-Hexanone	U		0.60	250	µg/L	5	05/12/13 12:12
4-Methyl-2-pentanone	U		0.48	250	µg/L	5	05/12/13 12:12
Acetone	28	J	1.6	250	µg/L	5	05/12/13 12:12
Benzene	U		0.92	5.0	µg/L	5	05/12/13 12:12
Bromodichloromethane	U		0.58	5.0	µg/L	5	05/12/13 12:12
Bromoform	U		0.74	5.0	µg/L	5	05/12/13 12:12
Bromomethane	U		1.1	25	µg/L	5	05/12/13 12:12
Carbon disulfide	U		0.87	25	µg/L	5	05/12/13 12:12
Carbon tetrachloride	U		0.62	5.0	µg/L	5	05/12/13 12:12
Chlorobenzene	U		0.63	5.0	µg/L	5	05/12/13 12:12
Chloroethane	U		2.3	25	µg/L	5	05/12/13 12:12
Chloroform	U		0.76	5.0	µg/L	5	05/12/13 12:12
Chloromethane	U		0.80	25	µg/L	5	05/12/13 12:12
cis-1,2-Dichloroethene	U		0.56	5.0	µg/L	5	05/12/13 12:12
cis-1,3-Dichloropropene	U		0.40	5.0	µg/L	5	05/12/13 12:12
Cyclohexane	U		1.1	5.0	µg/L	5	05/12/13 12:12
Dibromochloromethane	U		0.66	25	µg/L	5	05/12/13 12:12
Dichlorodifluoromethane	U		0.99	25	µg/L	5	05/12/13 12:12
Ethylbenzene	U		0.67	5.0	µg/L	5	05/12/13 12:12
Isopropylbenzene	U		0.68	25	µg/L	5	05/12/13 12:12
Methyl acetate	U		0.96	50	µg/L	5	05/12/13 12:12
Methyl tert-butyl ether	U		0.35	25	µg/L	5	05/12/13 12:12
Methylcyclohexane	U		4.9	5.0	µg/L	5	05/12/13 12:12
Methylene chloride	U		0.93	25	µg/L	5	05/12/13 12:12
Styrene	U		0.54	5.0	µg/L	5	05/12/13 12:12
Tetrachloroethene	U		0.76	5.0	µg/L	5	05/12/13 12:12
Toluene	U		0.61	5.0	µg/L	5	05/12/13 12:12
trans-1,2-Dichloroethene	U		0.62	5.0	µg/L	5	05/12/13 12:12

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-037
Collection Date: 05/03/13 04:40 PM

Work Order: 1305241
Lab ID: 1305241-37
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.74	5.0	µg/L	5	05/12/13 12:12
Trichloroethene	U		0.68	5.0	µg/L	5	05/12/13 12:12
Trichlorofluoromethane	U		0.90	5.0	µg/L	5	05/12/13 12:12
Vinyl chloride	U		0.86	5.0	µg/L	5	05/12/13 12:12
Xylenes, Total	U		1.4	15	µg/L	5	05/12/13 12:12
Surr: 1,2-Dichloroethane-d4	94.0			70-120	%REC	5	05/12/13 12:12
Surr: 4-Bromofluorobenzene	93.6			75-120	%REC	5	05/12/13 12:12
Surr: Dibromofluoromethane	91.6			85-115	%REC	5	05/12/13 12:12
Surr: Toluene-d8	97.3			85-120	%REC	5	05/12/13 12:12

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-038
Collection Date: 05/03/13 04:50 PM

Work Order: 1305241
Lab ID: 1305241-38
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270	Prep: SW3510 / 5/8/13			Analyst: RM
BatchID: 48246							
1,1`-Biphenyl	U		0.095	5.0	µg/L	1	05/09/13 14:05
2,4,5-Trichlorophenol	U		0.12	5.0	µg/L	1	05/09/13 14:05
2,4,6-Trichlorophenol	U		0.11	4.0	µg/L	1	05/09/13 14:05
2,4-Dichlorophenol	U		0.22	10	µg/L	1	05/09/13 14:05
2,4-Dimethylphenol	U		0.24	5.0	µg/L	1	05/09/13 14:05
2,4-Dinitrophenol	U		0.76	5.0	µg/L	1	05/09/13 14:05
2,4-Dinitrotoluene	U		0.78	5.0	µg/L	1	05/09/13 14:05
2,6-Dinitrotoluene	U		0.82	5.0	µg/L	1	05/09/13 14:05
2-Chloronaphthalene	U		0.13	5.0	µg/L	1	05/09/13 14:05
2-Chlorophenol	U		0.73	5.0	µg/L	1	05/09/13 14:05
2-Methylnaphthalene	U		0.13	5.0	µg/L	1	05/09/13 14:05
2-Methylphenol	U		0.60	5.0	µg/L	1	05/09/13 14:05
2-Nitroaniline	U		0.11	20	µg/L	1	05/09/13 14:05
2-Nitrophenol	U		0.19	5.0	µg/L	1	05/09/13 14:05
3,3`-Dichlorobenzidine	U		0.54	1.0	µg/L	1	05/09/13 14:05
3-Nitroaniline	U		2.5	20	µg/L	1	05/09/13 14:05
4,6-Dinitro-2-methylphenol	U		0.34	20	µg/L	1	05/09/13 14:05
4-Bromophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/09/13 14:05
4-Chloro-3-methylphenol	U		0.65	5.0	µg/L	1	05/09/13 14:05
4-Chloroaniline	U		1.1	10	µg/L	1	05/09/13 14:05
4-Chlorophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/09/13 14:05
4-Methylphenol	1.8	J	0.55	5.0	µg/L	1	05/09/13 14:05
4-Nitroaniline	U		1.5	20	µg/L	1	05/09/13 14:05
4-Nitrophenol	U		1.6	20	µg/L	1	05/09/13 14:05
Acenaphthene	U		0.11	5.0	µg/L	1	05/09/13 14:05
Acenaphthylene	U		0.12	5.0	µg/L	1	05/09/13 14:05
Acetophenone	0.98	J	0.090	1.0	µg/L	1	05/09/13 14:05
Anthracene	U		0.72	5.0	µg/L	1	05/09/13 14:05
Atrazine	U		0.13	3.0	µg/L	1	05/09/13 14:05
Benzaldehyde	U		0.46	1.0	µg/L	1	05/09/13 14:05
Benzo(a)anthracene	U		0.57	1.0	µg/L	1	05/09/13 14:05
Benzo(a)pyrene	U		0.10	1.0	µg/L	1	05/09/13 14:05
Benzo(b)fluoranthene	U		0.74	1.0	µg/L	1	05/09/13 14:05
Benzo(g,h,i)perylene	U		0.70	1.0	µg/L	1	05/09/13 14:05
Benzo(k)fluoranthene	U		0.17	1.0	µg/L	1	05/09/13 14:05
Bis(2-chloroethoxy)methane	U		0.13	5.0	µg/L	1	05/09/13 14:05
Bis(2-chloroethyl)ether	U		0.11	1.0	µg/L	1	05/09/13 14:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-038
Collection Date: 05/03/13 04:50 PM

Work Order: 1305241
Lab ID: 1305241-38
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.12	5.0	µg/L	1	05/09/13 14:05
Bis(2-ethylhexyl)phthalate	U		0.12	5.0	µg/L	1	05/09/13 14:05
Butyl benzyl phthalate	U		0.11	5.0	µg/L	1	05/09/13 14:05
Caprolactam	U		4.7	10	µg/L	1	05/09/13 14:05
Carbazole	U		0.84	10	µg/L	1	05/09/13 14:05
Chrysene	U		0.71	1.0	µg/L	1	05/09/13 14:05
Dibenzo(a,h)anthracene	U		0.67	2.0	µg/L	1	05/09/13 14:05
Dibenzofuran	U		0.11	4.0	µg/L	1	05/09/13 14:05
Diethyl phthalate	U		0.69	5.0	µg/L	1	05/09/13 14:05
Dimethyl phthalate	U		0.14	5.0	µg/L	1	05/09/13 14:05
Di-n-butyl phthalate	U		0.71	5.0	µg/L	1	05/09/13 14:05
Di-n-octyl phthalate	U		0.12	5.0	µg/L	1	05/09/13 14:05
Fluoranthene	U		0.77	1.0	µg/L	1	05/09/13 14:05
Fluorene	U		0.10	5.0	µg/L	1	05/09/13 14:05
Hexachlorobenzene	U		0.10	1.0	µg/L	1	05/09/13 14:05
Hexachlorobutadiene	U		0.12	1.0	µg/L	1	05/09/13 14:05
Hexachlorocyclopentadiene	U		0.18	5.0	µg/L	1	05/09/13 14:05
Hexachloroethane	U		0.13	5.0	µg/L	1	05/09/13 14:05
Indeno(1,2,3-cd)pyrene	U		0.69	2.0	µg/L	1	05/09/13 14:05
Isophorone	U		0.12	5.0	µg/L	1	05/09/13 14:05
Naphthalene	1.1	J	0.12	5.0	µg/L	1	05/09/13 14:05
Nitrobenzene	U		0.10	3.0	µg/L	1	05/09/13 14:05
N-Nitrosodi-n-propylamine	U		0.13	5.0	µg/L	1	05/09/13 14:05
N-Nitrosodiphenylamine	U		0.81	5.0	µg/L	1	05/09/13 14:05
Pentachlorophenol	U		0.11	1.0	µg/L	1	05/09/13 14:05
Phenanthrene	U		0.86	2.0	µg/L	1	05/09/13 14:05
Phenol	3.7	J	0.094	5.0	µg/L	1	05/09/13 14:05
Pyrene	U		0.65	5.0	µg/L	1	05/09/13 14:05
Surr: 2,4,6-Tribromophenol	71.2			32-115	%REC	1	05/09/13 14:05
Surr: 2-Fluorobiphenyl	67.2			32-100	%REC	1	05/09/13 14:05
Surr: 2-Fluorophenol	37.4			22-59	%REC	1	05/09/13 14:05
Surr: 4-Terphenyl-d14	110			23-112	%REC	1	05/09/13 14:05
Surr: Nitrobenzene-d5	65.9			31-93	%REC	1	05/09/13 14:05
Surr: Phenol-d6	24.8			13-36	%REC	1	05/09/13 14:05
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: RS	
BatchID: R120709							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 22:02
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 22:02
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 22:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-038
Collection Date: 05/03/13 04:50 PM

Work Order: 1305241
Lab ID: 1305241-38
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 22:02
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 22:02
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 22:02
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 22:02
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 22:02
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 22:02
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 22:02
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 22:02
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 22:02
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 22:02
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 22:02
2-Butanone	30		0.22	25	µg/L	1	05/14/13 22:02
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 22:02
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 22:02
Acetone	64		0.33	50	µg/L	1	05/14/13 22:02
Benzene	U		0.18	1.0	µg/L	1	05/14/13 22:02
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 22:02
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 22:02
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 22:02
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 22:02
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 22:02
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 22:02
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 22:02
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 22:02
Chloromethane	1.6	J	0.16	5.0	µg/L	1	05/14/13 22:02
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 22:02
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 22:02
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 22:02
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 22:02
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 22:02
Ethylbenzene	0.50	J	0.13	1.0	µg/L	1	05/14/13 22:02
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 22:02
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 22:02
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 22:02
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 22:02
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 22:02
Styrene	U		0.11	1.0	µg/L	1	05/14/13 22:02
Tetrachloroethene	0.82	J	0.15	1.0	µg/L	1	05/14/13 22:02
Toluene	U		0.12	1.0	µg/L	1	05/14/13 22:02
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 22:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp**Date:** 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-038
Collection Date: 05/03/13 04:50 PM

Work Order: 1305241
Lab ID: 1305241-38
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 22:02
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 22:02
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 22:02
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 22:02
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 22:02
Surr: 1,2-Dichloroethane-d4	99.2			70-120	%REC	1	05/14/13 22:02
Surr: 4-Bromofluorobenzene	98.7			75-120	%REC	1	05/14/13 22:02
Surr: Dibromofluoromethane	104			85-115	%REC	1	05/14/13 22:02
Surr: Toluene-d8	94.3			85-120	%REC	1	05/14/13 22:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-039
Collection Date: 05/03/13 05:20 PM

Work Order: 1305241
Lab ID: 1305241-39
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep: SW3510 / 5/8/13		Analyst: RM
<u>BatchID: 48246</u>							
1,1'-Biphenyl	0.91	J	0.095	5.0	µg/L	1	05/09/13 14:25
2,4,5-Trichlorophenol	U		0.12	5.0	µg/L	1	05/09/13 14:25
2,4,6-Trichlorophenol	U		0.11	4.0	µg/L	1	05/09/13 14:25
2,4-Dichlorophenol	U		0.22	10	µg/L	1	05/09/13 14:25
2,4-Dimethylphenol	2.6	J	0.24	5.0	µg/L	1	05/09/13 14:25
2,4-Dinitrophenol	U		0.76	5.0	µg/L	1	05/09/13 14:25
2,4-Dinitrotoluene	U		0.78	5.0	µg/L	1	05/09/13 14:25
2,6-Dinitrotoluene	U		0.82	5.0	µg/L	1	05/09/13 14:25
2-Chloronaphthalene	U		0.13	5.0	µg/L	1	05/09/13 14:25
2-Chlorophenol	U		0.73	5.0	µg/L	1	05/09/13 14:25
2-Methylnaphthalene	0.72	J	0.13	5.0	µg/L	1	05/09/13 14:25
2-Methylphenol	1.7	J	0.60	5.0	µg/L	1	05/09/13 14:25
2-Nitroaniline	U		0.11	20	µg/L	1	05/09/13 14:25
2-Nitrophenol	U		0.19	5.0	µg/L	1	05/09/13 14:25
3,3'-Dichlorobenzidine	U		0.54	1.0	µg/L	1	05/09/13 14:25
3-Nitroaniline	U		2.5	20	µg/L	1	05/09/13 14:25
4,6-Dinitro-2-methylphenol	U		0.34	20	µg/L	1	05/09/13 14:25
4-Bromophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/09/13 14:25
4-Chloro-3-methylphenol	U		0.65	5.0	µg/L	1	05/09/13 14:25
4-Chloroaniline	U		1.1	10	µg/L	1	05/09/13 14:25
4-Chlorophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/09/13 14:25
4-Methylphenol	0.98	J	0.55	5.0	µg/L	1	05/09/13 14:25
4-Nitroaniline	U		1.5	20	µg/L	1	05/09/13 14:25
4-Nitrophenol	U		1.6	20	µg/L	1	05/09/13 14:25
Acenaphthene	1.2	J	0.11	5.0	µg/L	1	05/09/13 14:25
Acenaphthylene	U		0.12	5.0	µg/L	1	05/09/13 14:25
Acetophenone	U		0.090	1.0	µg/L	1	05/09/13 14:25
Anthracene	1.0	J	0.72	5.0	µg/L	1	05/09/13 14:25
Atrazine	U		0.13	3.0	µg/L	1	05/09/13 14:25
Benzaldehyde	U		0.46	1.0	µg/L	1	05/09/13 14:25
Benzo(a)anthracene	U		0.57	1.0	µg/L	1	05/09/13 14:25
Benzo(a)pyrene	U		0.10	1.0	µg/L	1	05/09/13 14:25
Benzo(b)fluoranthene	U		0.74	1.0	µg/L	1	05/09/13 14:25
Benzo(g,h,i)perylene	U		0.70	1.0	µg/L	1	05/09/13 14:25
Benzo(k)fluoranthene	U		0.17	1.0	µg/L	1	05/09/13 14:25
Bis(2-chloroethoxy)methane	U		0.13	5.0	µg/L	1	05/09/13 14:25
Bis(2-chloroethyl)ether	U		0.11	1.0	µg/L	1	05/09/13 14:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-039
Collection Date: 05/03/13 05:20 PM

Work Order: 1305241
Lab ID: 1305241-39
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.12	5.0	µg/L	1	05/09/13 14:25
Bis(2-ethylhexyl)phthalate	U		0.12	5.0	µg/L	1	05/09/13 14:25
Butyl benzyl phthalate	U		0.11	5.0	µg/L	1	05/09/13 14:25
Caprolactam	U		4.7	10	µg/L	1	05/09/13 14:25
Carbazole	U		0.84	10	µg/L	1	05/09/13 14:25
Chrysene	U		0.71	1.0	µg/L	1	05/09/13 14:25
Dibenzo(a,h)anthracene	U		0.67	2.0	µg/L	1	05/09/13 14:25
Dibenzofuran	1.1	J	0.11	4.0	µg/L	1	05/09/13 14:25
Diethyl phthalate	5.0		0.69	5.0	µg/L	1	05/09/13 14:25
Dimethyl phthalate	U		0.14	5.0	µg/L	1	05/09/13 14:25
Di-n-butyl phthalate	U		0.71	5.0	µg/L	1	05/09/13 14:25
Di-n-octyl phthalate	U		0.12	5.0	µg/L	1	05/09/13 14:25
Fluoranthene	U		0.77	1.0	µg/L	1	05/09/13 14:25
Fluorene	2.1	J	0.10	5.0	µg/L	1	05/09/13 14:25
Hexachlorobenzene	U		0.10	1.0	µg/L	1	05/09/13 14:25
Hexachlorobutadiene	U		0.12	1.0	µg/L	1	05/09/13 14:25
Hexachlorocyclopentadiene	U		0.18	5.0	µg/L	1	05/09/13 14:25
Hexachloroethane	U		0.13	5.0	µg/L	1	05/09/13 14:25
Indeno(1,2,3-cd)pyrene	U		0.69	2.0	µg/L	1	05/09/13 14:25
Isophorone	U		0.12	5.0	µg/L	1	05/09/13 14:25
Naphthalene	12		0.12	5.0	µg/L	1	05/09/13 14:25
Nitrobenzene	U		0.10	3.0	µg/L	1	05/09/13 14:25
N-Nitrosodi-n-propylamine	U		0.13	5.0	µg/L	1	05/09/13 14:25
N-Nitrosodiphenylamine	U		0.81	5.0	µg/L	1	05/09/13 14:25
Pentachlorophenol	U		0.11	1.0	µg/L	1	05/09/13 14:25
Phenanthrene	1.2	J	0.86	2.0	µg/L	1	05/09/13 14:25
Phenol	U		0.094	5.0	µg/L	1	05/09/13 14:25
Pyrene	1.1	J	0.65	5.0	µg/L	1	05/09/13 14:25
Surr: 2,4,6-Tribromophenol	86.3			32-115	%REC	1	05/09/13 14:25
Surr: 2-Fluorobiphenyl	71.6			32-100	%REC	1	05/09/13 14:25
Surr: 2-Fluorophenol	44.9			22-59	%REC	1	05/09/13 14:25
Surr: 4-Terphenyl-d14	122	S		23-112	%REC	1	05/09/13 14:25
Surr: Nitrobenzene-d5	73.2			31-93	%REC	1	05/09/13 14:25
Surr: Phenol-d6	29.6			13-36	%REC	1	05/09/13 14:25
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: RS	
BatchID: R120709							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 22:23
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 22:23
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 22:23

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-039
Collection Date: 05/03/13 05:20 PM

Work Order: 1305241
Lab ID: 1305241-39
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 22:23
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 22:23
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 22:23
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 22:23
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 22:23
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 22:23
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 22:23
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 22:23
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 22:23
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 22:23
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 22:23
2-Butanone	14	J	0.22	25	µg/L	1	05/14/13 22:23
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 22:23
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 22:23
Acetone	U		0.33	50	µg/L	1	05/14/13 22:23
Benzene	U		0.18	1.0	µg/L	1	05/14/13 22:23
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 22:23
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 22:23
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 22:23
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 22:23
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 22:23
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 22:23
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 22:23
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 22:23
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 22:23
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 22:23
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 22:23
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 22:23
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 22:23
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 22:23
Ethylbenzene	1.8		0.13	1.0	µg/L	1	05/14/13 22:23
Isopropylbenzene	2.0	J	0.14	5.0	µg/L	1	05/14/13 22:23
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 22:23
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 22:23
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 22:23
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 22:23
Styrene	3.2		0.11	1.0	µg/L	1	05/14/13 22:23
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 22:23
Toluene	0.50	J	0.12	1.0	µg/L	1	05/14/13 22:23
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 22:23

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050313-MR-039
Collection Date: 05/03/13 05:20 PM

Work Order: 1305241
Lab ID: 1305241-39
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 22:23
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 22:23
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 22:23
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 22:23
Xylenes, Total	2.1	J	0.29	3.0	µg/L	1	05/14/13 22:23
Surr: 1,2-Dichloroethane-d4	94.4			70-120	%REC	1	05/14/13 22:23
Surr: 4-Bromofluorobenzene	103			75-120	%REC	1	05/14/13 22:23
Surr: Dibromofluoromethane	104			85-115	%REC	1	05/14/13 22:23
Surr: Toluene-d8	99.0			85-120	%REC	1	05/14/13 22:23

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: TB-17360-050313-MR-040
Collection Date: 05/03/13

Work Order: 1305241
Lab ID: 1305241-40
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120600</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 21:52
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 21:52
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 21:52
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 21:52
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 21:52
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 21:52
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 21:52
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 21:52
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 21:52
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 21:52
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 21:52
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 21:52
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 21:52
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 21:52
2-Butanone	U		0.22	25	µg/L	1	05/12/13 21:52
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 21:52
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 21:52
Acetone	U		0.33	50	µg/L	1	05/12/13 21:52
Benzene	U		0.18	1.0	µg/L	1	05/12/13 21:52
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 21:52
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 21:52
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 21:52
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 21:52
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 21:52
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 21:52
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 21:52
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 21:52
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 21:52
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 21:52
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 21:52
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 21:52
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 21:52
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 21:52
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 21:52
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 21:52
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 21:52
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 21:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: TB-17360-050313-MR-040
Collection Date: 05/03/13

Work Order: 1305241
Lab ID: 1305241-40
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 21:52
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 21:52
Styrene	U		0.11	1.0	µg/L	1	05/12/13 21:52
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 21:52
Toluene	U		0.12	1.0	µg/L	1	05/12/13 21:52
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 21:52
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 21:52
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 21:52
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 21:52
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 21:52
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 21:52
Surr: 1,2-Dichloroethane-d4	99.6			70-120	%REC	1	05/12/13 21:52
Surr: 4-Bromofluorobenzene	96.4			75-120	%REC	1	05/12/13 21:52
Surr: Dibromofluoromethane	103			85-115	%REC	1	05/12/13 21:52
Surr: Toluene-d8	96.3			85-120	%REC	1	05/12/13 21:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: TB-17360-050313-MR-041
Collection Date: 05/03/13

Work Order: 1305241
Lab ID: 1305241-41
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120600</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 22:14
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 22:14
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 22:14
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 22:14
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 22:14
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 22:14
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 22:14
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 22:14
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 22:14
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 22:14
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 22:14
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 22:14
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 22:14
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 22:14
2-Butanone	U		0.22	25	µg/L	1	05/12/13 22:14
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 22:14
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 22:14
Acetone	U		0.33	50	µg/L	1	05/12/13 22:14
Benzene	U		0.18	1.0	µg/L	1	05/12/13 22:14
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 22:14
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 22:14
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 22:14
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 22:14
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 22:14
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 22:14
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 22:14
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 22:14
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 22:14
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 22:14
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 22:14
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 22:14
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 22:14
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 22:14
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 22:14
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 22:14
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 22:14
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 22:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: TB-17360-050313-MR-041
Collection Date: 05/03/13

Work Order: 1305241
Lab ID: 1305241-41
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 22:14
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 22:14
Styrene	U		0.11	1.0	µg/L	1	05/12/13 22:14
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 22:14
Toluene	U		0.12	1.0	µg/L	1	05/12/13 22:14
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 22:14
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 22:14
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 22:14
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 22:14
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 22:14
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 22:14
Surr: 1,2-Dichloroethane-d4	100			70-120	%REC	1	05/12/13 22:14
Surr: 4-Bromofluorobenzene	98.6			75-120	%REC	1	05/12/13 22:14
Surr: Dibromofluoromethane	101			85-115	%REC	1	05/12/13 22:14
Surr: Toluene-d8	97.4			85-120	%REC	1	05/12/13 22:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: TB-17360-050313-MR-042
Collection Date: 05/03/13

Work Order: 1305241
Lab ID: 1305241-42
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120600</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/12/13 22:35
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/12/13 22:35
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/12/13 22:35
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/12/13 22:35
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/12/13 22:35
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 22:35
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/12/13 22:35
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/12/13 22:35
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/12/13 22:35
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 22:35
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/12/13 22:35
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/12/13 22:35
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/12/13 22:35
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/12/13 22:35
2-Butanone	U		0.22	25	µg/L	1	05/12/13 22:35
2-Hexanone	U		0.12	50	µg/L	1	05/12/13 22:35
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/12/13 22:35
Acetone	U		0.33	50	µg/L	1	05/12/13 22:35
Benzene	U		0.18	1.0	µg/L	1	05/12/13 22:35
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/12/13 22:35
Bromoform	U		0.15	1.0	µg/L	1	05/12/13 22:35
Bromomethane	U		0.21	5.0	µg/L	1	05/12/13 22:35
Carbon disulfide	U		0.17	5.0	µg/L	1	05/12/13 22:35
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/12/13 22:35
Chlorobenzene	U		0.13	1.0	µg/L	1	05/12/13 22:35
Chloroethane	U		0.46	5.0	µg/L	1	05/12/13 22:35
Chloroform	U		0.15	1.0	µg/L	1	05/12/13 22:35
Chloromethane	U		0.16	5.0	µg/L	1	05/12/13 22:35
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/12/13 22:35
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/12/13 22:35
Cyclohexane	U		0.22	1.0	µg/L	1	05/12/13 22:35
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/12/13 22:35
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/12/13 22:35
Ethylbenzene	U		0.13	1.0	µg/L	1	05/12/13 22:35
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/12/13 22:35
Methyl acetate	U		0.19	10	µg/L	1	05/12/13 22:35
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/12/13 22:35

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: TB-17360-050313-MR-042
Collection Date: 05/03/13

Work Order: 1305241
Lab ID: 1305241-42
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/12/13 22:35
Methylene chloride	U		0.19	5.0	µg/L	1	05/12/13 22:35
Styrene	U		0.11	1.0	µg/L	1	05/12/13 22:35
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/12/13 22:35
Toluene	U		0.12	1.0	µg/L	1	05/12/13 22:35
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/12/13 22:35
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/12/13 22:35
Trichloroethene	U		0.14	1.0	µg/L	1	05/12/13 22:35
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/12/13 22:35
Vinyl chloride	U		0.17	1.0	µg/L	1	05/12/13 22:35
Xylenes, Total	U		0.29	3.0	µg/L	1	05/12/13 22:35
Surr: 1,2-Dichloroethane-d4	100			70-120	%REC	1	05/12/13 22:35
Surr: 4-Bromofluorobenzene	95.8			75-120	%REC	1	05/12/13 22:35
Surr: Dibromofluoromethane	102			85-115	%REC	1	05/12/13 22:35
Surr: Toluene-d8	97.5			85-120	%REC	1	05/12/13 22:35

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050613-EB-040
Collection Date: 05/06/13 11:55 AM

Work Order: 1305241
Lab ID: 1305241-43
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470			Prep: SW7470 / 5/13/13	Analyst: LR
<u>BatchID:</u> 48372							
Mercury	U		0.00010	0.00020	mg/L	1	05/13/13 15:07
METALS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/11/13	Analyst: ML
<u>BatchID:</u> 48339							
Antimony	0.00024	J	0.000036	0.0050	mg/L	1	05/15/13 15:49
Arsenic	0.00092	J	0.00058	0.0050	mg/L	1	05/15/13 15:49
Barium	0.10		0.000063	0.0050	mg/L	1	05/15/13 15:49
Beryllium	U		0.000082	0.0020	mg/L	1	05/15/13 15:49
Cadmium	0.000066	J	0.000045	0.0020	mg/L	1	05/15/13 15:49
Chromium	0.00067	J	0.00027	0.0050	mg/L	1	05/15/13 15:49
Cobalt	0.00083	J	0.000041	0.0050	mg/L	1	05/15/13 15:49
Copper	0.0016	J	0.00053	0.0050	mg/L	1	05/15/13 15:49
Lead	0.000057	J	0.000051	0.0050	mg/L	1	05/15/13 15:49
Manganese	0.082		0.000054	0.0050	mg/L	1	05/15/13 15:49
Molybdenum	0.0067		0.000088	0.0050	mg/L	1	05/15/13 15:49
Nickel	0.0027	J	0.00025	0.0050	mg/L	1	05/15/13 15:49
Selenium	0.0011	J	0.00064	0.0050	mg/L	1	05/15/13 15:49
Silver	U		0.000042	0.0050	mg/L	1	05/15/13 15:49
Thallium	U		0.000062	0.0050	mg/L	1	05/15/13 15:49
Vanadium	0.0014	J	0.00016	0.0050	mg/L	1	05/15/13 15:49
Zinc	0.26		0.00048	0.010	mg/L	1	05/15/13 15:49
VOLATILE ORGANIC COMPOUNDS							
			SW8260				Analyst: RS
<u>BatchID:</u> R120709							
1,1,1-Trichloroethane	3.8		0.14	1.0	µg/L	1	05/14/13 19:30
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 19:30
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 19:30
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 19:30
1,1-Dichloroethane	2.0		0.11	1.0	µg/L	1	05/14/13 19:30
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 19:30
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 19:30
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 19:30
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 19:30
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 19:30
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 19:30
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 19:30
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 19:30
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 19:30

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050613-EB-040
Collection Date: 05/06/13 11:55 AM

Work Order: 1305241
Lab ID: 1305241-43
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.22	25	µg/L	1	05/14/13 19:30
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 19:30
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 19:30
Acetone	U		0.33	50	µg/L	1	05/14/13 19:30
Benzene	U		0.18	1.0	µg/L	1	05/14/13 19:30
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 19:30
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 19:30
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 19:30
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 19:30
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 19:30
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 19:30
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 19:30
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 19:30
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 19:30
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 19:30
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 19:30
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 19:30
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 19:30
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 19:30
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 19:30
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 19:30
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 19:30
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 19:30
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 19:30
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 19:30
Styrene	U		0.11	1.0	µg/L	1	05/14/13 19:30
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 19:30
Toluene	U		0.12	1.0	µg/L	1	05/14/13 19:30
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 19:30
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 19:30
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 19:30
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 19:30
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 19:30
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 19:30
Surr: 1,2-Dichloroethane-d4	102			70-120	%REC	1	05/14/13 19:30
Surr: 4-Bromofluorobenzene	97.6			75-120	%REC	1	05/14/13 19:30
Surr: Dibromofluoromethane	103			85-115	%REC	1	05/14/13 19:30
Surr: Toluene-d8	100			85-120	%REC	1	05/14/13 19:30

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050613-EB-041
Collection Date: 05/06/13 12:25 PM

Work Order: 1305241
Lab ID: 1305241-44
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: RS	
BatchID: R120709							
1,1,1-Trichloroethane	3.7		0.14	1.0	µg/L	1	05/14/13 19:51
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 19:51
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 19:51
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 19:51
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 19:51
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 19:51
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 19:51
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 19:51
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 19:51
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 19:51
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 19:51
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 19:51
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 19:51
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 19:51
2-Butanone	U		0.22	25	µg/L	1	05/14/13 19:51
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 19:51
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 19:51
Acetone	3.9	J	0.33	50	µg/L	1	05/14/13 19:51
Benzene	U		0.18	1.0	µg/L	1	05/14/13 19:51
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 19:51
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 19:51
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 19:51
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 19:51
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 19:51
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 19:51
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 19:51
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 19:51
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 19:51
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 19:51
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 19:51
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 19:51
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 19:51
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 19:51
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 19:51
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 19:51
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 19:51
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 19:51

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050613-EB-041
Collection Date: 05/06/13 12:25 PM

Work Order: 1305241
Lab ID: 1305241-44
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 19:51
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 19:51
Styrene	U		0.11	1.0	µg/L	1	05/14/13 19:51
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 19:51
Toluene	U		0.12	1.0	µg/L	1	05/14/13 19:51
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 19:51
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 19:51
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 19:51
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 19:51
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 19:51
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 19:51
Surr: 1,2-Dichloroethane-d4	103			70-120	%REC	1	05/14/13 19:51
Surr: 4-Bromofluorobenzene	97.6			75-120	%REC	1	05/14/13 19:51
Surr: Dibromofluoromethane	105			85-115	%REC	1	05/14/13 19:51
Surr: Toluene-d8	99.3			85-120	%REC	1	05/14/13 19:51

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050613-EB-042
Collection Date: 05/06/13 12:50 PM

Work Order: 1305241
Lab ID: 1305241-45
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470			Prep: SW7470 / 5/13/13	Analyst: LR
<u>BatchID:</u> 48372							
Mercury	U		0.00010	0.00020	mg/L	1	05/13/13 15:09
METALS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/11/13	Analyst: ML
<u>BatchID:</u> 48339							
Antimony	0.00014	J	0.000036	0.0050	mg/L	1	05/15/13 15:55
Arsenic	0.00063	J	0.00058	0.0050	mg/L	1	05/15/13 15:55
Barium	0.064		0.000063	0.0050	mg/L	1	05/15/13 15:55
Beryllium	U		0.000082	0.0020	mg/L	1	05/15/13 15:55
Cadmium	U		0.000045	0.0020	mg/L	1	05/15/13 15:55
Chromium	U		0.00027	0.0050	mg/L	1	05/15/13 15:55
Cobalt	0.00096	J	0.000041	0.0050	mg/L	1	05/15/13 15:55
Copper	0.00062	J	0.00053	0.0050	mg/L	1	05/15/13 15:55
Lead	U		0.000051	0.0050	mg/L	1	05/15/13 15:55
Manganese	0.00060	J	0.000054	0.0050	mg/L	1	05/15/13 15:55
Molybdenum	0.00069	J	0.000088	0.0050	mg/L	1	05/15/13 15:55
Nickel	0.0016	J	0.00025	0.0050	mg/L	1	05/15/13 15:55
Selenium	0.00072	J	0.00064	0.0050	mg/L	1	05/15/13 15:55
Silver	U		0.000042	0.0050	mg/L	1	05/15/13 15:55
Thallium	U		0.000062	0.0050	mg/L	1	05/15/13 15:55
Vanadium	U		0.00016	0.0050	mg/L	1	05/15/13 15:55
Zinc	0.11		0.00048	0.010	mg/L	1	05/15/13 15:55
VOLATILE ORGANIC COMPOUNDS							
			SW8260				Analyst: RS
<u>BatchID:</u> R120735							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 20:11
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 20:11
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 20:11
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 20:11
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 20:11
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 20:11
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 20:11
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 20:11
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 20:11
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 20:11
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 20:11
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 20:11
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 20:11
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 20:11

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050613-EB-042
Collection Date: 05/06/13 12:50 PM

Work Order: 1305241
Lab ID: 1305241-45
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.22	25	µg/L	1	05/14/13 20:11
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 20:11
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 20:11
Acetone	U		0.33	50	µg/L	1	05/14/13 20:11
Benzene	U		0.18	1.0	µg/L	1	05/14/13 20:11
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 20:11
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 20:11
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 20:11
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 20:11
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 20:11
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 20:11
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 20:11
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 20:11
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 20:11
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 20:11
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 20:11
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 20:11
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 20:11
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 20:11
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 20:11
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 20:11
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 20:11
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 20:11
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 20:11
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 20:11
Styrene	U		0.11	1.0	µg/L	1	05/14/13 20:11
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 20:11
Toluene	U		0.12	1.0	µg/L	1	05/14/13 20:11
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 20:11
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 20:11
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 20:11
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 20:11
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 20:11
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 20:11
Surr: 1,2-Dichloroethane-d4	100			70-120	%REC	1	05/14/13 20:11
Surr: 4-Bromofluorobenzene	99.2			75-120	%REC	1	05/14/13 20:11
Surr: Dibromofluoromethane	99.6			85-115	%REC	1	05/14/13 20:11
Surr: Toluene-d8	100			85-120	%REC	1	05/14/13 20:11

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050613-EB-043
Collection Date: 05/06/13 01:15 PM

Work Order: 1305241
Lab ID: 1305241-46
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
BatchID: <u>R120735</u>							
1,1,1-Trichloroethane	1.0		0.14	1.0	µg/L	1	05/14/13 20:34
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 20:34
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 20:34
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 20:34
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 20:34
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 20:34
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 20:34
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 20:34
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 20:34
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 20:34
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 20:34
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 20:34
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 20:34
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 20:34
2-Butanone	U		0.22	25	µg/L	1	05/14/13 20:34
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 20:34
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 20:34
Acetone	U		0.33	50	µg/L	1	05/14/13 20:34
Benzene	U		0.18	1.0	µg/L	1	05/14/13 20:34
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 20:34
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 20:34
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 20:34
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 20:34
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 20:34
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 20:34
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 20:34
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 20:34
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 20:34
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 20:34
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 20:34
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 20:34
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 20:34
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 20:34
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 20:34
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 20:34
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 20:34
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 20:34

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050613-EB-043
Collection Date: 05/06/13 01:15 PM

Work Order: 1305241
Lab ID: 1305241-46
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 20:34
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 20:34
Styrene	U		0.11	1.0	µg/L	1	05/14/13 20:34
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 20:34
Toluene	U		0.12	1.0	µg/L	1	05/14/13 20:34
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 20:34
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 20:34
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 20:34
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 20:34
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 20:34
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 20:34
Surr: 1,2-Dichloroethane-d4	101			70-120	%REC	1	05/14/13 20:34
Surr: 4-Bromofluorobenzene	98.8			75-120	%REC	1	05/14/13 20:34
Surr: Dibromofluoromethane	101			85-115	%REC	1	05/14/13 20:34
Surr: Toluene-d8	102			85-120	%REC	1	05/14/13 20:34

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050613-EB-044
Collection Date: 05/06/13 02:28 PM

Work Order: 1305241
Lab ID: 1305241-47
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: RS	
BatchID: R120735							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 20:58
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 20:58
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 20:58
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 20:58
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 20:58
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 20:58
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 20:58
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 20:58
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 20:58
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 20:58
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 20:58
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 20:58
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 20:58
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 20:58
2-Butanone	U		0.22	25	µg/L	1	05/14/13 20:58
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 20:58
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 20:58
Acetone	4.6	J	0.33	50	µg/L	1	05/14/13 20:58
Benzene	U		0.18	1.0	µg/L	1	05/14/13 20:58
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 20:58
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 20:58
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 20:58
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 20:58
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 20:58
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 20:58
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 20:58
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 20:58
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 20:58
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 20:58
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 20:58
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 20:58
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 20:58
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 20:58
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 20:58
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 20:58
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 20:58
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 20:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050613-EB-044
Collection Date: 05/06/13 02:28 PM

Work Order: 1305241
Lab ID: 1305241-47
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 20:58
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 20:58
Styrene	U		0.11	1.0	µg/L	1	05/14/13 20:58
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 20:58
Toluene	U		0.12	1.0	µg/L	1	05/14/13 20:58
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 20:58
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 20:58
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 20:58
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 20:58
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 20:58
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 20:58
Surr: 1,2-Dichloroethane-d4	100			70-120	%REC	1	05/14/13 20:58
Surr: 4-Bromofluorobenzene	98.2			75-120	%REC	1	05/14/13 20:58
Surr: Dibromofluoromethane	100			85-115	%REC	1	05/14/13 20:58
Surr: Toluene-d8	100			85-120	%REC	1	05/14/13 20:58

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050613-EB-045
Collection Date: 05/06/13 03:50 PM

Work Order: 1305241
Lab ID: 1305241-48
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470			Prep: SW7470 / 5/13/13	Analyst: LR
<u>BatchID:</u> 48372							
Mercury	U		0.00010	0.00020	mg/L	1	05/13/13 15:11
METALS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/11/13	Analyst: ML
<u>BatchID:</u> 48339							
Antimony	0.00014	J	0.000036	0.0050	mg/L	1	05/15/13 16:01
Arsenic	U		0.00058	0.0050	mg/L	1	05/15/13 16:01
Barium	0.072		0.000063	0.0050	mg/L	1	05/15/13 16:01
Beryllium	U		0.000082	0.0020	mg/L	1	05/15/13 16:01
Cadmium	0.000062	J	0.000045	0.0020	mg/L	1	05/15/13 16:01
Chromium	0.0013	J	0.00027	0.0050	mg/L	1	05/15/13 16:01
Cobalt	0.0052		0.000041	0.0050	mg/L	1	05/15/13 16:01
Copper	0.0021	J	0.00053	0.0050	mg/L	1	05/15/13 16:01
Lead	0.00082	J	0.000051	0.0050	mg/L	1	05/15/13 16:01
Manganese	0.068		0.000054	0.0050	mg/L	1	05/15/13 16:01
Molybdenum	0.0034	J	0.000088	0.0050	mg/L	1	05/15/13 16:01
Nickel	0.0048	J	0.00025	0.0050	mg/L	1	05/15/13 16:01
Selenium	U		0.00064	0.0050	mg/L	1	05/15/13 16:01
Silver	U		0.000042	0.0050	mg/L	1	05/15/13 16:01
Thallium	U		0.000062	0.0050	mg/L	1	05/15/13 16:01
Vanadium	0.00044	J	0.00016	0.0050	mg/L	1	05/15/13 16:01
Zinc	0.0096	J	0.00048	0.010	mg/L	1	05/15/13 16:01
VOLATILE ORGANIC COMPOUNDS							
			SW8260				Analyst: RS
<u>BatchID:</u> R120735							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 21:21
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 21:21
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 21:21
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 21:21
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 21:21
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 21:21
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 21:21
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 21:21
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 21:21
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 21:21
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 21:21
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 21:21
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 21:21
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 21:21

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050613-EB-045
Collection Date: 05/06/13 03:50 PM

Work Order: 1305241
Lab ID: 1305241-48
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.22	25	µg/L	1	05/14/13 21:21
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 21:21
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 21:21
Acetone	3.8	J	0.33	50	µg/L	1	05/14/13 21:21
Benzene	U		0.18	1.0	µg/L	1	05/14/13 21:21
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 21:21
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 21:21
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 21:21
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 21:21
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 21:21
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 21:21
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 21:21
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 21:21
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 21:21
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 21:21
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 21:21
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 21:21
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 21:21
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 21:21
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 21:21
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 21:21
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 21:21
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 21:21
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 21:21
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 21:21
Styrene	U		0.11	1.0	µg/L	1	05/14/13 21:21
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 21:21
Toluene	U		0.12	1.0	µg/L	1	05/14/13 21:21
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 21:21
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 21:21
Trichloroethene	4.5		0.14	1.0	µg/L	1	05/14/13 21:21
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 21:21
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 21:21
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 21:21
Surr: 1,2-Dichloroethane-d4	99.8			70-120	%REC	1	05/14/13 21:21
Surr: 4-Bromofluorobenzene	98.0			75-120	%REC	1	05/14/13 21:21
Surr: Dibromofluoromethane	100			85-115	%REC	1	05/14/13 21:21
Surr: Toluene-d8	102			85-120	%REC	1	05/14/13 21:21

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-EB-046
Collection Date: 05/07/13 10:45 AM

Work Order: 1305241
Lab ID: 1305241-49
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 21:44
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 21:44
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 21:44
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 21:44
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 21:44
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 21:44
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 21:44
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 21:44
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 21:44
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 21:44
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 21:44
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 21:44
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 21:44
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 21:44
2-Butanone	U		0.22	25	µg/L	1	05/14/13 21:44
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 21:44
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 21:44
Acetone	U		0.33	50	µg/L	1	05/14/13 21:44
Benzene	U		0.18	1.0	µg/L	1	05/14/13 21:44
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 21:44
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 21:44
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 21:44
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 21:44
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 21:44
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 21:44
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 21:44
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 21:44
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 21:44
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 21:44
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 21:44
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 21:44
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 21:44
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 21:44
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 21:44
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 21:44
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 21:44
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 21:44

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-EB-046
Collection Date: 05/07/13 10:45 AM

Work Order: 1305241
Lab ID: 1305241-49
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 21:44
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 21:44
Styrene	U		0.11	1.0	µg/L	1	05/14/13 21:44
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 21:44
Toluene	U		0.12	1.0	µg/L	1	05/14/13 21:44
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 21:44
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 21:44
Trichloroethene	3.9		0.14	1.0	µg/L	1	05/14/13 21:44
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 21:44
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 21:44
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 21:44
Surr: 1,2-Dichloroethane-d4	102			70-120	%REC	1	05/14/13 21:44
Surr: 4-Bromofluorobenzene	98.4			75-120	%REC	1	05/14/13 21:44
Surr: Dibromofluoromethane	99.6			85-115	%REC	1	05/14/13 21:44
Surr: Toluene-d8	101			85-120	%REC	1	05/14/13 21:44

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-EB-047
Collection Date: 05/07/13 12:05 PM

Work Order: 1305241
Lab ID: 1305241-50
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 22:07
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 22:07
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 22:07
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 22:07
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 22:07
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 22:07
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 22:07
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 22:07
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 22:07
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 22:07
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 22:07
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 22:07
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 22:07
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 22:07
2-Butanone	U		0.22	25	µg/L	1	05/14/13 22:07
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 22:07
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 22:07
Acetone	U		0.33	50	µg/L	1	05/14/13 22:07
Benzene	U		0.18	1.0	µg/L	1	05/14/13 22:07
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 22:07
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 22:07
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 22:07
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 22:07
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 22:07
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 22:07
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 22:07
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 22:07
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 22:07
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 22:07
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 22:07
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 22:07
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 22:07
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 22:07
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 22:07
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 22:07
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 22:07
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 22:07

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-EB-047
Collection Date: 05/07/13 12:05 PM

Work Order: 1305241
Lab ID: 1305241-50
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 22:07
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 22:07
Styrene	U		0.11	1.0	µg/L	1	05/14/13 22:07
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 22:07
Toluene	U		0.12	1.0	µg/L	1	05/14/13 22:07
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 22:07
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 22:07
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 22:07
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 22:07
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 22:07
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 22:07
Surr: 1,2-Dichloroethane-d4	102			70-120	%REC	1	05/14/13 22:07
Surr: 4-Bromofluorobenzene	99.1			75-120	%REC	1	05/14/13 22:07
Surr: Dibromofluoromethane	99.4			85-115	%REC	1	05/14/13 22:07
Surr: Toluene-d8	102			85-120	%REC	1	05/14/13 22:07

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-048
Collection Date: 05/07/13 10:34 AM

Work Order: 1305241
Lab ID: 1305241-51
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 22:31
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 22:31
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 22:31
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 22:31
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 22:31
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 22:31
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 22:31
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 22:31
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 22:31
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 22:31
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 22:31
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 22:31
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 22:31
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 22:31
2-Butanone	U		0.22	25	µg/L	1	05/14/13 22:31
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 22:31
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 22:31
Acetone	U		0.33	50	µg/L	1	05/14/13 22:31
Benzene	U		0.18	1.0	µg/L	1	05/14/13 22:31
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 22:31
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 22:31
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 22:31
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 22:31
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 22:31
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 22:31
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 22:31
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 22:31
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 22:31
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 22:31
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 22:31
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 22:31
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 22:31
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 22:31
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 22:31
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 22:31
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 22:31
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 22:31

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-048
Collection Date: 05/07/13 10:34 AM

Work Order: 1305241
Lab ID: 1305241-51
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 22:31
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 22:31
Styrene	U		0.11	1.0	µg/L	1	05/14/13 22:31
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 22:31
Toluene	U		0.12	1.0	µg/L	1	05/14/13 22:31
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 22:31
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 22:31
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 22:31
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 22:31
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 22:31
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 22:31
Surr: 1,2-Dichloroethane-d4	102			70-120	%REC	1	05/14/13 22:31
Surr: 4-Bromofluorobenzene	98.8			75-120	%REC	1	05/14/13 22:31
Surr: Dibromofluoromethane	99.6			85-115	%REC	1	05/14/13 22:31
Surr: Toluene-d8	102			85-120	%REC	1	05/14/13 22:31

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-049
Collection Date: 05/07/13 11:25 AM

Work Order: 1305241
Lab ID: 1305241-52
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 22:54
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 22:54
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 22:54
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 22:54
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 22:54
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 22:54
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 22:54
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 22:54
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 22:54
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 22:54
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 22:54
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 22:54
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 22:54
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 22:54
2-Butanone	U		0.22	25	µg/L	1	05/14/13 22:54
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 22:54
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 22:54
Acetone	U		0.33	50	µg/L	1	05/14/13 22:54
Benzene	U		0.18	1.0	µg/L	1	05/14/13 22:54
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 22:54
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 22:54
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 22:54
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 22:54
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 22:54
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 22:54
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 22:54
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 22:54
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 22:54
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 22:54
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 22:54
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 22:54
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 22:54
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 22:54
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 22:54
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 22:54
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 22:54
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 22:54

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-049
Collection Date: 05/07/13 11:25 AM

Work Order: 1305241
Lab ID: 1305241-52
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 22:54
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 22:54
Styrene	U		0.11	1.0	µg/L	1	05/14/13 22:54
Tetrachloroethene	3.2		0.15	1.0	µg/L	1	05/14/13 22:54
Toluene	U		0.12	1.0	µg/L	1	05/14/13 22:54
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 22:54
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 22:54
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 22:54
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 22:54
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 22:54
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 22:54
Surr: 1,2-Dichloroethane-d4	100			70-120	%REC	1	05/14/13 22:54
Surr: 4-Bromofluorobenzene	98.4			75-120	%REC	1	05/14/13 22:54
Surr: Dibromofluoromethane	100			85-115	%REC	1	05/14/13 22:54
Surr: Toluene-d8	102			85-120	%REC	1	05/14/13 22:54

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-050
Collection Date: 05/07/13 12:20 PM

Work Order: 1305241
Lab ID: 1305241-53
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 23:18
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 23:18
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 23:18
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 23:18
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 23:18
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 23:18
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 23:18
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 23:18
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 23:18
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 23:18
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 23:18
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 23:18
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 23:18
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 23:18
2-Butanone	U		0.22	25	µg/L	1	05/14/13 23:18
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 23:18
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 23:18
Acetone	U		0.33	50	µg/L	1	05/14/13 23:18
Benzene	U		0.18	1.0	µg/L	1	05/14/13 23:18
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 23:18
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 23:18
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 23:18
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 23:18
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 23:18
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 23:18
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 23:18
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 23:18
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 23:18
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 23:18
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 23:18
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 23:18
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 23:18
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 23:18
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 23:18
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 23:18
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 23:18
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 23:18

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-050
Collection Date: 05/07/13 12:20 PM

Work Order: 1305241
Lab ID: 1305241-53
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 23:18
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 23:18
Styrene	U		0.11	1.0	µg/L	1	05/14/13 23:18
Tetrachloroethene	7.5		0.15	1.0	µg/L	1	05/14/13 23:18
Toluene	U		0.12	1.0	µg/L	1	05/14/13 23:18
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 23:18
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 23:18
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 23:18
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 23:18
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 23:18
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 23:18
Surr: 1,2-Dichloroethane-d4	103			70-120	%REC	1	05/14/13 23:18
Surr: 4-Bromofluorobenzene	98.6			75-120	%REC	1	05/14/13 23:18
Surr: Dibromofluoromethane	99.8			85-115	%REC	1	05/14/13 23:18
Surr: Toluene-d8	103			85-120	%REC	1	05/14/13 23:18

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-MR-051
Collection Date: 05/07/13 10:50 AM

Work Order: 1305241
Lab ID: 1305241-54
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			SW7470		Prep: SW7470 / 5/13/13	Analyst: LR	
BatchID: <u>48372</u>							
Mercury	U		0.00010	0.00020	mg/L	1	05/13/13 15:13
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 5/11/13	Analyst: ML	
BatchID: <u>48339</u>							
Antimony	0.00015	J	0.000036	0.0050	mg/L	1	05/15/13 16:07
Arsenic	U		0.00058	0.0050	mg/L	1	05/15/13 16:07
Barium	0.039		0.000063	0.0050	mg/L	1	05/15/13 16:07
Beryllium	U		0.000082	0.0020	mg/L	1	05/15/13 16:07
Cadmium	U		0.000045	0.0020	mg/L	1	05/15/13 16:07
Chromium	0.0011	J	0.00027	0.0050	mg/L	1	05/15/13 16:07
Cobalt	0.00090	J	0.000041	0.0050	mg/L	1	05/15/13 16:07
Copper	0.00082	J	0.00053	0.0050	mg/L	1	05/15/13 16:07
Lead	U		0.000051	0.0050	mg/L	1	05/15/13 16:07
Manganese	0.00097	J	0.000054	0.0050	mg/L	1	05/15/13 16:07
Molybdenum	0.027		0.000088	0.0050	mg/L	1	05/15/13 16:07
Nickel	0.0021	J	0.00025	0.0050	mg/L	1	05/15/13 16:07
Selenium	0.0020	J	0.00064	0.0050	mg/L	1	05/15/13 16:07
Silver	U		0.000042	0.0050	mg/L	1	05/15/13 16:07
Thallium	U		0.000062	0.0050	mg/L	1	05/15/13 16:07
Vanadium	0.00078	J	0.00016	0.0050	mg/L	1	05/15/13 16:07
Zinc	0.0066	J	0.00048	0.010	mg/L	1	05/15/13 16:07
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: RS	
BatchID: <u>R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 23:41
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 23:41
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 23:41
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 23:41
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 23:41
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 23:41
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 23:41
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 23:41
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 23:41
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 23:41
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 23:41
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 23:41
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 23:41
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 23:41

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-MR-051
Collection Date: 05/07/13 10:50 AM

Work Order: 1305241
Lab ID: 1305241-54
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.22	25	µg/L	1	05/14/13 23:41
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 23:41
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 23:41
Acetone	U		0.33	50	µg/L	1	05/14/13 23:41
Benzene	U		0.18	1.0	µg/L	1	05/14/13 23:41
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 23:41
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 23:41
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 23:41
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 23:41
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 23:41
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 23:41
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 23:41
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 23:41
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 23:41
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 23:41
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 23:41
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 23:41
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 23:41
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 23:41
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 23:41
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 23:41
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 23:41
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 23:41
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 23:41
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 23:41
Styrene	U		0.11	1.0	µg/L	1	05/14/13 23:41
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 23:41
Toluene	U		0.12	1.0	µg/L	1	05/14/13 23:41
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 23:41
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 23:41
Trichloroethene	3.7		0.14	1.0	µg/L	1	05/14/13 23:41
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 23:41
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 23:41
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 23:41
Surr: 1,2-Dichloroethane-d4	103			70-120	%REC	1	05/14/13 23:41
Surr: 4-Bromofluorobenzene	101			75-120	%REC	1	05/14/13 23:41
Surr: Dibromofluoromethane	100			85-115	%REC	1	05/14/13 23:41
Surr: Toluene-d8	104			85-120	%REC	1	05/14/13 23:41

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-MR-052
Collection Date: 05/07/13 11:25 AM

Work Order: 1305241
Lab ID: 1305241-55
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/15/13 12:05
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/15/13 12:05
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/15/13 12:05
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/15/13 12:05
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/15/13 12:05
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 12:05
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/15/13 12:05
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/15/13 12:05
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/15/13 12:05
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 12:05
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/15/13 12:05
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/15/13 12:05
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/15/13 12:05
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/15/13 12:05
2-Butanone	U		0.22	25	µg/L	1	05/15/13 12:05
2-Hexanone	U		0.12	50	µg/L	1	05/15/13 12:05
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/15/13 12:05
Acetone	U		0.33	50	µg/L	1	05/15/13 12:05
Benzene	U		0.18	1.0	µg/L	1	05/15/13 12:05
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/15/13 12:05
Bromoform	U		0.15	1.0	µg/L	1	05/15/13 12:05
Bromomethane	U		0.21	5.0	µg/L	1	05/15/13 12:05
Carbon disulfide	U		0.17	5.0	µg/L	1	05/15/13 12:05
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/15/13 12:05
Chlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 12:05
Chloroethane	U		0.46	5.0	µg/L	1	05/15/13 12:05
Chloroform	1.2		0.15	1.0	µg/L	1	05/15/13 12:05
Chloromethane	U		0.16	5.0	µg/L	1	05/15/13 12:05
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/15/13 12:05
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/15/13 12:05
Cyclohexane	U		0.22	1.0	µg/L	1	05/15/13 12:05
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/15/13 12:05
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/15/13 12:05
Ethylbenzene	U		0.13	1.0	µg/L	1	05/15/13 12:05
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/15/13 12:05
Methyl acetate	U		0.19	10	µg/L	1	05/15/13 12:05
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/15/13 12:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-MR-052
Collection Date: 05/07/13 11:25 AM

Work Order: 1305241
Lab ID: 1305241-55
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/15/13 12:05
Methylene chloride	U		0.19	5.0	µg/L	1	05/15/13 12:05
Styrene	U		0.11	1.0	µg/L	1	05/15/13 12:05
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/15/13 12:05
Toluene	U		0.12	1.0	µg/L	1	05/15/13 12:05
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 12:05
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/15/13 12:05
Trichloroethene	29		0.14	1.0	µg/L	1	05/15/13 12:05
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/15/13 12:05
Vinyl chloride	U		0.17	1.0	µg/L	1	05/15/13 12:05
Xylenes, Total	U		0.29	3.0	µg/L	1	05/15/13 12:05
Surr: 1,2-Dichloroethane-d4	103			70-120	%REC	1	05/15/13 12:05
Surr: 4-Bromofluorobenzene	99.2			75-120	%REC	1	05/15/13 12:05
Surr: Dibromofluoromethane	99.0			85-115	%REC	1	05/15/13 12:05
Surr: Toluene-d8	102			85-120	%REC	1	05/15/13 12:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-053
Collection Date: 05/07/13 02:26 PM

Work Order: 1305241
Lab ID: 1305241-56
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep: SW3510 / 5/10/13	Analyst: RM	
<u>BatchID: 48313</u>							
1,1'-Biphenyl	U		0.095	5.0	µg/L	1	05/13/13 16:44
2,4,5-Trichlorophenol	U		0.12	5.0	µg/L	1	05/13/13 16:44
2,4,6-Trichlorophenol	U		0.11	4.0	µg/L	1	05/13/13 16:44
2,4-Dichlorophenol	U		0.22	10	µg/L	1	05/13/13 16:44
2,4-Dimethylphenol	U		0.24	5.0	µg/L	1	05/13/13 16:44
2,4-Dinitrophenol	U		0.76	5.0	µg/L	1	05/13/13 16:44
2,4-Dinitrotoluene	U		0.78	5.0	µg/L	1	05/13/13 16:44
2,6-Dinitrotoluene	U		0.82	5.0	µg/L	1	05/13/13 16:44
2-Chloronaphthalene	U		0.13	5.0	µg/L	1	05/13/13 16:44
2-Chlorophenol	U		0.73	5.0	µg/L	1	05/13/13 16:44
2-Methylnaphthalene	U		0.13	5.0	µg/L	1	05/13/13 16:44
2-Methylphenol	U		0.60	5.0	µg/L	1	05/13/13 16:44
2-Nitroaniline	U		0.11	20	µg/L	1	05/13/13 16:44
2-Nitrophenol	U		0.19	5.0	µg/L	1	05/13/13 16:44
3,3'-Dichlorobenzidine	U		0.54	1.0	µg/L	1	05/13/13 16:44
3-Nitroaniline	U		2.5	20	µg/L	1	05/13/13 16:44
4,6-Dinitro-2-methylphenol	U		0.34	20	µg/L	1	05/13/13 16:44
4-Bromophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/13/13 16:44
4-Chloro-3-methylphenol	U		0.65	5.0	µg/L	1	05/13/13 16:44
4-Chloroaniline	U		1.1	10	µg/L	1	05/13/13 16:44
4-Chlorophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/13/13 16:44
4-Methylphenol	U		0.55	5.0	µg/L	1	05/13/13 16:44
4-Nitroaniline	U		1.5	20	µg/L	1	05/13/13 16:44
4-Nitrophenol	U		1.6	20	µg/L	1	05/13/13 16:44
Acenaphthene	U		0.11	5.0	µg/L	1	05/13/13 16:44
Acenaphthylene	U		0.12	5.0	µg/L	1	05/13/13 16:44
Acetophenone	U		0.090	1.0	µg/L	1	05/13/13 16:44
Anthracene	U		0.72	5.0	µg/L	1	05/13/13 16:44
Atrazine	U		0.13	3.0	µg/L	1	05/13/13 16:44
Benzaldehyde	U		0.46	1.0	µg/L	1	05/13/13 16:44
Benzo(a)anthracene	U		0.57	1.0	µg/L	1	05/13/13 16:44
Benzo(a)pyrene	U		0.10	1.0	µg/L	1	05/13/13 16:44
Benzo(b)fluoranthene	U		0.74	1.0	µg/L	1	05/13/13 16:44
Benzo(g,h,i)perylene	U		0.70	1.0	µg/L	1	05/13/13 16:44
Benzo(k)fluoranthene	U		0.17	1.0	µg/L	1	05/13/13 16:44
Bis(2-chloroethoxy)methane	U		0.13	5.0	µg/L	1	05/13/13 16:44
Bis(2-chloroethyl)ether	U		0.11	1.0	µg/L	1	05/13/13 16:44

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-053
Collection Date: 05/07/13 02:26 PM

Work Order: 1305241
Lab ID: 1305241-56
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bis(2-chloroisopropyl)ether	U		0.12	5.0	µg/L	1	05/13/13 16:44
Bis(2-ethylhexyl)phthalate	U		0.12	5.0	µg/L	1	05/13/13 16:44
Butyl benzyl phthalate	U		0.11	5.0	µg/L	1	05/13/13 16:44
Caprolactam	U		4.7	10	µg/L	1	05/13/13 16:44
Carbazole	U		0.84	10	µg/L	1	05/13/13 16:44
Chrysene	U		0.71	1.0	µg/L	1	05/13/13 16:44
Dibenzo(a,h)anthracene	U		0.67	2.0	µg/L	1	05/13/13 16:44
Dibenzofuran	U		0.11	4.0	µg/L	1	05/13/13 16:44
Diethyl phthalate	U		0.69	5.0	µg/L	1	05/13/13 16:44
Dimethyl phthalate	U		0.14	5.0	µg/L	1	05/13/13 16:44
Di-n-butyl phthalate	U		0.71	5.0	µg/L	1	05/13/13 16:44
Di-n-octyl phthalate	U		0.12	5.0	µg/L	1	05/13/13 16:44
Fluoranthene	U		0.77	1.0	µg/L	1	05/13/13 16:44
Fluorene	U		0.10	5.0	µg/L	1	05/13/13 16:44
Hexachlorobenzene	U		0.10	1.0	µg/L	1	05/13/13 16:44
Hexachlorobutadiene	U		0.12	1.0	µg/L	1	05/13/13 16:44
Hexachlorocyclopentadiene	U		0.18	5.0	µg/L	1	05/13/13 16:44
Hexachloroethane	U		0.13	5.0	µg/L	1	05/13/13 16:44
Indeno(1,2,3-cd)pyrene	U		0.69	2.0	µg/L	1	05/13/13 16:44
Isophorone	U		0.12	5.0	µg/L	1	05/13/13 16:44
Naphthalene	U		0.12	5.0	µg/L	1	05/13/13 16:44
Nitrobenzene	U		0.10	3.0	µg/L	1	05/13/13 16:44
N-Nitrosodi-n-propylamine	U		0.13	5.0	µg/L	1	05/13/13 16:44
N-Nitrosodiphenylamine	U		0.81	5.0	µg/L	1	05/13/13 16:44
Pentachlorophenol	U		0.11	1.0	µg/L	1	05/13/13 16:44
Phenanthrene	U		0.86	2.0	µg/L	1	05/13/13 16:44
Phenol	U		0.094	5.0	µg/L	1	05/13/13 16:44
Pyrene	U		0.65	5.0	µg/L	1	05/13/13 16:44
Surr: 2,4,6-Tribromophenol	54.0			32-115	%REC	1	05/13/13 16:44
Surr: 2-Fluorobiphenyl	52.0			32-100	%REC	1	05/13/13 16:44
Surr: 2-Fluorophenol	38.6			22-59	%REC	1	05/13/13 16:44
Surr: 4-Terphenyl-d14	99.7			23-112	%REC	1	05/13/13 16:44
Surr: Nitrobenzene-d5	53.8			31-93	%REC	1	05/13/13 16:44
Surr: Phenol-d6	25.0			13-36	%REC	1	05/13/13 16:44
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: RS	
BatchID: R120735							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/15/13 12:28
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/15/13 12:28
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/15/13 12:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-053
Collection Date: 05/07/13 02:26 PM

Work Order: 1305241
Lab ID: 1305241-56
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/15/13 12:28
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/15/13 12:28
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 12:28
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/15/13 12:28
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/15/13 12:28
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/15/13 12:28
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 12:28
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/15/13 12:28
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/15/13 12:28
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/15/13 12:28
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/15/13 12:28
2-Butanone	U		0.22	25	µg/L	1	05/15/13 12:28
2-Hexanone	U		0.12	50	µg/L	1	05/15/13 12:28
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/15/13 12:28
Acetone	U		0.33	50	µg/L	1	05/15/13 12:28
Benzene	U		0.18	1.0	µg/L	1	05/15/13 12:28
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/15/13 12:28
Bromoform	U		0.15	1.0	µg/L	1	05/15/13 12:28
Bromomethane	U		0.21	5.0	µg/L	1	05/15/13 12:28
Carbon disulfide	U		0.17	5.0	µg/L	1	05/15/13 12:28
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/15/13 12:28
Chlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 12:28
Chloroethane	U		0.46	5.0	µg/L	1	05/15/13 12:28
Chloroform	U		0.15	1.0	µg/L	1	05/15/13 12:28
Chloromethane	U		0.16	5.0	µg/L	1	05/15/13 12:28
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/15/13 12:28
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/15/13 12:28
Cyclohexane	U		0.22	1.0	µg/L	1	05/15/13 12:28
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/15/13 12:28
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/15/13 12:28
Ethylbenzene	U		0.13	1.0	µg/L	1	05/15/13 12:28
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/15/13 12:28
Methyl acetate	U		0.19	10	µg/L	1	05/15/13 12:28
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/15/13 12:28
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/15/13 12:28
Methylene chloride	U		0.19	5.0	µg/L	1	05/15/13 12:28
Styrene	U		0.11	1.0	µg/L	1	05/15/13 12:28
Tetrachloroethene	5.2		0.15	1.0	µg/L	1	05/15/13 12:28
Toluene	U		0.12	1.0	µg/L	1	05/15/13 12:28
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 12:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp**Date:** 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-053
Collection Date: 05/07/13 02:26 PM

Work Order: 1305241
Lab ID: 1305241-56
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/15/13 12:28
Trichloroethene	U		0.14	1.0	µg/L	1	05/15/13 12:28
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/15/13 12:28
Vinyl chloride	U		0.17	1.0	µg/L	1	05/15/13 12:28
Xylenes, Total	U		0.29	3.0	µg/L	1	05/15/13 12:28
Surr: 1,2-Dichloroethane-d4	103			70-120	%REC	1	05/15/13 12:28
Surr: 4-Bromofluorobenzene	98.8			75-120	%REC	1	05/15/13 12:28
Surr: Dibromofluoromethane	99.6			85-115	%REC	1	05/15/13 12:28
Surr: Toluene-d8	103			85-120	%REC	1	05/15/13 12:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-054
Collection Date: 05/07/13 01:55 PM

Work Order: 1305241
Lab ID: 1305241-57
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/15/13 12:52
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/15/13 12:52
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/15/13 12:52
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/15/13 12:52
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/15/13 12:52
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 12:52
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/15/13 12:52
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/15/13 12:52
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/15/13 12:52
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 12:52
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/15/13 12:52
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/15/13 12:52
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/15/13 12:52
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/15/13 12:52
2-Butanone	U		0.22	25	µg/L	1	05/15/13 12:52
2-Hexanone	U		0.12	50	µg/L	1	05/15/13 12:52
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/15/13 12:52
Acetone	U		0.33	50	µg/L	1	05/15/13 12:52
Benzene	U		0.18	1.0	µg/L	1	05/15/13 12:52
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/15/13 12:52
Bromoform	U		0.15	1.0	µg/L	1	05/15/13 12:52
Bromomethane	U		0.21	5.0	µg/L	1	05/15/13 12:52
Carbon disulfide	U		0.17	5.0	µg/L	1	05/15/13 12:52
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/15/13 12:52
Chlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 12:52
Chloroethane	U		0.46	5.0	µg/L	1	05/15/13 12:52
Chloroform	U		0.15	1.0	µg/L	1	05/15/13 12:52
Chloromethane	U		0.16	5.0	µg/L	1	05/15/13 12:52
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/15/13 12:52
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/15/13 12:52
Cyclohexane	U		0.22	1.0	µg/L	1	05/15/13 12:52
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/15/13 12:52
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/15/13 12:52
Ethylbenzene	U		0.13	1.0	µg/L	1	05/15/13 12:52
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/15/13 12:52
Methyl acetate	U		0.19	10	µg/L	1	05/15/13 12:52
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/15/13 12:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-054
Collection Date: 05/07/13 01:55 PM

Work Order: 1305241
Lab ID: 1305241-57
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/15/13 12:52
Methylene chloride	U		0.19	5.0	µg/L	1	05/15/13 12:52
Styrene	U		0.11	1.0	µg/L	1	05/15/13 12:52
Tetrachloroethene	2.0		0.15	1.0	µg/L	1	05/15/13 12:52
Toluene	U		0.12	1.0	µg/L	1	05/15/13 12:52
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 12:52
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/15/13 12:52
Trichloroethene	U		0.14	1.0	µg/L	1	05/15/13 12:52
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/15/13 12:52
Vinyl chloride	U		0.17	1.0	µg/L	1	05/15/13 12:52
Xylenes, Total	U		0.29	3.0	µg/L	1	05/15/13 12:52
Surr: 1,2-Dichloroethane-d4	103			70-120	%REC	1	05/15/13 12:52
Surr: 4-Bromofluorobenzene	97.4			75-120	%REC	1	05/15/13 12:52
Surr: Dibromofluoromethane	99.8			85-115	%REC	1	05/15/13 12:52
Surr: Toluene-d8	103			85-120	%REC	1	05/15/13 12:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-055
Collection Date: 05/07/13 01:15 PM

Work Order: 1305241
Lab ID: 1305241-58
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/15/13 01:15
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/15/13 01:15
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/15/13 01:15
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/15/13 01:15
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/15/13 01:15
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 01:15
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/15/13 01:15
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/15/13 01:15
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/15/13 01:15
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 01:15
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/15/13 01:15
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/15/13 01:15
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/15/13 01:15
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/15/13 01:15
2-Butanone	U		0.22	25	µg/L	1	05/15/13 01:15
2-Hexanone	U		0.12	50	µg/L	1	05/15/13 01:15
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/15/13 01:15
Acetone	U		0.33	50	µg/L	1	05/15/13 01:15
Benzene	U		0.18	1.0	µg/L	1	05/15/13 01:15
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/15/13 01:15
Bromoform	U		0.15	1.0	µg/L	1	05/15/13 01:15
Bromomethane	U		0.21	5.0	µg/L	1	05/15/13 01:15
Carbon disulfide	U		0.17	5.0	µg/L	1	05/15/13 01:15
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/15/13 01:15
Chlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 01:15
Chloroethane	U		0.46	5.0	µg/L	1	05/15/13 01:15
Chloroform	U		0.15	1.0	µg/L	1	05/15/13 01:15
Chloromethane	U		0.16	5.0	µg/L	1	05/15/13 01:15
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/15/13 01:15
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/15/13 01:15
Cyclohexane	U		0.22	1.0	µg/L	1	05/15/13 01:15
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/15/13 01:15
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/15/13 01:15
Ethylbenzene	U		0.13	1.0	µg/L	1	05/15/13 01:15
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/15/13 01:15
Methyl acetate	U		0.19	10	µg/L	1	05/15/13 01:15
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/15/13 01:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: GW-17360-050713-BW-055
Collection Date: 05/07/13 01:15 PM

Work Order: 1305241
Lab ID: 1305241-58
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/15/13 01:15
Methylene chloride	U		0.19	5.0	µg/L	1	05/15/13 01:15
Styrene	U		0.11	1.0	µg/L	1	05/15/13 01:15
Toluene	U		0.12	1.0	µg/L	1	05/15/13 01:15
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 01:15
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/15/13 01:15
Trichloroethene	U		0.14	1.0	µg/L	1	05/15/13 01:15
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/15/13 01:15
Vinyl chloride	U		0.17	1.0	µg/L	1	05/15/13 01:15
Xylenes, Total	U		0.29	3.0	µg/L	1	05/15/13 01:15
Surr: 1,2-Dichloroethane-d4	102			70-120	%REC	1	05/15/13 01:15
Surr: 4-Bromofluorobenzene	100			75-120	%REC	1	05/15/13 01:15
Surr: Dibromofluoromethane	98.2			85-115	%REC	1	05/15/13 01:15
Surr: Toluene-d8	104			85-120	%REC	1	05/15/13 01:15
BatchID: R120753							
Tetrachloroethene	140		0.76	5.0	µg/L	5	05/15/13 15:48
Surr: 1,2-Dichloroethane-d4	98.6			70-120	%REC	5	05/15/13 15:48
Surr: 4-Bromofluorobenzene	98.2			75-120	%REC	5	05/15/13 15:48
Surr: Dibromofluoromethane	97.9			85-115	%REC	5	05/15/13 15:48
Surr: Toluene-d8	97.2			85-120	%REC	5	05/15/13 15:48

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-MR-056
Collection Date: 05/07/13 01:55 PM

Work Order: 1305241
Lab ID: 1305241-59
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
BatchID: <u>R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/15/13 01:39
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/15/13 01:39
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/15/13 01:39
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/15/13 01:39
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/15/13 01:39
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 01:39
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/15/13 01:39
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/15/13 01:39
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/15/13 01:39
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 01:39
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/15/13 01:39
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/15/13 01:39
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/15/13 01:39
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/15/13 01:39
2-Butanone	U		0.22	25	µg/L	1	05/15/13 01:39
2-Hexanone	U		0.12	50	µg/L	1	05/15/13 01:39
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/15/13 01:39
Acetone	U		0.33	50	µg/L	1	05/15/13 01:39
Benzene	U		0.18	1.0	µg/L	1	05/15/13 01:39
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/15/13 01:39
Bromoform	U		0.15	1.0	µg/L	1	05/15/13 01:39
Bromomethane	U		0.21	5.0	µg/L	1	05/15/13 01:39
Carbon disulfide	U		0.17	5.0	µg/L	1	05/15/13 01:39
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/15/13 01:39
Chlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 01:39
Chloroethane	U		0.46	5.0	µg/L	1	05/15/13 01:39
Chloroform	U		0.15	1.0	µg/L	1	05/15/13 01:39
Chloromethane	U		0.16	5.0	µg/L	1	05/15/13 01:39
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/15/13 01:39
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/15/13 01:39
Cyclohexane	U		0.22	1.0	µg/L	1	05/15/13 01:39
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/15/13 01:39
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/15/13 01:39
Ethylbenzene	U		0.13	1.0	µg/L	1	05/15/13 01:39
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/15/13 01:39
Methyl acetate	U		0.19	10	µg/L	1	05/15/13 01:39
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/15/13 01:39

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-MR-056
Collection Date: 05/07/13 01:55 PM

Work Order: 1305241
Lab ID: 1305241-59
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/15/13 01:39
Methylene chloride	U		0.19	5.0	µg/L	1	05/15/13 01:39
Styrene	U		0.11	1.0	µg/L	1	05/15/13 01:39
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/15/13 01:39
Toluene	U		0.12	1.0	µg/L	1	05/15/13 01:39
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 01:39
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/15/13 01:39
Trichloroethene	U		0.14	1.0	µg/L	1	05/15/13 01:39
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/15/13 01:39
Vinyl chloride	U		0.17	1.0	µg/L	1	05/15/13 01:39
Xylenes, Total	U		0.29	3.0	µg/L	1	05/15/13 01:39
Surr: 1,2-Dichloroethane-d4	104			70-120	%REC	1	05/15/13 01:39
Surr: 4-Bromofluorobenzene	97.9			75-120	%REC	1	05/15/13 01:39
Surr: Dibromofluoromethane	101			85-115	%REC	1	05/15/13 01:39
Surr: Toluene-d8	102			85-120	%REC	1	05/15/13 01:39

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-MR-057
Collection Date: 05/07/13 02:25 PM

Work Order: 1305241
Lab ID: 1305241-60
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470			Prep: SW7470 / 5/13/13	Analyst: LR
<u>BatchID: 48372</u>							
Mercury	U		0.00010	0.00020	mg/L	1	05/13/13 15:21
METALS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/11/13	Analyst: ML
<u>BatchID: 48339</u>							
Antimony	0.00011	J	0.000036	0.0050	mg/L	1	05/15/13 16:13
Arsenic	0.0011	J	0.00058	0.0050	mg/L	1	05/15/13 16:13
Barium	0.051		0.000063	0.0050	mg/L	1	05/15/13 16:13
Beryllium	U		0.000082	0.0020	mg/L	1	05/15/13 16:13
Cadmium	0.000060	J	0.000045	0.0020	mg/L	1	05/15/13 16:13
Chromium	U		0.00027	0.0050	mg/L	1	05/15/13 16:13
Cobalt	0.0086		0.000041	0.0050	mg/L	1	05/15/13 16:13
Copper	0.0041	J	0.00053	0.0050	mg/L	1	05/15/13 16:13
Lead	U		0.000051	0.0050	mg/L	1	05/15/13 16:13
Manganese	0.032		0.000054	0.0050	mg/L	1	05/15/13 16:13
Molybdenum	0.00071	J	0.000088	0.0050	mg/L	1	05/15/13 16:13
Nickel	0.0057		0.00025	0.0050	mg/L	1	05/15/13 16:13
Selenium	U		0.00064	0.0050	mg/L	1	05/15/13 16:13
Silver	U		0.000042	0.0050	mg/L	1	05/15/13 16:13
Thallium	U		0.000062	0.0050	mg/L	1	05/15/13 16:13
Vanadium	U		0.00016	0.0050	mg/L	1	05/15/13 16:13
Zinc	0.0027	J	0.00048	0.010	mg/L	1	05/15/13 16:13
VOLATILE ORGANIC COMPOUNDS							
			SW8260				Analyst: RS
<u>BatchID: R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/15/13 02:02
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/15/13 02:02
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/15/13 02:02
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/15/13 02:02
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/15/13 02:02
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 02:02
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/15/13 02:02
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/15/13 02:02
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/15/13 02:02
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 02:02
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/15/13 02:02
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/15/13 02:02
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/15/13 02:02
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/15/13 02:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-MR-057
Collection Date: 05/07/13 02:25 PM

Work Order: 1305241
Lab ID: 1305241-60
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.22	25	µg/L	1	05/15/13 02:02
2-Hexanone	U		0.12	50	µg/L	1	05/15/13 02:02
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/15/13 02:02
Acetone	U		0.33	50	µg/L	1	05/15/13 02:02
Benzene	U		0.18	1.0	µg/L	1	05/15/13 02:02
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/15/13 02:02
Bromoform	U		0.15	1.0	µg/L	1	05/15/13 02:02
Bromomethane	U		0.21	5.0	µg/L	1	05/15/13 02:02
Carbon disulfide	U		0.17	5.0	µg/L	1	05/15/13 02:02
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/15/13 02:02
Chlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 02:02
Chloroethane	U		0.46	5.0	µg/L	1	05/15/13 02:02
Chloroform	U		0.15	1.0	µg/L	1	05/15/13 02:02
Chloromethane	U		0.16	5.0	µg/L	1	05/15/13 02:02
cis-1,2-Dichloroethene	1.6		0.11	1.0	µg/L	1	05/15/13 02:02
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/15/13 02:02
Cyclohexane	U		0.22	1.0	µg/L	1	05/15/13 02:02
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/15/13 02:02
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/15/13 02:02
Ethylbenzene	U		0.13	1.0	µg/L	1	05/15/13 02:02
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/15/13 02:02
Methyl acetate	U		0.19	10	µg/L	1	05/15/13 02:02
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/15/13 02:02
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/15/13 02:02
Methylene chloride	U		0.19	5.0	µg/L	1	05/15/13 02:02
Styrene	U		0.11	1.0	µg/L	1	05/15/13 02:02
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/15/13 02:02
Toluene	U		0.12	1.0	µg/L	1	05/15/13 02:02
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 02:02
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/15/13 02:02
Trichloroethene	3.0		0.14	1.0	µg/L	1	05/15/13 02:02
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/15/13 02:02
Vinyl chloride	U		0.17	1.0	µg/L	1	05/15/13 02:02
Xylenes, Total	U		0.29	3.0	µg/L	1	05/15/13 02:02
Surr: 1,2-Dichloroethane-d4	104			70-120	%REC	1	05/15/13 02:02
Surr: 4-Bromofluorobenzene	99.0			75-120	%REC	1	05/15/13 02:02
Surr: Dibromofluoromethane	101			85-115	%REC	1	05/15/13 02:02
Surr: Toluene-d8	102			85-120	%REC	1	05/15/13 02:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-MR-060
Collection Date: 05/07/13 03:10 PM

Work Order: 1305241
Lab ID: 1305241-61
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/15/13 02:25
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/15/13 02:25
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/15/13 02:25
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/15/13 02:25
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/15/13 02:25
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 02:25
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/15/13 02:25
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/15/13 02:25
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/15/13 02:25
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 02:25
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/15/13 02:25
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/15/13 02:25
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/15/13 02:25
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/15/13 02:25
2-Butanone	U		0.22	25	µg/L	1	05/15/13 02:25
2-Hexanone	U		0.12	50	µg/L	1	05/15/13 02:25
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/15/13 02:25
Acetone	U		0.33	50	µg/L	1	05/15/13 02:25
Benzene	U		0.18	1.0	µg/L	1	05/15/13 02:25
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/15/13 02:25
Bromoform	U		0.15	1.0	µg/L	1	05/15/13 02:25
Bromomethane	U		0.21	5.0	µg/L	1	05/15/13 02:25
Carbon disulfide	U		0.17	5.0	µg/L	1	05/15/13 02:25
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/15/13 02:25
Chlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 02:25
Chloroethane	U		0.46	5.0	µg/L	1	05/15/13 02:25
Chloroform	U		0.15	1.0	µg/L	1	05/15/13 02:25
Chloromethane	U		0.16	5.0	µg/L	1	05/15/13 02:25
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/15/13 02:25
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/15/13 02:25
Cyclohexane	U		0.22	1.0	µg/L	1	05/15/13 02:25
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/15/13 02:25
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/15/13 02:25
Ethylbenzene	U		0.13	1.0	µg/L	1	05/15/13 02:25
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/15/13 02:25
Methyl acetate	U		0.19	10	µg/L	1	05/15/13 02:25
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/15/13 02:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-MR-060
Collection Date: 05/07/13 03:10 PM

Work Order: 1305241
Lab ID: 1305241-61
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/15/13 02:25
Methylene chloride	U		0.19	5.0	µg/L	1	05/15/13 02:25
Styrene	U		0.11	1.0	µg/L	1	05/15/13 02:25
Tetrachloroethene	2.8		0.15	1.0	µg/L	1	05/15/13 02:25
Toluene	U		0.12	1.0	µg/L	1	05/15/13 02:25
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 02:25
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/15/13 02:25
Trichloroethene	U		0.14	1.0	µg/L	1	05/15/13 02:25
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/15/13 02:25
Vinyl chloride	U		0.17	1.0	µg/L	1	05/15/13 02:25
Xylenes, Total	U		0.29	3.0	µg/L	1	05/15/13 02:25
Surr: 1,2-Dichloroethane-d4	103			70-120	%REC	1	05/15/13 02:25
Surr: 4-Bromofluorobenzene	99.0			75-120	%REC	1	05/15/13 02:25
Surr: Dibromofluoromethane	99.8			85-115	%REC	1	05/15/13 02:25
Surr: Toluene-d8	102			85-120	%REC	1	05/15/13 02:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-EB-058
Collection Date: 05/07/13 02:30 PM

Work Order: 1305241
Lab ID: 1305241-62
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: RS
<u>BatchID: R120735</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/15/13 02:49
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/15/13 02:49
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/15/13 02:49
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/15/13 02:49
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/15/13 02:49
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 02:49
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/15/13 02:49
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/15/13 02:49
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/15/13 02:49
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 02:49
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/15/13 02:49
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/15/13 02:49
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/15/13 02:49
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/15/13 02:49
2-Butanone	U		0.22	25	µg/L	1	05/15/13 02:49
2-Hexanone	U		0.12	50	µg/L	1	05/15/13 02:49
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/15/13 02:49
Acetone	U		0.33	50	µg/L	1	05/15/13 02:49
Benzene	U		0.18	1.0	µg/L	1	05/15/13 02:49
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/15/13 02:49
Bromoform	U		0.15	1.0	µg/L	1	05/15/13 02:49
Bromomethane	U		0.21	5.0	µg/L	1	05/15/13 02:49
Carbon disulfide	U		0.17	5.0	µg/L	1	05/15/13 02:49
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/15/13 02:49
Chlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 02:49
Chloroethane	U		0.46	5.0	µg/L	1	05/15/13 02:49
Chloroform	U		0.15	1.0	µg/L	1	05/15/13 02:49
Chloromethane	U		0.16	5.0	µg/L	1	05/15/13 02:49
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/15/13 02:49
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/15/13 02:49
Cyclohexane	U		0.22	1.0	µg/L	1	05/15/13 02:49
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/15/13 02:49
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/15/13 02:49
Ethylbenzene	1.2		0.13	1.0	µg/L	1	05/15/13 02:49
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/15/13 02:49
Methyl acetate	U		0.19	10	µg/L	1	05/15/13 02:49
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/15/13 02:49

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-EB-058
Collection Date: 05/07/13 02:30 PM

Work Order: 1305241
Lab ID: 1305241-62
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/15/13 02:49
Methylene chloride	U		0.19	5.0	µg/L	1	05/15/13 02:49
Styrene	U		0.11	1.0	µg/L	1	05/15/13 02:49
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/15/13 02:49
Toluene	U		0.12	1.0	µg/L	1	05/15/13 02:49
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 02:49
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/15/13 02:49
Trichloroethene	U		0.14	1.0	µg/L	1	05/15/13 02:49
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/15/13 02:49
Vinyl chloride	U		0.17	1.0	µg/L	1	05/15/13 02:49
Xylenes, Total	1.5	J	0.29	3.0	µg/L	1	05/15/13 02:49
Surr: 1,2-Dichloroethane-d4	104			70-120	%REC	1	05/15/13 02:49
Surr: 4-Bromofluorobenzene	99.6			75-120	%REC	1	05/15/13 02:49
Surr: Dibromofluoromethane	99.1			85-115	%REC	1	05/15/13 02:49
Surr: Toluene-d8	103			85-120	%REC	1	05/15/13 02:49

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-EB-059
Collection Date: 05/07/13 03:30 PM

Work Order: 1305241
Lab ID: 1305241-63
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7470			Prep: SW7470 / 5/13/13	Analyst: LR
<u>BatchID:</u> 48372							
Mercury	U		0.00010	0.00020	mg/L	1	05/13/13 15:23
METALS BY ICP-MS							
			SW6020A			Prep: SW3005A / 5/11/13	Analyst: ML
<u>BatchID:</u> 48339							
Antimony	0.000052	J	0.000036	0.0050	mg/L	1	05/15/13 16:19
Arsenic	0.0095		0.00058	0.0050	mg/L	1	05/15/13 16:19
Barium	0.083		0.000063	0.0050	mg/L	1	05/15/13 16:19
Beryllium	U		0.000082	0.0020	mg/L	1	05/15/13 16:19
Cadmium	0.00018	J	0.000045	0.0020	mg/L	1	05/15/13 16:19
Chromium	0.00044	J	0.00027	0.0050	mg/L	1	05/15/13 16:19
Cobalt	0.0017	J	0.000041	0.0050	mg/L	1	05/15/13 16:19
Copper	0.0015	J	0.00053	0.0050	mg/L	1	05/15/13 16:19
Lead	0.00045	J	0.000051	0.0050	mg/L	1	05/15/13 16:19
Manganese	0.67		0.000054	0.0050	mg/L	1	05/15/13 16:19
Molybdenum	0.00031	J	0.000088	0.0050	mg/L	1	05/15/13 16:19
Nickel	0.0019	J	0.00025	0.0050	mg/L	1	05/15/13 16:19
Selenium	U		0.00064	0.0050	mg/L	1	05/15/13 16:19
Silver	U		0.000042	0.0050	mg/L	1	05/15/13 16:19
Thallium	U		0.000062	0.0050	mg/L	1	05/15/13 16:19
Vanadium	U		0.00016	0.0050	mg/L	1	05/15/13 16:19
Zinc	0.61		0.00048	0.010	mg/L	1	05/15/13 16:19
VOLATILE ORGANIC COMPOUNDS							
			SW8260				Analyst: RS
<u>BatchID:</u> R120735							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/15/13 03:12
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/15/13 03:12
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/15/13 03:12
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/15/13 03:12
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/15/13 03:12
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 03:12
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/15/13 03:12
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/15/13 03:12
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/15/13 03:12
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 03:12
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/15/13 03:12
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/15/13 03:12
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/15/13 03:12
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/15/13 03:12

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-EB-059
Collection Date: 05/07/13 03:30 PM

Work Order: 1305241
Lab ID: 1305241-63
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
2-Butanone	U		0.22	25	µg/L	1	05/15/13 03:12
2-Hexanone	U		0.12	50	µg/L	1	05/15/13 03:12
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/15/13 03:12
Acetone	U		0.33	50	µg/L	1	05/15/13 03:12
Benzene	U		0.18	1.0	µg/L	1	05/15/13 03:12
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/15/13 03:12
Bromoform	U		0.15	1.0	µg/L	1	05/15/13 03:12
Bromomethane	U		0.21	5.0	µg/L	1	05/15/13 03:12
Carbon disulfide	U		0.17	5.0	µg/L	1	05/15/13 03:12
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/15/13 03:12
Chlorobenzene	U		0.13	1.0	µg/L	1	05/15/13 03:12
Chloroethane	U		0.46	5.0	µg/L	1	05/15/13 03:12
Chloroform	U		0.15	1.0	µg/L	1	05/15/13 03:12
Chloromethane	U		0.16	5.0	µg/L	1	05/15/13 03:12
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/15/13 03:12
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/15/13 03:12
Cyclohexane	U		0.22	1.0	µg/L	1	05/15/13 03:12
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/15/13 03:12
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/15/13 03:12
Ethylbenzene	U		0.13	1.0	µg/L	1	05/15/13 03:12
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/15/13 03:12
Methyl acetate	U		0.19	10	µg/L	1	05/15/13 03:12
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/15/13 03:12
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/15/13 03:12
Methylene chloride	U		0.19	5.0	µg/L	1	05/15/13 03:12
Styrene	U		0.11	1.0	µg/L	1	05/15/13 03:12
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/15/13 03:12
Toluene	U		0.12	1.0	µg/L	1	05/15/13 03:12
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/15/13 03:12
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/15/13 03:12
Trichloroethene	U		0.14	1.0	µg/L	1	05/15/13 03:12
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/15/13 03:12
Vinyl chloride	U		0.17	1.0	µg/L	1	05/15/13 03:12
Xylenes, Total	U		0.29	3.0	µg/L	1	05/15/13 03:12
Surr: 1,2-Dichloroethane-d4	105			70-120	%REC	1	05/15/13 03:12
Surr: 4-Bromofluorobenzene	98.2			75-120	%REC	1	05/15/13 03:12
Surr: Dibromofluoromethane	99.6			85-115	%REC	1	05/15/13 03:12
Surr: Toluene-d8	104			85-120	%REC	1	05/15/13 03:12

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-EB-061
Collection Date: 05/07/13 06:35 PM

Work Order: 1305241
Lab ID: 1305241-64
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA			SW7470			Prep: SW7470 / 5/13/13	Analyst: LR
<u>BatchID: 48372</u>							
Mercury	U		0.00010	0.00020	mg/L	1	05/13/13 15:25
METALS BY ICP-MS			SW6020A			Prep: SW3005A / 5/11/13	Analyst: ML
<u>BatchID: 48339</u>							
Antimony	0.00016	J	0.000036	0.0050	mg/L	1	05/15/13 16:55
Arsenic	U		0.00058	0.0050	mg/L	1	05/15/13 16:55
Barium	0.023		0.000063	0.0050	mg/L	1	05/15/13 16:55
Beryllium	U		0.000082	0.0020	mg/L	1	05/15/13 16:55
Cadmium	0.00046	J	0.000045	0.0020	mg/L	1	05/15/13 16:55
Chromium	0.00083	J	0.00027	0.0050	mg/L	1	05/15/13 16:55
Cobalt	0.0048	J	0.000041	0.0050	mg/L	1	05/15/13 16:55
Copper	0.0053		0.00053	0.0050	mg/L	1	05/15/13 16:55
Lead	0.00020	J	0.000051	0.0050	mg/L	1	05/15/13 16:55
Manganese	0.0011	J	0.000054	0.0050	mg/L	1	05/15/13 16:55
Molybdenum	0.00090	J	0.000088	0.0050	mg/L	1	05/15/13 16:55
Nickel	0.010		0.00025	0.0050	mg/L	1	05/15/13 16:55
Selenium	0.0030	J	0.00064	0.0050	mg/L	1	05/15/13 16:55
Silver	U		0.000042	0.0050	mg/L	1	05/15/13 16:55
Thallium	U		0.000062	0.0050	mg/L	1	05/15/13 16:55
Vanadium	U		0.00016	0.0050	mg/L	1	05/15/13 16:55
Zinc	0.0087	J	0.00048	0.010	mg/L	1	05/15/13 16:55
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270			Prep: SW3510 / 5/10/13	Analyst: RM
<u>BatchID: 48313</u>							
1,1'-Biphenyl	U		0.095	5.0	µg/L	1	05/13/13 17:04
2,4,5-Trichlorophenol	U		0.12	5.0	µg/L	1	05/13/13 17:04
2,4,6-Trichlorophenol	U		0.11	4.0	µg/L	1	05/13/13 17:04
2,4-Dichlorophenol	U		0.22	10	µg/L	1	05/13/13 17:04
2,4-Dimethylphenol	U		0.24	5.0	µg/L	1	05/13/13 17:04
2,4-Dinitrophenol	U		0.76	5.0	µg/L	1	05/13/13 17:04
2,4-Dinitrotoluene	U		0.78	5.0	µg/L	1	05/13/13 17:04
2,6-Dinitrotoluene	U		0.82	5.0	µg/L	1	05/13/13 17:04
2-Chloronaphthalene	U		0.13	5.0	µg/L	1	05/13/13 17:04
2-Chlorophenol	U		0.73	5.0	µg/L	1	05/13/13 17:04
2-Methylnaphthalene	U		0.13	5.0	µg/L	1	05/13/13 17:04
2-Methylphenol	U		0.60	5.0	µg/L	1	05/13/13 17:04
2-Nitroaniline	U		0.11	20	µg/L	1	05/13/13 17:04
2-Nitrophenol	U		0.19	5.0	µg/L	1	05/13/13 17:04

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-EB-061
Collection Date: 05/07/13 06:35 PM

Work Order: 1305241
Lab ID: 1305241-64
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
3,3'-Dichlorobenzidine	U		0.54	1.0	µg/L	1	05/13/13 17:04
3-Nitroaniline	U		2.5	20	µg/L	1	05/13/13 17:04
4,6-Dinitro-2-methylphenol	U		0.34	20	µg/L	1	05/13/13 17:04
4-Bromophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/13/13 17:04
4-Chloro-3-methylphenol	U		0.65	5.0	µg/L	1	05/13/13 17:04
4-Chloroaniline	U		1.1	10	µg/L	1	05/13/13 17:04
4-Chlorophenyl phenyl ether	U		0.11	5.0	µg/L	1	05/13/13 17:04
4-Methylphenol	U		0.55	5.0	µg/L	1	05/13/13 17:04
4-Nitroaniline	U		1.5	20	µg/L	1	05/13/13 17:04
4-Nitrophenol	U		1.6	20	µg/L	1	05/13/13 17:04
Acenaphthene	U		0.11	5.0	µg/L	1	05/13/13 17:04
Acenaphthylene	U		0.12	5.0	µg/L	1	05/13/13 17:04
Acetophenone	U		0.090	1.0	µg/L	1	05/13/13 17:04
Anthracene	U		0.72	5.0	µg/L	1	05/13/13 17:04
Atrazine	U		0.13	3.0	µg/L	1	05/13/13 17:04
Benzaldehyde	U		0.46	1.0	µg/L	1	05/13/13 17:04
Benzo(a)anthracene	U		0.57	1.0	µg/L	1	05/13/13 17:04
Benzo(a)pyrene	U		0.10	1.0	µg/L	1	05/13/13 17:04
Benzo(b)fluoranthene	U		0.74	1.0	µg/L	1	05/13/13 17:04
Benzo(g,h,i)perylene	U		0.70	1.0	µg/L	1	05/13/13 17:04
Benzo(k)fluoranthene	U		0.17	1.0	µg/L	1	05/13/13 17:04
Bis(2-chloroethoxy)methane	U		0.13	5.0	µg/L	1	05/13/13 17:04
Bis(2-chloroethyl)ether	U		0.11	1.0	µg/L	1	05/13/13 17:04
Bis(2-chloroisopropyl)ether	U		0.12	5.0	µg/L	1	05/13/13 17:04
Bis(2-ethylhexyl)phthalate	U		0.12	5.0	µg/L	1	05/13/13 17:04
Butyl benzyl phthalate	U		0.11	5.0	µg/L	1	05/13/13 17:04
Caprolactam	U		4.7	10	µg/L	1	05/13/13 17:04
Carbazole	U		0.84	10	µg/L	1	05/13/13 17:04
Chrysene	U		0.71	1.0	µg/L	1	05/13/13 17:04
Dibenzo(a,h)anthracene	U		0.67	2.0	µg/L	1	05/13/13 17:04
Dibenzofuran	U		0.11	4.0	µg/L	1	05/13/13 17:04
Diethyl phthalate	U		0.69	5.0	µg/L	1	05/13/13 17:04
Dimethyl phthalate	U		0.14	5.0	µg/L	1	05/13/13 17:04
Di-n-butyl phthalate	U		0.71	5.0	µg/L	1	05/13/13 17:04
Di-n-octyl phthalate	U		0.12	5.0	µg/L	1	05/13/13 17:04
Fluoranthene	U		0.77	1.0	µg/L	1	05/13/13 17:04
Fluorene	U		0.10	5.0	µg/L	1	05/13/13 17:04
Hexachlorobenzene	U		0.10	1.0	µg/L	1	05/13/13 17:04
Hexachlorobutadiene	U		0.12	1.0	µg/L	1	05/13/13 17:04
Hexachlorocyclopentadiene	U		0.18	5.0	µg/L	1	05/13/13 17:04

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-EB-061
Collection Date: 05/07/13 06:35 PM

Work Order: 1305241
Lab ID: 1305241-64
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Hexachloroethane	U		0.13	5.0	µg/L	1	05/13/13 17:04
Indeno(1,2,3-cd)pyrene	U		0.69	2.0	µg/L	1	05/13/13 17:04
Isophorone	U		0.12	5.0	µg/L	1	05/13/13 17:04
Naphthalene	U		0.12	5.0	µg/L	1	05/13/13 17:04
Nitrobenzene	U		0.10	3.0	µg/L	1	05/13/13 17:04
N-Nitrosodi-n-propylamine	U		0.13	5.0	µg/L	1	05/13/13 17:04
N-Nitrosodiphenylamine	U		0.81	5.0	µg/L	1	05/13/13 17:04
Pentachlorophenol	U		0.11	1.0	µg/L	1	05/13/13 17:04
Phenanthrene	U		0.86	2.0	µg/L	1	05/13/13 17:04
Phenol	U		0.094	5.0	µg/L	1	05/13/13 17:04
Pyrene	U		0.65	5.0	µg/L	1	05/13/13 17:04
Surr: 2,4,6-Tribromophenol	55.8			32-115	%REC	1	05/13/13 17:04
Surr: 2-Fluorobiphenyl	41.0			32-100	%REC	1	05/13/13 17:04
Surr: 2-Fluorophenol	26.0			22-59	%REC	1	05/13/13 17:04
Surr: 4-Terphenyl-d14	88.1			23-112	%REC	1	05/13/13 17:04
Surr: Nitrobenzene-d5	36.9			31-93	%REC	1	05/13/13 17:04
Surr: Phenol-d6	17.6			13-36	%REC	1	05/13/13 17:04

VOLATILE ORGANIC COMPOUNDS

SW8260

Analyst: AK

BatchID: R120692

1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 19:27
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 19:27
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 19:27
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 19:27
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 19:27
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 19:27
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 19:27
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 19:27
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 19:27
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 19:27
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 19:27
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 19:27
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 19:27
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 19:27
2-Butanone	U		0.22	25	µg/L	1	05/14/13 19:27
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 19:27
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 19:27
Acetone	U		0.33	50	µg/L	1	05/14/13 19:27
Benzene	U		0.18	1.0	µg/L	1	05/14/13 19:27
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 19:27

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-050713-EB-061
Collection Date: 05/07/13 06:35 PM

Work Order: 1305241
Lab ID: 1305241-64
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 19:27
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 19:27
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 19:27
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 19:27
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 19:27
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 19:27
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 19:27
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 19:27
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 19:27
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 19:27
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 19:27
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 19:27
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 19:27
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 19:27
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 19:27
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 19:27
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 19:27
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 19:27
Methylene chloride	U		0.19	5.0	µg/L	1	05/14/13 19:27
Styrene	U		0.11	1.0	µg/L	1	05/14/13 19:27
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 19:27
Toluene	U		0.12	1.0	µg/L	1	05/14/13 19:27
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 19:27
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 19:27
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 19:27
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 19:27
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 19:27
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 19:27
Surr: 1,2-Dichloroethane-d4	102			70-120	%REC	1	05/14/13 19:27
Surr: 4-Bromofluorobenzene	96.4			75-120	%REC	1	05/14/13 19:27
Surr: Dibromofluoromethane	99.4			85-115	%REC	1	05/14/13 19:27
Surr: Toluene-d8	98.7			85-120	%REC	1	05/14/13 19:27

CHROMIUM, TRIVALENT

CALCULATION

Analyst: JYG

BatchID: R120879

Chromium, Trivalent	U	0.0050	0.020	mg/L	1	05/16/13 16:08

CHROMIUM, HEXAVALENT

SW7196A

Analyst: MB

BatchID: R120395

Chromium, Hexavalent	U	0.0050	0.0050	mg/L	1	05/08/13 17:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: TB-17360-050813-EB-062
Collection Date: 05/06/13

Work Order: 1305241
Lab ID: 1305241-65
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: AK
<u>BatchID: R120692</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/14/13 19:03
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/14/13 19:03
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/14/13 19:03
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/14/13 19:03
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/14/13 19:03
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 19:03
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/14/13 19:03
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/14/13 19:03
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/14/13 19:03
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 19:03
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/14/13 19:03
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/14/13 19:03
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/14/13 19:03
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/14/13 19:03
2-Butanone	U		0.22	25	µg/L	1	05/14/13 19:03
2-Hexanone	U		0.12	50	µg/L	1	05/14/13 19:03
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/14/13 19:03
Acetone	U		0.33	50	µg/L	1	05/14/13 19:03
Benzene	U		0.18	1.0	µg/L	1	05/14/13 19:03
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/14/13 19:03
Bromoform	U		0.15	1.0	µg/L	1	05/14/13 19:03
Bromomethane	U		0.21	5.0	µg/L	1	05/14/13 19:03
Carbon disulfide	U		0.17	5.0	µg/L	1	05/14/13 19:03
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/14/13 19:03
Chlorobenzene	U		0.13	1.0	µg/L	1	05/14/13 19:03
Chloroethane	U		0.46	5.0	µg/L	1	05/14/13 19:03
Chloroform	U		0.15	1.0	µg/L	1	05/14/13 19:03
Chloromethane	U		0.16	5.0	µg/L	1	05/14/13 19:03
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/14/13 19:03
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/14/13 19:03
Cyclohexane	U		0.22	1.0	µg/L	1	05/14/13 19:03
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/14/13 19:03
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/14/13 19:03
Ethylbenzene	U		0.13	1.0	µg/L	1	05/14/13 19:03
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/14/13 19:03
Methyl acetate	U		0.19	10	µg/L	1	05/14/13 19:03
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/14/13 19:03

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 20-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: TB-17360-050813-EB-062
Collection Date: 05/06/13

Work Order: 1305241
Lab ID: 1305241-65
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/14/13 19:03
Methylene chloride	1.0	J	0.19	5.0	µg/L	1	05/14/13 19:03
Styrene	U		0.11	1.0	µg/L	1	05/14/13 19:03
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/14/13 19:03
Toluene	U		0.12	1.0	µg/L	1	05/14/13 19:03
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/14/13 19:03
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/14/13 19:03
Trichloroethene	U		0.14	1.0	µg/L	1	05/14/13 19:03
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/14/13 19:03
Vinyl chloride	U		0.17	1.0	µg/L	1	05/14/13 19:03
Xylenes, Total	U		0.29	3.0	µg/L	1	05/14/13 19:03
Surr: 1,2-Dichloroethane-d4	98.0			70-120	%REC	1	05/14/13 19:03
Surr: 4-Bromofluorobenzene	96.0			75-120	%REC	1	05/14/13 19:03
Surr: Dibromofluoromethane	98.7			85-115	%REC	1	05/14/13 19:03
Surr: Toluene-d8	98.6			85-120	%REC	1	05/14/13 19:03

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **48372** Instrument ID **HG1** Method: **SW7470**

MBLK		Sample ID: MBLK-48372-48372				Units: mg/L		Analysis Date: 05/13/13 02:42 PM		
Client ID:		Run ID: HG1_130513A				SeqNo: 2316243		Prep Date: 05/13/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	U	0.00020								

LCS		Sample ID: LCS-48372-48372				Units: mg/L		Analysis Date: 05/13/13 02:44 PM		
Client ID:		Run ID: HG1_130513A				SeqNo: 2316245		Prep Date: 05/13/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.001965	0.00020	0.002	0	98.2	80-120	0			

MS		Sample ID: 1305241-32BMS				Units: mg/L		Analysis Date: 05/13/13 02:59 PM		
Client ID: WG-17360-050313-MR-032		Run ID: HG1_130513A				SeqNo: 2316257		Prep Date: 05/13/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.001862	0.00020	0.002	0.000057	90.2	75-125	0			

MSD		Sample ID: 1305241-32BMSD				Units: mg/L		Analysis Date: 05/13/13 03:01 PM		
Client ID: WG-17360-050313-MR-032		Run ID: HG1_130513A				SeqNo: 2316258		Prep Date: 05/13/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00186	0.00020	0.002	0.000057	90.2	75-125	0.001862	0.107	20	

The following samples were analyzed in this batch:

1305241-08B	1305241-31B	1305241-32B
1305241-35B	1305241-36B	1305241-43B
1305241-45B	1305241-48B	1305241-54B
1305241-60B	1305241-63B	1305241-64B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **48339** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: MBLK-48339-48339				Units: mg/L		Analysis Date: 05/15/13 02:22 PM		
Client ID:		Run ID: ICPMS1_130515A				SeqNo: 2319555		Prep Date: 05/11/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	U	0.0050								
Arsenic	U	0.0050								
Barium	0.0001579	0.0050								J
Beryllium	U	0.0020								
Cadmium	U	0.0020								
Chromium	U	0.0050								
Cobalt	U	0.0050								
Copper	U	0.0050								
Lead	U	0.0050								
Manganese	U	0.0050								
Molybdenum	U	0.0050								
Nickel	U	0.0050								
Selenium	U	0.0050								
Silver	U	0.0050								
Thallium	U	0.0050								
Vanadium	U	0.0050								
Zinc	U	0.010								

LCS		Sample ID: LCS-48339-48339				Units: mg/L		Analysis Date: 05/15/13 02:29 PM		
Client ID:		Run ID: ICPMS1_130515A				SeqNo: 2319556		Prep Date: 05/11/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.1018	0.0050	0.1	0	102	80-120	0			
Arsenic	0.1019	0.0050	0.1	0	102	80-120	0			
Barium	0.09857	0.0050	0.1	0	98.6	80-120	0			
Beryllium	0.0975	0.0020	0.1	0	97.5	80-120	0			
Cadmium	0.09991	0.0020	0.1	0	99.9	80-120	0			
Chromium	0.09711	0.0050	0.1	0	97.1	80-120	0			
Cobalt	0.09514	0.0050	0.1	0	95.1	80-120	0			
Copper	0.09807	0.0050	0.1	0	98.1	80-120	0			
Lead	0.0984	0.0050	0.1	0	98.4	80-120	0			
Manganese	0.09952	0.0050	0.1	0	99.5	80-120	0			
Molybdenum	0.09789	0.0050	0.1	0	97.9	80-120	0			
Nickel	0.09796	0.0050	0.1	0	98	80-120	0			
Selenium	0.09915	0.0050	0.1	0	99.2	80-120	0			
Silver	0.09672	0.0050	0.1	0	96.7	80-120	0			
Thallium	0.09307	0.0050	0.1	0	93.1	80-120	0			
Vanadium	0.09777	0.0050	0.1	0	97.8	80-120	0			
Zinc	0.1021	0.010	0.1	0	102	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **48339** Instrument ID **ICPMS1** Method: **SW6020A**

MS				Sample ID: 1305241-32BMS			Units: mg/L		Analysis Date: 05/15/13 03:26 PM	
Client ID: WG-17360-050313-MR-032				Run ID: ICPMS1_130515A			SeqNo: 2320064		Prep Date: 05/11/13	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.09491	0.0050	0.1	0.0007533	94.2	75-125	0			
Arsenic	0.1077	0.0050	0.1	0.01177	95.9	75-125	0			
Barium	0.1381	0.0050	0.1	0.04188	96.2	75-125	0			
Beryllium	0.08839	0.0020	0.1	-0.00003885	88.4	75-125	0			
Cadmium	0.09146	0.0020	0.1	0.0002757	91.2	75-125	0			
Chromium	0.09258	0.0050	0.1	0.0004337	92.1	75-125	0			
Cobalt	0.09402	0.0050	0.1	0.005742	88.3	75-125	0			
Copper	0.1085	0.0050	0.1	0.02138	87.1	75-125	0			
Lead	0.1024	0.0050	0.1	0.005194	97.2	75-125	0			
Manganese	0.7089	0.0050	0.1	0.6382	70.7	75-125	0			SO
Molybdenum	0.1212	0.0050	0.1	0.027	94.2	75-125	0			
Nickel	0.1071	0.0050	0.1	0.01916	87.9	75-125	0			
Selenium	0.09642	0.0050	0.1	0.001235	95.2	75-125	0			
Silver	0.08257	0.0050	0.1	0.00002544	82.5	75-125	0			
Thallium	0.09366	0.0050	0.1	-0.0004719	94.1	75-125	0			
Vanadium	0.09712	0.0050	0.1	0.0006476	96.5	75-125	0			
Zinc	0.095	0.010	0.1	0.00677	88.2	75-125	0			

MSD				Sample ID: 1305241-32BMSD			Units: mg/L		Analysis Date: 05/15/13 03:31 PM	
Client ID: WG-17360-050313-MR-032				Run ID: ICPMS1_130515A			SeqNo: 2320065		Prep Date: 05/11/13	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	0.09551	0.0050	0.1	0.0007533	94.8	75-125	0.09491	0.63	20	
Arsenic	0.1106	0.0050	0.1	0.01177	98.8	75-125	0.1077	2.66	20	
Barium	0.1415	0.0050	0.1	0.04188	99.6	75-125	0.1381	2.43	20	
Beryllium	0.08903	0.0020	0.1	-0.00003885	89.1	75-125	0.08839	0.721	20	
Cadmium	0.09366	0.0020	0.1	0.0002757	93.4	75-125	0.09146	2.38	20	
Chromium	0.09465	0.0050	0.1	0.0004337	94.2	75-125	0.09258	2.21	20	
Cobalt	0.0962	0.0050	0.1	0.005742	90.5	75-125	0.09402	2.29	20	
Copper	0.1112	0.0050	0.1	0.02138	89.8	75-125	0.1085	2.46	20	
Lead	0.1048	0.0050	0.1	0.005194	99.6	75-125	0.1024	2.32	20	
Manganese	0.7354	0.0050	0.1	0.6382	97.2	75-125	0.7089	3.67	20	O
Molybdenum	0.1233	0.0050	0.1	0.027	96.3	75-125	0.1212	1.72	20	
Nickel	0.1095	0.0050	0.1	0.01916	90.3	75-125	0.1071	2.22	20	
Selenium	0.09979	0.0050	0.1	0.001235	98.6	75-125	0.09642	3.44	20	
Silver	0.08308	0.0050	0.1	0.00002544	83.1	75-125	0.08257	0.616	20	
Thallium	0.09563	0.0050	0.1	-0.0004719	96.1	75-125	0.09366	2.08	20	
Vanadium	0.09988	0.0050	0.1	0.0006476	99.2	75-125	0.09712	2.8	20	
Zinc	0.0963	0.010	0.1	0.00677	89.5	75-125	0.095	1.36	20	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **48339** Instrument ID **ICPMS1** Method: **SW6020A**

The following samples were analyzed in this batch:

1305241-08B	1305241-31B	1305241-32B
1305241-35B	1305241-36B	1305241-43B
1305241-45B	1305241-48B	1305241-54B
1305241-60B	1305241-63B	1305241-64B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **48246** Instrument ID **SVMS6** Method: **SW8270**

MBLK		Sample ID: SBLKW1-48246-48246				Units: µg/L		Analysis Date: 05/09/13 08:28 AM		
Client ID:		Run ID: SVMS6_130509A				SeqNo: 2315479		Prep Date: 05/08/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1'-Biphenyl	U	5.0								
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dichlorophenol	U	10								
2,4-Dimethylphenol	U	5.0								
2,4-Dinitrophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
2,6-Dinitrotoluene	U	5.0								
2-Chloronaphthalene	U	5.0								
2-Chlorophenol	U	5.0								
2-Methylnaphthalene	U	5.0								
2-Methylphenol	U	5.0								
2-Nitroaniline	U	20								
2-Nitrophenol	U	5.0								
3,3'-Dichlorobenzidine	U	5.0								
3-Nitroaniline	U	20								
4,6-Dinitro-2-methylphenol	U	20								
4-Bromophenyl phenyl ether	U	5.0								
4-Chloro-3-methylphenol	U	5.0								
4-Chloroaniline	U	20								
4-Chlorophenyl phenyl ether	U	5.0								
4-Methylphenol	U	5.0								
4-Nitroaniline	U	20								
4-Nitrophenol	U	20								
Acenaphthene	U	5.0								
Acenaphthylene	U	5.0								
Acetophenone	U	1.0								
Anthracene	U	5.0								
Atrazine	U	1.0								
Benzaldehyde	U	1.0								
Benzo(a)anthracene	U	5.0								
Benzo(a)pyrene	U	5.0								
Benzo(b)fluoranthene	U	5.0								
Benzo(g,h,i)perylene	U	5.0								
Benzo(k)fluoranthene	U	5.0								
Bis(2-chloroethoxy)methane	U	5.0								
Bis(2-chloroethyl)ether	U	5.0								
Bis(2-chloroisopropyl)ether	U	5.0								
Bis(2-ethylhexyl)phthalate	U	5.0								
Butyl benzyl phthalate	U	5.0								
Caprolactam	U	10								
Carbazole	U	10								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: 48246	Instrument ID SVMS6	Method: SW8270						
Chrysene	U	5.0						
Dibenzo(a,h)anthracene	U	5.0						
Dibenzofuran	U	5.0						
Diethyl phthalate	U	20						
Dimethyl phthalate	U	20						
Di-n-butyl phthalate	U	5.0						
Di-n-octyl phthalate	U	5.0						
Fluoranthene	U	5.0						
Fluorene	U	5.0						
Hexachlorobenzene	U	5.0						
Hexachlorobutadiene	U	5.0						
Hexachlorocyclopentadiene	U	20						
Hexachloroethane	U	5.0						
Indeno(1,2,3-cd)pyrene	U	5.0						
Isophorone	U	5.0						
Naphthalene	U	5.0						
Nitrobenzene	U	5.0						
N-Nitrosodi-n-propylamine	U	5.0						
N-Nitrosodiphenylamine	U	5.0						
Pentachlorophenol	U	20						
Phenanthrene	U	5.0						
Phenol	U	5.0						
Pyrene	U	5.0						
<i>Surr: 2,4,6-Tribromophenol</i>	26.9	0	50	0	53.8	38-115	0	
<i>Surr: 2-Fluorobiphenyl</i>	28.38	0	50	0	56.8	32-100	0	
<i>Surr: 2-Fluorophenol</i>	18.71	0	50	0	37.4	22-59	0	
<i>Surr: 4-Terphenyl-d14</i>	43.37	0	50	0	86.7	23-112	0	
<i>Surr: Nitrobenzene-d5</i>	28.37	0	50	0	56.7	31-93	0	
<i>Surr: Phenol-d6</i>	10.93	0	50	0	21.9	13-36	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **48246** Instrument ID **SVMS6** Method: **SW8270**

LCS Sample ID: SLCSW1-48246-48246				Units: µg/L			Analysis Date: 05/09/13 08:48 AM			
Client ID:		Run ID: SVMS6_130509A		SeqNo: 2315480		Prep Date: 05/08/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	13.31	5.0	20	0	66.6	50-110	0			
2,4,6-Trichlorophenol	12.34	5.0	20	0	61.7	50-115	0			
2,4-Dichlorophenol	12.57	10	20	0	62.8	50-105	0			
2,4-Dimethylphenol	10.94	5.0	20	0	54.7	30-110	0			
2,4-Dinitrophenol	12.52	5.0	20	0	62.6	15-140	0			
2,4-Dinitrotoluene	15.66	5.0	20	0	78.3	50-120	0			
2,6-Dinitrotoluene	12.6	5.0	20	0	63	50-115	0			
2-Chloronaphthalene	11.96	5.0	20	0	59.8	50-105	0			
2-Chlorophenol	13.62	5.0	20	0	68.1	35-105	0			
2-Methylnaphthalene	11.98	5.0	20	0	59.9	45-105	0			
2-Methylphenol	12.75	5.0	20	0	63.8	40-110	0			
2-Nitroaniline	12.99	20	20	0	65	50-115	0			J
2-Nitrophenol	11.98	5.0	20	0	59.9	40-115	0			
3-Nitroaniline	14.64	20	20	0	73.2	20-125	0			J
4,6-Dinitro-2-methylphenol	13.47	20	20	0	67.4	40-130	0			J
4-Bromophenyl phenyl ether	12.36	5.0	20	0	61.8	50-115	0			
4-Chloro-3-methylphenol	13.05	5.0	20	0	65.2	45-110	0			
4-Chloroaniline	13.94	20	20	0	69.7	15-110	0			J
4-Chlorophenyl phenyl ether	12.34	5.0	20	0	61.7	50-110	0			
4-Methylphenol	11.34	5.0	20	0	56.7	30-110	0			
4-Nitroaniline	11.37	20	20	0	56.8	35-150	0			J
4-Nitrophenol	5.35	20	20	0	26.8	1-58	0			J
Acenaphthene	12.52	5.0	20	0	62.6	45-110	0			
Acenaphthylene	12.62	5.0	20	0	63.1	50-105	0			
Anthracene	13.83	5.0	20	0	69.2	55-110	0			
Benzo(a)anthracene	13.86	5.0	20	0	69.3	55-110	0			
Benzo(a)pyrene	13.98	5.0	20	0	69.9	55-110	0			
Benzo(b)fluoranthene	13.74	5.0	20	0	68.7	45-120	0			
Benzo(g,h,i)perylene	14.4	5.0	20	0	72	40-125	0			
Benzo(k)fluoranthene	14.22	5.0	20	0	71.1	45-125	0			
Bis(2-chloroethoxy)methane	12.64	5.0	20	0	63.2	45-105	0			
Bis(2-chloroethyl)ether	16.22	5.0	20	0	81.1	35-110	0			
Bis(2-chloroisopropyl)ether	12.57	5.0	20	0	62.8	25-130	0			
Bis(2-ethylhexyl)phthalate	16.49	5.0	20	0	82.4	40-125	0			
Butyl benzyl phthalate	14.07	5.0	20	0	70.4	45-115	0			
Carbazole	14.35	10	20	0	71.8	50-150	0			
Chrysene	14.86	5.0	20	0	74.3	55-110	0			
Dibenzo(a,h)anthracene	14.19	5.0	20	0	71	40-125	0			
Dibenzofuran	12.36	5.0	20	0	61.8	55-105	0			
Diethyl phthalate	13.66	20	20	0	68.3	40-120	0			J
Dimethyl phthalate	13.3	20	20	0	66.5	25-125	0			J
Di-n-butyl phthalate	14.16	5.0	20	0	70.8	55-115	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: 48246		Instrument ID SVMS6		Method: SW8270				
Di-n-octyl phthalate	17.75	5.0	20	0	88.8	35-135	0	
Fluoranthene	14.85	5.0	20	0	74.2	55-115	0	
Fluorene	12.78	5.0	20	0	63.9	50-110	0	
Hexachlorobenzene	11.69	5.0	20	0	58.4	50-110	0	
Hexachlorobutadiene	10.93	5.0	20	0	54.6	25-105	0	
Hexachlorocyclopentadiene	6.33	20	20	0	31.6	25-105	0	J
Hexachloroethane	12.98	5.0	20	0	64.9	30-95	0	
Indeno(1,2,3-cd)pyrene	14.39	5.0	20	0	72	45-125	0	
Isophorone	12.57	5.0	20	0	62.8	50-110	0	
Naphthalene	11.49	5.0	20	0	57.4	40-100	0	
Nitrobenzene	12.89	5.0	20	0	64.4	45-110	0	
N-Nitrosodi-n-propylamine	14.01	5.0	20	0	70	35-130	0	
N-Nitrosodiphenylamine	12.97	5.0	20	0	64.8	50-110	0	
Pentachlorophenol	11.79	20	20	0	59	40-115	0	J
Phenanthrene	12.52	5.0	20	0	62.6	50-115	0	
Phenol	5.78	5.0	20	0	28.9	12-43	0	
Pyrene	14.02	5.0	20	0	70.1	50-130	0	
<i>Surr: 2,4,6-Tribromophenol</i>	29.47	0	50	0	58.9	38-115	0	
<i>Surr: 2-Fluorobiphenyl</i>	28.84	0	50	0	57.7	32-100	0	
<i>Surr: 2-Fluorophenol</i>	21.97	0	50	0	43.9	22-59	0	
<i>Surr: 4-Terphenyl-d14</i>	42.15	0	50	0	84.3	23-112	0	
<i>Surr: Nitrobenzene-d5</i>	30.8	0	50	0	61.6	31-93	0	
<i>Surr: Phenol-d6</i>	13.9	0	50	0	27.8	13-36	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **48246** Instrument ID **SVMS6** Method: **SW8270**

MS Sample ID: 1305241-32C MS				Units: µg/L			Analysis Date: 05/09/13 09:07 AM			
Client ID: WG-17360-050313-MR-032			Run ID: SVMS6_130509A		SeqNo: 2315481		Prep Date: 05/08/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	16.24	5.0	20	0	81.2	50-110	0			
2,4,6-Trichlorophenol	14.85	5.0	20	0	74.2	50-115	0			
2,4-Dichlorophenol	14.53	10	20	0	72.6	50-105	0			
2,4-Dimethylphenol	13.74	5.0	20	0	68.7	30-110	0			
2,4-Dinitrophenol	19.29	5.0	20	0	96.4	15-140	0			
2,4-Dinitrotoluene	17.7	5.0	20	0	88.5	50-120	0			
2,6-Dinitrotoluene	14.51	5.0	20	0	72.6	50-115	0			
2-Chloronaphthalene	13.64	5.0	20	0	68.2	50-105	0			
2-Chlorophenol	13.66	5.0	20	0	68.3	35-105	0			
2-Methylnaphthalene	13.55	5.0	20	0	67.8	45-105	0			
2-Methylphenol	12.37	5.0	20	0	61.8	40-110	0			
2-Nitroaniline	17.22	20	20	0	86.1	50-115	0			J
2-Nitrophenol	13.21	5.0	20	0	66	40-115	0			
3-Nitroaniline	16.27	20	20	0	81.4	20-125	0			J
4,6-Dinitro-2-methylphenol	15.87	20	20	0	79.4	40-130	0			J
4-Bromophenyl phenyl ether	14.42	5.0	20	0	72.1	50-115	0			
4-Chloro-3-methylphenol	15.06	5.0	20	0	75.3	45-110	0			
4-Chloroaniline	15.16	20	20	0	75.8	15-110	0			J
4-Chlorophenyl phenyl ether	14.43	5.0	20	0	72.2	50-110	0			
4-Methylphenol	10.9	5.0	20	0	54.5	30-110	0			
4-Nitroaniline	12.97	20	20	0	64.8	35-150	0			J
4-Nitrophenol	7.07	20	20	0	35.4	1-58	0			J
Acenaphthene	14.56	5.0	20	0	72.8	45-110	0			
Acenaphthylene	14.38	5.0	20	0	71.9	50-105	0			
Anthracene	16.03	5.0	20	0	80.2	55-110	0			
Benzo(a)anthracene	15.69	5.0	20	0	78.4	55-110	0			
Benzo(a)pyrene	15.86	5.0	20	0	79.3	55-110	0			
Benzo(b)fluoranthene	15.59	5.0	20	0	78	45-120	0			
Benzo(g,h,i)perylene	13.99	5.0	20	0	70	40-125	0			
Benzo(k)fluoranthene	15.33	5.0	20	0	76.6	45-125	0			
Bis(2-chloroethoxy)methane	14.11	5.0	20	0	70.6	45-105	0			
Bis(2-chloroethyl)ether	16.07	5.0	20	0	80.4	35-110	0			
Bis(2-chloroisopropyl)ether	13.81	5.0	20	0	69	25-130	0			
Bis(2-ethylhexyl)phthalate	20.47	5.0	20	0	102	40-125	0			
Butyl benzyl phthalate	17.93	5.0	20	0	89.6	45-115	0			
Carbazole	16.23	10	20	0	81.2	50-150	0			
Chrysene	15.98	5.0	20	0	79.9	55-110	0			
Dibenzo(a,h)anthracene	14.45	5.0	20	0	72.2	40-125	0			
Dibenzofuran	14.27	5.0	20	0	71.4	55-105	0			
Diethyl phthalate	15.81	20	20	0	79	40-120	0			J
Dimethyl phthalate	15.38	20	20	0	76.9	25-125	0			J
Di-n-butyl phthalate	16.48	5.0	20	0	82.4	55-115	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: 48246		Instrument ID SVMS6		Method: SW8270				
Di-n-octyl phthalate	23.99	5.0	20	0	120	35-135	0	
Fluoranthene	16.88	5.0	20	0	84.4	55-115	0	
Fluorene	15.01	5.0	20	0	75	50-110	0	
Hexachlorobenzene	12.75	5.0	20	0	63.8	50-110	0	
Hexachlorobutadiene	12.12	5.0	20	0	60.6	25-105	0	
Hexachlorocyclopentadiene	8.16	20	20	0	40.8	25-105	0	J
Hexachloroethane	14.48	5.0	20	0	72.4	30-95	0	
Indeno(1,2,3-cd)pyrene	14.68	5.0	20	0	73.4	45-125	0	
Isophorone	14.65	5.0	20	0	73.2	50-110	0	
Naphthalene	12.37	5.0	20	0	61.8	40-100	0	
Nitrobenzene	13.72	5.0	20	0	68.6	45-110	0	
N-Nitrosodi-n-propylamine	16.3	5.0	20	0	81.5	35-130	0	
N-Nitrosodiphenylamine	15.31	5.0	20	0	76.6	50-110	0	
Pentachlorophenol	15.64	20	20	0	78.2	40-115	0	J
Phenanthrene	14.13	5.0	20	0	70.6	50-115	0	
Phenol	4.86	5.0	20	0	24.3	12-43	0	J
Pyrene	15.88	5.0	20	0	79.4	50-130	0	
<i>Surr: 2,4,6-Tribromophenol</i>	<i>34.6</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>69.2</i>	<i>38-115</i>	<i>0</i>	
<i>Surr: 2-Fluorobiphenyl</i>	<i>31.52</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>63</i>	<i>32-100</i>	<i>0</i>	
<i>Surr: 2-Fluorophenol</i>	<i>18.12</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>36.2</i>	<i>22-59</i>	<i>0</i>	
<i>Surr: 4-Terphenyl-d14</i>	<i>45.23</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>90.5</i>	<i>23-112</i>	<i>0</i>	
<i>Surr: Nitrobenzene-d5</i>	<i>33.14</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>66.3</i>	<i>31-93</i>	<i>0</i>	
<i>Surr: Phenol-d6</i>	<i>11.54</i>	<i>0</i>	<i>50</i>	<i>0</i>	<i>23.1</i>	<i>13-36</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **48246** Instrument ID **SVMS6** Method: **SW8270**

MSD Sample ID: 1305241-32C MSD				Units: µg/L			Analysis Date: 05/09/13 09:27 AM			
Client ID: WG-17360-050313-MR-032				Run ID: SVMS6_130509A		SeqNo: 2315482		Prep Date: 05/08/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	16.39	5.0	20	0	82	50-110	16.24	0.919	30	
2,4,6-Trichlorophenol	15.28	5.0	20	0	76.4	50-115	14.85	2.85	30	
2,4-Dichlorophenol	14.58	10	20	0	72.9	50-105	14.53	0.344	30	
2,4-Dimethylphenol	13.93	5.0	20	0	69.6	30-110	13.74	1.37	30	
2,4-Dinitrophenol	19.61	5.0	20	0	98	15-140	19.29	1.65	30	
2,4-Dinitrotoluene	17.48	5.0	20	0	87.4	50-120	17.7	1.25	30	
2,6-Dinitrotoluene	14.69	5.0	20	0	73.4	50-115	14.51	1.23	30	
2-Chloronaphthalene	13.63	5.0	20	0	68.2	50-105	13.64	0.0733	30	
2-Chlorophenol	13.93	5.0	20	0	69.6	35-105	13.66	1.96	30	
2-Methylnaphthalene	13.5	5.0	20	0	67.5	45-105	13.55	0.37	30	
2-Methylphenol	12.45	5.0	20	0	62.2	40-110	12.37	0.645	30	
2-Nitroaniline	16.17	20	20	0	80.8	50-115	17.22	0	30	J
2-Nitrophenol	13.73	5.0	20	0	68.6	40-115	13.21	3.86	30	
3-Nitroaniline	15.39	20	20	0	77	20-125	16.27	0	30	J
4,6-Dinitro-2-methylphenol	16.64	20	20	0	83.2	40-130	15.87	0	30	J
4-Bromophenyl phenyl ether	15.39	5.0	20	0	77	50-115	14.42	6.51	30	
4-Chloro-3-methylphenol	15.2	5.0	20	0	76	45-110	15.06	0.925	30	
4-Chloroaniline	13.76	20	20	0	68.8	15-110	15.16	0	30	J
4-Chlorophenyl phenyl ether	14.45	5.0	20	0	72.2	50-110	14.43	0.139	30	
4-Methylphenol	11.28	5.0	20	0	56.4	30-110	10.9	3.43	30	
4-Nitroaniline	12.32	20	20	0	61.6	35-150	12.97	0	30	J
4-Nitrophenol	6.09	20	20	0	30.4	1-58	7.07	0	0	J
Acenaphthene	14.52	5.0	20	0	72.6	45-110	14.56	0.275	30	
Acenaphthylene	14.16	5.0	20	0	70.8	50-105	14.38	1.54	30	
Anthracene	16.76	5.0	20	0	83.8	55-110	16.03	4.45	30	
Benzo(a)anthracene	16.64	5.0	20	0	83.2	55-110	15.69	5.88	30	
Benzo(a)pyrene	17.01	5.0	20	0	85	55-110	15.86	7	30	
Benzo(b)fluoranthene	17.5	5.0	20	0	87.5	45-120	15.59	11.5	30	
Benzo(g,h,i)perylene	13.76	5.0	20	0	68.8	40-125	13.99	1.66	30	
Benzo(k)fluoranthene	16.9	5.0	20	0	84.5	45-125	15.33	9.74	30	
Bis(2-chloroethoxy)methane	13.79	5.0	20	0	69	45-105	14.11	2.29	30	
Bis(2-chloroethyl)ether	13.92	5.0	20	0	69.6	35-110	16.07	14.3	30	
Bis(2-chloroisopropyl)ether	13.76	5.0	20	0	68.8	25-130	13.81	0.363	30	
Bis(2-ethylhexyl)phthalate	22.85	5.0	20	0	114	40-125	20.47	11	30	
Butyl benzyl phthalate	19.59	5.0	20	0	98	45-115	17.93	8.85	30	
Carbazole	16.44	10	20	0	82.2	50-150	16.23	1.29	30	
Chrysene	16.75	5.0	20	0	83.8	55-110	15.98	4.71	30	
Dibenzo(a,h)anthracene	14.43	5.0	20	0	72.2	40-125	14.45	0.139	30	
Dibenzofuran	14.13	5.0	20	0	70.6	55-105	14.27	0.986	30	
Diethyl phthalate	15.73	20	20	0	78.6	40-120	15.81	0	30	J
Dimethyl phthalate	15.1	20	20	0	75.5	25-125	15.38	0	30	J
Di-n-butyl phthalate	17.39	5.0	20	0	87	55-115	16.48	5.37	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: 48246		Instrument ID SVMS6		Method: SW8270							
Di-n-octyl phthalate	28.87	5.0	20	0	144	35-135	23.99	18.5	30	S	
Fluoranthene	16.85	5.0	20	0	84.2	55-115	16.88	0.178	30		
Fluorene	14.89	5.0	20	0	74.4	50-110	15.01	0.803	30		
Hexachlorobenzene	13.44	5.0	20	0	67.2	50-110	12.75	5.27	30		
Hexachlorobutadiene	12.4	5.0	20	0	62	25-105	12.12	2.28	30		
Hexachlorocyclopentadiene	8.97	20	20	0	44.8	25-105	8.16	0	30	J	
Hexachloroethane	14.69	5.0	20	0	73.4	30-95	14.48	1.44	30		
Indeno(1,2,3-cd)pyrene	14.73	5.0	20	0	73.6	45-125	14.68	0.34	30		
Isophorone	14.41	5.0	20	0	72	50-110	14.65	1.65	30		
Naphthalene	12.58	5.0	20	0	62.9	40-100	12.37	1.68	30		
Nitrobenzene	14.17	5.0	20	0	70.8	45-110	13.72	3.23	30		
N-Nitrosodi-n-propylamine	15.65	5.0	20	0	78.2	35-130	16.3	4.07	30		
N-Nitrosodiphenylamine	16.21	5.0	20	0	81	50-110	15.31	5.71	30		
Pentachlorophenol	16.36	20	20	0	81.8	40-115	15.64	0	30	J	
Phenanthrene	14.8	5.0	20	0	74	50-115	14.13	4.63	30		
Phenol	5.37	5.0	20	0	26.8	12-43	4.86	9.97	30		
Pyrene	18.01	5.0	20	0	90	50-130	15.88	12.6	30		
<i>Surr: 2,4,6-Tribromophenol</i>	37.17	0	50	0	74.3	38-115	34.6	7.16	40		
<i>Surr: 2-Fluorobiphenyl</i>	31.76	0	50	0	63.5	32-100	31.52	0.759	40		
<i>Surr: 2-Fluorophenol</i>	20.37	0	50	0	40.7	22-59	18.12	11.7	40		
<i>Surr: 4-Terphenyl-d14</i>	51.69	0	50	0	103	23-112	45.23	13.3	40		
<i>Surr: Nitrobenzene-d5</i>	34.03	0	50	0	68.1	31-93	33.14	2.65	40		
<i>Surr: Phenol-d6</i>	12.93	0	50	0	25.9	13-36	11.54	11.4	40		

The following samples were analyzed in this batch:

1305241-31C	1305241-32C	1305241-34B
1305241-37B	1305241-38B	1305241-39B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **48313** Instrument ID **SVMS6** Method: **SW8270**

MBLK		Sample ID: SBLKW1-48313-48313				Units: µg/L		Analysis Date: 05/13/13 09:50 AM		
Client ID:		Run ID: SVMS6_130513A				SeqNo: 2316192		Prep Date: 05/10/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1'-Biphenyl	U	5.0								
2,4,5-Trichlorophenol	U	5.0								
2,4,6-Trichlorophenol	U	5.0								
2,4-Dichlorophenol	U	10								
2,4-Dimethylphenol	U	5.0								
2,4-Dinitrophenol	U	5.0								
2,4-Dinitrotoluene	U	5.0								
2,6-Dinitrotoluene	U	5.0								
2-Chloronaphthalene	U	5.0								
2-Chlorophenol	U	5.0								
2-Methylnaphthalene	U	5.0								
2-Methylphenol	U	5.0								
2-Nitroaniline	U	20								
2-Nitrophenol	U	5.0								
3,3'-Dichlorobenzidine	U	5.0								
3-Nitroaniline	U	20								
4,6-Dinitro-2-methylphenol	U	20								
4-Bromophenyl phenyl ether	U	5.0								
4-Chloro-3-methylphenol	U	5.0								
4-Chloroaniline	U	20								
4-Chlorophenyl phenyl ether	U	5.0								
4-Methylphenol	U	5.0								
4-Nitroaniline	U	20								
4-Nitrophenol	U	20								
Acenaphthene	U	5.0								
Acenaphthylene	U	5.0								
Acetophenone	U	1.0								
Anthracene	U	5.0								
Atrazine	U	1.0								
Benzaldehyde	U	1.0								
Benzo(a)anthracene	U	5.0								
Benzo(a)pyrene	U	5.0								
Benzo(b)fluoranthene	U	5.0								
Benzo(g,h,i)perylene	U	5.0								
Benzo(k)fluoranthene	U	5.0								
Bis(2-chloroethoxy)methane	U	5.0								
Bis(2-chloroethyl)ether	U	5.0								
Bis(2-chloroisopropyl)ether	U	5.0								
Bis(2-ethylhexyl)phthalate	U	5.0								
Butyl benzyl phthalate	U	5.0								
Caprolactam	U	10								
Carbazole	U	10								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: 48313	Instrument ID SVMS6	Method: SW8270						
Chrysene	U	5.0						
Dibenzo(a,h)anthracene	U	5.0						
Dibenzofuran	U	5.0						
Diethyl phthalate	U	20						
Dimethyl phthalate	U	20						
Di-n-butyl phthalate	U	5.0						
Di-n-octyl phthalate	U	5.0						
Fluoranthene	U	5.0						
Fluorene	U	5.0						
Hexachlorobenzene	U	5.0						
Hexachlorobutadiene	U	5.0						
Hexachlorocyclopentadiene	U	20						
Hexachloroethane	U	5.0						
Indeno(1,2,3-cd)pyrene	U	5.0						
Isophorone	U	5.0						
Naphthalene	U	5.0						
Nitrobenzene	U	5.0						
N-Nitrosodi-n-propylamine	U	5.0						
N-Nitrosodiphenylamine	U	5.0						
Pentachlorophenol	U	20						
Phenanthrene	U	5.0						
Phenol	U	5.0						
Pyrene	U	5.0						
<i>Surr: 2,4,6-Tribromophenol</i>	23.2	0	50	0	46.4	38-115	0	
<i>Surr: 2-Fluorobiphenyl</i>	25.03	0	50	0	50.1	32-100	0	
<i>Surr: 2-Fluorophenol</i>	17.72	0	50	0	35.4	22-59	0	
<i>Surr: 4-Terphenyl-d14</i>	40.42	0	50	0	80.8	23-112	0	
<i>Surr: Nitrobenzene-d5</i>	26.01	0	50	0	52	31-93	0	
<i>Surr: Phenol-d6</i>	10.65	0	50	0	21.3	13-36	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **48313** Instrument ID **SVMS6** Method: **SW8270**

LCS Sample ID: SLCSW1-48313-48313				Units: µg/L			Analysis Date: 05/13/13 10:09 AM			
Client ID:		Run ID: SVMS6_130513A		SeqNo: 2316193		Prep Date: 05/10/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	13.27	5.0	20	0	66.4	50-110	0			
2,4,6-Trichlorophenol	12.17	5.0	20	0	60.8	50-115	0			
2,4-Dichlorophenol	12.71	10	20	0	63.6	50-105	0			
2,4-Dimethylphenol	11.12	5.0	20	0	55.6	30-110	0			
2,4-Dinitrophenol	12.25	5.0	20	0	61.2	15-140	0			
2,4-Dinitrotoluene	16.82	5.0	20	0	84.1	50-120	0			
2,6-Dinitrotoluene	13.76	5.0	20	0	68.8	50-115	0			
2-Chloronaphthalene	12.19	5.0	20	0	61	50-105	0			
2-Chlorophenol	13.46	5.0	20	0	67.3	35-105	0			
2-Methylnaphthalene	12.53	5.0	20	0	62.6	45-105	0			
2-Methylphenol	12.36	5.0	20	0	61.8	40-110	0			
2-Nitroaniline	13.67	20	20	0	68.4	50-115	0			J
2-Nitrophenol	11.76	5.0	20	0	58.8	40-115	0			
3-Nitroaniline	14.8	20	20	0	74	20-125	0			J
4,6-Dinitro-2-methylphenol	13.76	20	20	0	68.8	40-130	0			J
4-Bromophenyl phenyl ether	12.38	5.0	20	0	61.9	50-115	0			
4-Chloro-3-methylphenol	13.53	5.0	20	0	67.6	45-110	0			
4-Chloroaniline	14.43	20	20	0	72.2	15-110	0			J
4-Chlorophenyl phenyl ether	12.87	5.0	20	0	64.4	50-110	0			
4-Methylphenol	11.46	5.0	20	0	57.3	30-110	0			
4-Nitroaniline	13.11	20	20	0	65.6	35-150	0			J
4-Nitrophenol	4.64	20	20	0	23.2	1-58	0			J
Acenaphthene	13.01	5.0	20	0	65	45-110	0			
Acenaphthylene	13.17	5.0	20	0	65.8	50-105	0			
Anthracene	14.48	5.0	20	0	72.4	55-110	0			
Benzo(a)anthracene	14.73	5.0	20	0	73.6	55-110	0			
Benzo(a)pyrene	15.19	5.0	20	0	76	55-110	0			
Benzo(b)fluoranthene	14.72	5.0	20	0	73.6	45-120	0			
Benzo(g,h,i)perylene	16.18	5.0	20	0	80.9	40-125	0			
Benzo(k)fluoranthene	15.13	5.0	20	0	75.6	45-125	0			
Bis(2-chloroethoxy)methane	12.58	5.0	20	0	62.9	45-105	0			
Bis(2-chloroethyl)ether	16.86	5.0	20	0	84.3	35-110	0			
Bis(2-chloroisopropyl)ether	13.4	5.0	20	0	67	25-130	0			
Bis(2-ethylhexyl)phthalate	16.86	5.0	20	0	84.3	40-125	0			
Butyl benzyl phthalate	14.61	5.0	20	0	73	45-115	0			
Carbazole	15.35	10	20	0	76.8	50-150	0			
Chrysene	16.4	5.0	20	0	82	55-110	0			
Dibenzo(a,h)anthracene	15.87	5.0	20	0	79.4	40-125	0			
Dibenzofuran	13.04	5.0	20	0	65.2	55-105	0			
Diethyl phthalate	14.42	20	20	0	72.1	40-120	0			J
Dimethyl phthalate	14.32	20	20	0	71.6	25-125	0			J
Di-n-butyl phthalate	14.35	5.0	20	0	71.8	55-115	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: 48313		Instrument ID SVMS6		Method: SW8270				
Di-n-octyl phthalate	19.19	5.0	20	0	96	35-135	0	
Fluoranthene	15.95	5.0	20	0	79.8	55-115	0	
Fluorene	13.44	5.0	20	0	67.2	50-110	0	
Hexachlorobenzene	12.22	5.0	20	0	61.1	50-110	0	
Hexachlorobutadiene	10.93	5.0	20	0	54.6	25-105	0	
Hexachlorocyclopentadiene	4.84	20	20	0	24.2	25-105	0	JS
Hexachloroethane	13.75	5.0	20	0	68.8	30-95	0	
Indeno(1,2,3-cd)pyrene	15.94	5.0	20	0	79.7	45-125	0	
Isophorone	13.2	5.0	20	0	66	50-110	0	
Naphthalene	11.69	5.0	20	0	58.4	40-100	0	
Nitrobenzene	13.17	5.0	20	0	65.8	45-110	0	
N-Nitrosodi-n-propylamine	15.15	5.0	20	0	75.8	35-130	0	
N-Nitrosodiphenylamine	13.46	5.0	20	0	67.3	50-110	0	
Pentachlorophenol	8.32	20	20	0	41.6	40-115	0	J
Phenanthrene	13.16	5.0	20	0	65.8	50-115	0	
Phenol	5.67	5.0	20	0	28.4	12-43	0	
Pyrene	14.86	5.0	20	0	74.3	50-130	0	
<i>Surr: 2,4,6-Tribromophenol</i>	28.64	0	50	0	57.3	38-115	0	
<i>Surr: 2-Fluorobiphenyl</i>	27.82	0	50	0	55.6	32-100	0	
<i>Surr: 2-Fluorophenol</i>	19.82	0	50	0	39.6	22-59	0	
<i>Surr: 4-Terphenyl-d14</i>	42.9	0	50	0	85.8	23-112	0	
<i>Surr: Nitrobenzene-d5</i>	30.96	0	50	0	61.9	31-93	0	
<i>Surr: Phenol-d6</i>	13.36	0	50	0	26.7	13-36	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **48313** Instrument ID **SVMS6** Method: **SW8270**

MS Sample ID: 1305250-02A MS				Units: µg/L			Analysis Date: 05/13/13 10:29 AM			
Client ID:		Run ID: SVMS6_130513A		SeqNo: 2316194		Prep Date: 05/10/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	318.4	100	400	0	79.6	50-110	0			
2,4,6-Trichlorophenol	285.8	100	400	0	71.4	50-115	0			
2,4-Dichlorophenol	275.4	200	400	0	68.8	50-105	0			
2,4-Dimethylphenol	246.4	100	400	0	61.6	30-110	0			
2,4-Dinitrophenol	314	100	400	0	78.5	15-140	0			
2,4-Dinitrotoluene	356	100	400	0	89	50-120	0			
2,6-Dinitrotoluene	276.8	100	400	0	69.2	50-115	0			
2-Chloronaphthalene	278.6	100	400	0	69.6	50-105	0			
2-Chlorophenol	252.4	100	400	0	63.1	35-105	0			
2-Methylnaphthalene	288.8	100	400	0	72.2	45-105	0			
2-Methylphenol	219	100	400	0	54.8	40-110	0			
2-Nitroaniline	284	400	400	0	71	50-115	0			J
2-Nitrophenol	250.6	100	400	0	62.6	40-115	0			
3-Nitroaniline	275.6	400	400	0	68.9	20-125	0			J
4,6-Dinitro-2-methylphenol	288.6	400	400	0	72.2	40-130	0			J
4-Bromophenyl phenyl ether	303.6	100	400	0	75.9	50-115	0			
4-Chloro-3-methylphenol	299.8	100	400	0	75	45-110	0			
4-Chloroaniline	225.4	400	400	0	56.4	15-110	0			J
4-Chlorophenyl phenyl ether	305	100	400	0	76.2	50-110	0			
4-Methylphenol	206.6	100	400	0	51.6	30-110	0			
4-Nitroaniline	254	400	400	0	63.5	35-150	0			J
4-Nitrophenol	97.4	400	400	0	24.4	1-58	0			J
Acenaphthene	309.2	100	400	0	77.3	45-110	0			
Acenaphthylene	316.2	100	400	23.6	73.2	50-105	0			
Anthracene	367.2	100	400	19.8	86.8	55-110	0			
Benzo(a)anthracene	358.6	100	400	44.6	78.5	55-110	0			
Benzo(a)pyrene	337.6	100	400	41	74.2	55-110	0			
Benzo(b)fluoranthene	341.6	100	400	47.4	73.6	45-120	0			
Benzo(g,h,i)perylene	325.8	100	400	23.2	75.6	40-125	0			
Benzo(k)fluoranthene	324.6	100	400	23.8	75.2	45-125	0			
Bis(2-chloroethoxy)methane	258.6	100	400	0	64.6	45-105	0			
Bis(2-chloroethyl)ether	318	100	400	0	79.5	35-110	0			
Bis(2-chloroisopropyl)ether	270.4	100	400	0	67.6	25-130	0			
Bis(2-ethylhexyl)phthalate	423.2	100	400	0	106	40-125	0			
Butyl benzyl phthalate	375.2	100	400	0	93.8	45-115	0			
Carbazole	349.2	200	400	0	87.3	50-150	0			
Chrysene	364.6	100	400	38.8	81.4	55-110	0			
Dibenzo(a,h)anthracene	321.2	100	400	0	80.3	40-125	0			
Dibenzofuran	336.2	100	400	36.6	74.9	55-105	0			
Diethyl phthalate	308	400	400	0	77	40-120	0			J
Dimethyl phthalate	280.4	400	400	0	70.1	25-125	0			J
Di-n-butyl phthalate	342.2	100	400	0	85.6	55-115	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: 48313		Instrument ID SVMS6		Method: SW8270			
Di-n-octyl phthalate	476.8	100	400	0	119	35-135	0
Fluoranthene	465.6	100	400	96	92.4	55-115	0
Fluorene	351.8	100	400	36.8	78.8	50-110	0
Hexachlorobenzene	289.2	100	400	0	72.3	50-110	0
Hexachlorobutadiene	260	100	400	0	65	25-105	0
Hexachlorocyclopentadiene	149	400	400	0	37.2	25-105	0 J
Hexachloroethane	292	100	400	0	73	30-95	0
Indeno(1,2,3-cd)pyrene	336	100	400	38.2	74.4	45-125	0
Isophorone	259.8	100	400	0	65	50-110	0
Naphthalene	294	100	400	35	64.8	40-100	0
Nitrobenzene	265.8	100	400	0	66.4	45-110	0
N-Nitrosodi-n-propylamine	288.8	100	400	0	72.2	35-130	0
N-Nitrosodiphenylamine	342.2	100	400	0	85.6	50-110	0
Pentachlorophenol	234.2	400	400	0	58.6	40-115	0 J
Phenanthrene	428.2	100	400	131.2	74.2	50-115	0
Phenol	87.2	100	400	0	21.8	12-43	0 J
Pyrene	351	100	400	99.6	62.8	50-130	0
<i>Surr: 2,4,6-Tribromophenol</i>	<i>677.2</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>67.7</i>	<i>38-115</i>	<i>0</i>
<i>Surr: 2-Fluorobiphenyl</i>	<i>649.8</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>65</i>	<i>32-100</i>	<i>0</i>
<i>Surr: 2-Fluorophenol</i>	<i>327</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>32.7</i>	<i>22-59</i>	<i>0</i>
<i>Surr: 4-Terphenyl-d14</i>	<i>1075</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>108</i>	<i>23-112</i>	<i>0</i>
<i>Surr: Nitrobenzene-d5</i>	<i>631</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>63.1</i>	<i>31-93</i>	<i>0</i>
<i>Surr: Phenol-d6</i>	<i>200.8</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>20.1</i>	<i>13-36</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **48313** Instrument ID **SVMS6** Method: **SW8270**

MSD Sample ID: 1305250-02A MSD				Units: µg/L			Analysis Date: 05/13/13 10:49 AM			
Client ID:		Run ID: SVMS6_130513A		SeqNo: 2316195		Prep Date: 05/10/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2,4,5-Trichlorophenol	329.6	100	400	0	82.4	50-110	318.4	3.46	30	
2,4,6-Trichlorophenol	303.6	100	400	0	75.9	50-115	285.8	6.04	30	
2,4-Dichlorophenol	285.8	200	400	0	71.4	50-105	275.4	3.71	30	
2,4-Dimethylphenol	253.8	100	400	0	63.4	30-110	246.4	2.96	30	
2,4-Dinitrophenol	339.6	100	400	0	84.9	15-140	314	7.83	30	
2,4-Dinitrotoluene	359.2	100	400	0	89.8	50-120	356	0.895	30	
2,6-Dinitrotoluene	293.8	100	400	0	73.4	50-115	276.8	5.96	30	
2-Chloronaphthalene	295	100	400	0	73.8	50-105	278.6	5.72	30	
2-Chlorophenol	272.2	100	400	0	68	35-105	252.4	7.55	30	
2-Methylnaphthalene	306.6	100	400	0	76.6	45-105	288.8	5.98	30	
2-Methylphenol	236.2	100	400	0	59	40-110	219	7.56	30	
2-Nitroaniline	300.8	400	400	0	75.2	50-115	284	0	30	J
2-Nitrophenol	270.4	100	400	0	67.6	40-115	250.6	7.6	30	
3-Nitroaniline	279.6	400	400	0	69.9	20-125	275.6	0	30	J
4,6-Dinitro-2-methylphenol	297.2	400	400	0	74.3	40-130	288.6	0	30	J
4-Bromophenyl phenyl ether	321	100	400	0	80.2	50-115	303.6	5.57	30	
4-Chloro-3-methylphenol	307.6	100	400	0	76.9	45-110	299.8	2.57	30	
4-Chloroaniline	231.8	400	400	0	58	15-110	225.4	0	30	J
4-Chlorophenyl phenyl ether	317.8	100	400	0	79.4	50-110	305	4.11	30	
4-Methylphenol	220.6	100	400	0	55.2	30-110	206.6	6.55	30	
4-Nitroaniline	268.4	400	400	0	67.1	35-150	254	0	30	J
4-Nitrophenol	111.8	400	400	0	28	1-58	97.4	0	0	J
Acenaphthene	322.4	100	400	0	80.6	45-110	309.2	4.18	30	
Acenaphthylene	328.4	100	400	23.6	76.2	50-105	316.2	3.79	30	
Anthracene	379	100	400	19.8	89.8	55-110	367.2	3.16	30	
Benzo(a)anthracene	373.6	100	400	44.6	82.2	55-110	358.6	4.1	30	
Benzo(a)pyrene	347.6	100	400	41	76.6	55-110	337.6	2.92	30	
Benzo(b)fluoranthene	358.8	100	400	47.4	77.8	45-120	341.6	4.91	30	
Benzo(g,h,i)perylene	326.8	100	400	23.2	75.9	40-125	325.8	0.306	30	
Benzo(k)fluoranthene	329	100	400	23.8	76.3	45-125	324.6	1.35	30	
Bis(2-chloroethoxy)methane	276.6	100	400	0	69.2	45-105	258.6	6.73	30	
Bis(2-chloroethyl)ether	342.4	100	400	0	85.6	35-110	318	7.39	30	
Bis(2-chloroisopropyl)ether	295	100	400	0	73.8	25-130	270.4	8.7	30	
Bis(2-ethylhexyl)phthalate	443.6	100	400	0	111	40-125	423.2	4.71	30	
Butyl benzyl phthalate	385	100	400	0	96.2	45-115	375.2	2.58	30	
Carbazole	361.6	200	400	0	90.4	50-150	349.2	3.49	30	
Chrysene	377.4	100	400	38.8	84.6	55-110	364.6	3.45	30	
Dibenzo(a,h)anthracene	325.8	100	400	0	81.4	40-125	321.2	1.42	30	
Dibenzofuran	351.6	100	400	36.6	78.8	55-105	336.2	4.48	30	
Diethyl phthalate	324.4	400	400	0	81.1	40-120	308	0	30	J
Dimethyl phthalate	291.8	400	400	0	73	25-125	280.4	0	30	J
Di-n-butyl phthalate	337.4	100	400	0	84.4	55-115	342.2	1.41	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: 48313		Instrument ID SVMS6		Method: SW8270					
Di-n-octyl phthalate	499.4	100	400	0	125	35-135	476.8	4.63	30
Fluoranthene	466.8	100	400	96	92.7	55-115	465.6	0.257	30
Fluorene	368	100	400	36.8	82.8	50-110	351.8	4.5	30
Hexachlorobenzene	299.4	100	400	0	74.8	50-110	289.2	3.47	30
Hexachlorobutadiene	269.6	100	400	0	67.4	25-105	260	3.63	30
Hexachlorocyclopentadiene	155.8	400	400	0	39	25-105	149	0	30 J
Hexachloroethane	310.2	100	400	0	77.6	30-95	292	6.04	30
Indeno(1,2,3-cd)pyrene	338.8	100	400	38.2	75.2	45-125	336	0.83	30
Isophorone	281.6	100	400	0	70.4	50-110	259.8	8.05	30
Naphthalene	302.4	100	400	35	66.8	40-100	294	2.82	30
Nitrobenzene	275.4	100	400	0	68.8	45-110	265.8	3.55	30
N-Nitrosodi-n-propylamine	314.6	100	400	0	78.6	35-130	288.8	8.55	30
N-Nitrosodiphenylamine	355.8	100	400	0	89	50-110	342.2	3.9	30
Pentachlorophenol	249	400	400	0	62.2	40-115	234.2	0	30 J
Phenanthrene	441.4	100	400	131.2	77.6	50-115	428.2	3.04	30
Phenol	105.2	100	400	0	26.3	12-43	87.2	18.7	30
Pyrene	339.6	100	400	99.6	60	50-130	351	3.3	30
<i>Surr: 2,4,6-Tribromophenol</i>	685.6	0	1000	0	68.6	38-115	677.2	1.23	40
<i>Surr: 2-Fluorobiphenyl</i>	666.8	0	1000	0	66.7	32-100	649.8	2.58	40
<i>Surr: 2-Fluorophenol</i>	361.6	0	1000	0	36.2	22-59	327	10	40
<i>Surr: 4-Terphenyl-d14</i>	1077	0	1000	0	108	23-112	1075	0.186	40
<i>Surr: Nitrobenzene-d5</i>	665.2	0	1000	0	66.5	31-93	631	5.28	40
<i>Surr: Phenol-d6</i>	238.2	0	1000	0	23.8	13-36	200.8	17	40

The following samples were analyzed in this batch:

1305241-56B	1305241-64C

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120585** Instrument ID **VMS7** Method: **SW8260**

MBLK		Sample ID: VBLKW2-130511-R120585				Units: µg/L		Analysis Date: 05/11/13 10:57 PM		
Client ID:		Run ID: VMS7_130511B				SeqNo: 2314760		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								
Toluene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120585	Instrument ID VMS7	Method: SW8260						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>18.9</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.5</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>18.36</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>91.8</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>18.49</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>92.4</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.38</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.9</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120585** Instrument ID **VMS7** Method: **SW8260**

LCS Sample ID: VLCSW2-130511-R120585				Units: µg/L			Analysis Date: 05/11/13 10:07 PM			
Client ID:		Run ID: VMS7_130511B			SeqNo: 2314759		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	22.15	1.0	20	0	111	65-130	0			
1,1,2,2-Tetrachloroethane	17.38	1.0	20	0	86.9	65-130	0			
1,1,2-Trichloroethane	18.68	1.0	20	0	93.4	75-125	0			
1,1-Dichloroethane	18.64	1.0	20	0	93.2	70-135	0			
1,1-Dichloroethene	21.12	1.0	20	0	106	70-130	0			
1,2,4-Trichlorobenzene	19.46	1.0	20	0	97.3	65-135	0			
1,2-Dibromo-3-chloropropane	17.56	1.0	20	0	87.8	50-130	0			
1,2-Dibromoethane	20.15	1.0	20	0	101	80-120	0			
1,2-Dichlorobenzene	19.41	1.0	20	0	97	70-120	0			
1,2-Dichloroethane	20.51	1.0	20	0	103	70-130	0			
1,2-Dichloropropane	20.28	2.0	20	0	101	75-125	0			
1,3-Dichlorobenzene	20.03	2.0	20	0	100	75-125	0			
1,4-Dichlorobenzene	19.49	2.0	20	0	97.4	75-125	0			
2-Butanone	18.18	5.0	20	0	90.9	30-150	0			
2-Hexanone	17.41	5.0	20	0	87	55-130	0			
4-Methyl-2-pentanone	21.16	5.0	20	0	106	60-135	0			
Acetone	19.1	20	20	0	95.5	40-140	0			J
Benzene	20.93	1.0	20	0	105	80-120	0			
Bromodichloromethane	21.77	1.0	20	0	109	75-120	0			
Bromoform	17.39	1.0	20	0	87	70-130	0			
Bromomethane	31.56	1.0	20	0	158	30-145	0			S
Carbon disulfide	21.22	2.5	20	0	106	35-165	0			
Carbon tetrachloride	24.78	1.0	20	0	124	65-140	0			
Chlorobenzene	20.7	1.0	20	0	104	80-120	0			
Chloroethane	19.24	1.0	20	0	96.2	60-135	0			
Chloroform	20.37	1.0	20	0	102	65-135	0			
Chloromethane	24.23	1.0	20	0	121	70-125	0			
cis-1,2-Dichloroethene	19.79	1.0	20	0	99	70-125	0			
cis-1,3-Dichloropropene	20.38	1.0	20	0	102	70-130	0			
Dibromochloromethane	18.03	1.0	20	0	90.2	60-135	0			
Dichlorodifluoromethane	21.42	1.0	20	0	107	30-155	0			
Ethylbenzene	20.66	1.0	20	0	103	75-125	0			
Isopropylbenzene	20.78	1.0	20	0	104	75-125	0			
Methyl tert-butyl ether	18.77	5.0	20	0	93.8	65-125	0			
Methylene chloride	20.38	5.0	20	0	102	55-140	0			
Styrene	20.53	1.0	20	0	103	65-135	0			
Tetrachloroethene	22.11	2.0	20	0	111	45-150	0			
Toluene	20.63	1.0	20	0	103	75-120	0			
trans-1,2-Dichloroethene	20.16	1.0	20	0	101	60-140	0			
trans-1,3-Dichloropropene	19.48	1.0	20	0	97.4	55-140	0			
Trichloroethene	21.92	1.0	20	0	110	70-125	0			
Trichlorofluoromethane	20.25	1.0	20	0	101	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120585	Instrument ID VMS7	Method: SW8260					
Vinyl chloride	18.5	1.0	20	0	92.5	50-145	0
Xylenes, Total	61.58	3.0	60	0	103	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>18.87</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.4</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.58</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.9</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>19.26</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.3</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>19.05</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.2</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120585** Instrument ID **VMS7** Method: **SW8260**

MS Sample ID: 1305241-20A MS				Units: µg/L			Analysis Date: 05/12/13 08:05 AM			
Client ID: WG-17360-050213-MR-020			Run ID: VMS7_130511B		SeqNo: 2314777		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	21.79	1.0	20	0	109	65-130	0			
1,1,2,2-Tetrachloroethane	15.82	1.0	20	0	79.1	65-130	0			
1,1,2-Trichloroethane	17.59	1.0	20	0	88	75-125	0			
1,1-Dichloroethane	18.68	1.0	20	0	93.4	70-135	0			
1,1-Dichloroethene	22.59	1.0	20	0	113	70-130	0			
1,2,4-Trichlorobenzene	16.55	1.0	20	0	82.8	65-135	0			
1,2-Dibromo-3-chloropropane	13.74	1.0	20	0	68.7	50-130	0			
1,2-Dibromoethane	19.3	1.0	20	0	96.5	80-120	0			
1,2-Dichlorobenzene	18.34	1.0	20	0	91.7	70-120	0			
1,2-Dichloroethane	19.9	1.0	20	0	99.5	70-130	0			
1,2-Dichloropropane	19.62	2.0	20	0	98.1	75-125	0			
1,3-Dichlorobenzene	18.98	2.0	20	0	94.9	75-125	0			
1,4-Dichlorobenzene	18.17	2.0	20	0	90.8	75-125	0			
2-Butanone	13.15	5.0	20	0	65.8	30-150	0			
2-Hexanone	16.27	5.0	20	0	81.4	55-130	0			
4-Methyl-2-pentanone	19.53	5.0	20	0	97.6	60-135	0			
Acetone	13.7	20	20	0	68.5	40-140	0			J
Benzene	20.71	1.0	20	0	104	80-120	0			
Bromodichloromethane	19.44	1.0	20	0	97.2	75-120	0			
Bromoform	15.17	1.0	20	0	75.8	70-130	0			
Bromomethane	94.66	1.0	20	0	473	30-145	0			S
Carbon disulfide	22.03	2.5	20	0	110	35-165	0			
Carbon tetrachloride	23.55	1.0	20	0	118	65-140	0			
Chlorobenzene	19.8	1.0	20	0	99	80-120	0			
Chloroethane	19.94	1.0	20	0	99.7	60-135	0			
Chloroform	20.18	1.0	20	0	101	65-135	0			
Chloromethane	25.53	1.0	20	0	128	70-125	0			S
cis-1,2-Dichloroethene	19.01	1.0	20	0	95	70-125	0			
cis-1,3-Dichloropropene	18.1	1.0	20	0	90.5	70-130	0			
Dibromochloromethane	16.2	1.0	20	0	81	60-135	0			
Dichlorodifluoromethane	21.02	1.0	20	0	105	30-155	0			
Ethylbenzene	20.02	1.0	20	0	100	75-125	0			
Isopropylbenzene	19.98	1.0	20	0	99.9	75-125	0			
Methyl tert-butyl ether	17.57	5.0	20	0	87.8	65-125	0			
Methylene chloride	20.5	5.0	20	0	102	55-140	0			
Styrene	19.09	1.0	20	0	95.4	65-135	0			
Tetrachloroethene	21.34	2.0	20	0	107	45-150	0			
Toluene	20.36	1.0	20	0	102	75-120	0			
trans-1,2-Dichloroethene	20.91	1.0	20	0	105	60-140	0			
trans-1,3-Dichloropropene	17.37	1.0	20	0	86.8	55-140	0			
Trichloroethene	21.89	1.0	20	0	109	70-125	0			
Trichlorofluoromethane	22.73	1.0	20	0	114	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120585	Instrument ID VMS7		Method: SW8260				
Vinyl chloride	19.12	1.0	20	0	95.6	50-145	0
Xylenes, Total	58.41	3.0	60	0	97.4	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>18.89</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.4</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>18.94</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.7</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>19.34</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.7</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>19.16</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.8</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120585** Instrument ID **VMS7** Method: **SW8260**

MSD				Sample ID: 1305241-20A MSD			Units: µg/L		Analysis Date: 05/12/13 08:30 AM	
Client ID: WG-17360-050213-MR-020				Run ID: VMS7_130511B			SeqNo: 2314778		Prep Date:	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	21.11	1.0	20	0	106	65-130	21.79	3.17	30	
1,1,2,2-Tetrachloroethane	15.13	1.0	20	0	75.6	65-130	15.82	4.46	30	
1,1,2-Trichloroethane	17.12	1.0	20	0	85.6	75-125	17.59	2.71	30	
1,1-Dichloroethane	18.49	1.0	20	0	92.4	70-135	18.68	1.02	30	
1,1-Dichloroethene	22.17	1.0	20	0	111	70-130	22.59	1.88	30	
1,2,4-Trichlorobenzene	17.57	1.0	20	0	87.8	65-135	16.55	5.98	30	
1,2-Dibromo-3-chloropropane	14.46	1.0	20	0	72.3	50-130	13.74	5.11	30	
1,2-Dibromoethane	18.68	1.0	20	0	93.4	80-120	19.3	3.26	30	
1,2-Dichlorobenzene	18.37	1.0	20	0	91.8	70-120	18.34	0.163	30	
1,2-Dichloroethane	19.35	1.0	20	0	96.8	70-130	19.9	2.8	30	
1,2-Dichloropropane	19.06	2.0	20	0	95.3	75-125	19.62	2.9	30	
1,3-Dichlorobenzene	18.75	2.0	20	0	93.8	75-125	18.98	1.22	30	
1,4-Dichlorobenzene	18.03	2.0	20	0	90.2	75-125	18.17	0.773	30	
2-Butanone	14.18	5.0	20	0	70.9	30-150	13.15	7.54	30	
2-Hexanone	15.66	5.0	20	0	78.3	55-130	16.27	3.82	30	
4-Methyl-2-pentanone	18.78	5.0	20	0	93.9	60-135	19.53	3.92	30	
Acetone	19.86	20	20	0	99.3	40-140	13.7	0	30	J
Benzene	20.12	1.0	20	0	101	80-120	20.71	2.89	30	
Bromodichloromethane	18.95	1.0	20	0	94.8	75-120	19.44	2.55	30	
Bromoform	15.17	1.0	20	0	75.8	70-130	15.17	0	30	
Bromomethane	95.46	1.0	20	0	477	30-145	94.66	0.842	30	S
Carbon disulfide	21.9	2.5	20	0	110	35-165	22.03	0.592	30	
Carbon tetrachloride	22.92	1.0	20	0	115	65-140	23.55	2.71	30	
Chlorobenzene	19.25	1.0	20	0	96.2	80-120	19.8	2.82	30	
Chloroethane	19.49	1.0	20	0	97.4	60-135	19.94	2.28	30	
Chloroform	19.84	1.0	20	0	99.2	65-135	20.18	1.7	30	
Chloromethane	26.04	1.0	20	0	130	70-125	25.53	1.98	30	S
cis-1,2-Dichloroethene	18.97	1.0	20	0	94.8	70-125	19.01	0.211	30	
cis-1,3-Dichloropropene	17.31	1.0	20	0	86.6	70-130	18.1	4.46	30	
Dibromochloromethane	16.03	1.0	20	0	80.2	60-135	16.2	1.05	30	
Dichlorodifluoromethane	21.33	1.0	20	0	107	30-155	21.02	1.46	30	
Ethylbenzene	19.51	1.0	20	0	97.6	75-125	20.02	2.58	30	
Isopropylbenzene	19.43	1.0	20	0	97.2	75-125	19.98	2.79	30	
Methyl tert-butyl ether	17.34	5.0	20	0	86.7	65-125	17.57	1.32	30	
Methylene chloride	20.17	5.0	20	0	101	55-140	20.5	1.62	30	
Styrene	18.82	1.0	20	0	94.1	65-135	19.09	1.42	30	
Tetrachloroethene	20.96	2.0	20	0	105	45-150	21.34	1.8	30	
Toluene	19.73	1.0	20	0	98.6	75-120	20.36	3.14	30	
trans-1,2-Dichloroethene	20.67	1.0	20	0	103	60-140	20.91	1.15	30	
trans-1,3-Dichloropropene	17.21	1.0	20	0	86	55-140	17.37	0.925	30	
Trichloroethene	20.81	1.0	20	0	104	70-125	21.89	5.06	30	
Trichlorofluoromethane	21.87	1.0	20	0	109	60-145	22.73	3.86	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120585	Instrument ID VMS7	Method: SW8260							
Vinyl chloride	18.96	1.0	20	0	94.8	50-145	19.12	0.84	30
Xylenes, Total	56.62	3.0	60	0	94.4	75-130	58.41	3.11	30
<i>Surr: 1,2-Dichloroethane-d4</i>	18.21	0	20	0	91	70-120	18.89	3.67	30
<i>Surr: 4-Bromofluorobenzene</i>	18.87	0	20	0	94.4	75-120	18.94	0.37	30
<i>Surr: Dibromofluoromethane</i>	18.57	0	20	0	92.8	85-115	19.34	4.06	30
<i>Surr: Toluene-d8</i>	18.76	0	20	0	93.8	85-120	19.16	2.11	30

The following samples were analyzed in this batch:

1305241-17A	1305241-18A	1305241-19A
1305241-20A	1305241-21A	1305241-22A
1305241-23A	1305241-24A	1305241-25A
1305241-26A	1305241-27A	1305241-28A
1305241-29A	1305241-30A	1305241-31A
1305241-33A	1305241-37A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120587** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: VBLKW2-130511-R120587				Units: µg/L		Analysis Date: 05/11/13 08:40 PM		
Client ID:		Run ID: VMS9_130511B				SeqNo: 2314618		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								
Toluene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120587	Instrument ID VMS9	Method: SW8260						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.56</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.8</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.28</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.4</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>20.11</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.57</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.8</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120587** Instrument ID **VMS9** Method: **SW8260**

LCS		Sample ID: VLCSW2-130511-R120587				Units: µg/L		Analysis Date: 05/11/13 07:57 PM		
Client ID:		Run ID: VMS9_130511B				SeqNo: 2314617		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	22.76	1.0	20	0	114	65-130	0			
1,1,2,2-Tetrachloroethane	18.52	1.0	20	0	92.6	65-130	0			
1,1,2-Trichloroethane	19.78	1.0	20	0	98.9	75-125	0			
1,1-Dichloroethane	21.03	1.0	20	0	105	70-135	0			
1,1-Dichloroethene	22.46	1.0	20	0	112	70-130	0			
1,2,4-Trichlorobenzene	21.79	1.0	20	0	109	65-135	0			
1,2-Dibromo-3-chloropropane	17.48	1.0	20	0	87.4	50-130	0			
1,2-Dibromoethane	20.49	1.0	20	0	102	80-120	0			
1,2-Dichlorobenzene	21.18	1.0	20	0	106	70-120	0			
1,2-Dichloroethane	20.25	1.0	20	0	101	70-130	0			
1,2-Dichloropropane	21.54	2.0	20	0	108	75-125	0			
1,3-Dichlorobenzene	21.8	2.0	20	0	109	75-125	0			
1,4-Dichlorobenzene	21.5	2.0	20	0	108	75-125	0			
2-Butanone	18.66	5.0	20	0	93.3	30-150	0			
2-Hexanone	17.4	5.0	20	0	87	55-130	0			
4-Methyl-2-pentanone	20.82	5.0	20	0	104	60-135	0			
Acetone	17.38	20	20	0	86.9	40-140	0			J
Benzene	21.33	1.0	20	0	107	80-120	0			
Bromodichloromethane	22.39	1.0	20	0	112	75-120	0			
Bromoform	19.8	1.0	20	0	99	70-130	0			
Bromomethane	22	1.0	20	0	110	30-145	0			
Carbon disulfide	25.6	2.5	20	0	128	35-165	0			
Carbon tetrachloride	19.95	1.0	20	0	99.8	65-140	0			
Chlorobenzene	21.2	1.0	20	0	106	80-120	0			
Chloroethane	23.8	1.0	20	0	119	60-135	0			
Chloroform	21.17	1.0	20	0	106	65-135	0			
Chloromethane	20.25	1.0	20	0	101	70-125	0			
cis-1,2-Dichloroethene	20.9	1.0	20	0	104	70-125	0			
cis-1,3-Dichloropropene	21.62	1.0	20	0	108	70-130	0			
Dibromochloromethane	19.8	1.0	20	0	99	60-135	0			
Dichlorodifluoromethane	23.55	1.0	20	0	118	30-155	0			
Ethylbenzene	21.64	1.0	20	0	108	75-125	0			
Isopropylbenzene	22.05	1.0	20	0	110	75-125	0			
Methyl tert-butyl ether	20.31	5.0	20	0	102	65-125	0			
Methylene chloride	20.01	5.0	20	0	100	55-140	0			
Styrene	22.02	1.0	20	0	110	65-135	0			
Tetrachloroethene	18.61	2.0	20	0	93	45-150	0			
Toluene	21.25	1.0	20	0	106	75-120	0			
trans-1,2-Dichloroethene	22.61	1.0	20	0	113	60-140	0			
trans-1,3-Dichloropropene	20.38	1.0	20	0	102	55-140	0			
Trichloroethene	19.5	1.0	20	0	97.5	70-125	0			
Trichlorofluoromethane	23.68	1.0	20	0	118	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120587	Instrument ID VMS9		Method: SW8260				
Vinyl chloride	22.08	1.0	20	0	110	50-145	0
Xylenes, Total	62.66	3.0	60	0	104	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.7</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.5</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.15</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>21.64</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>108</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>19.81</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120587** Instrument ID **VMS9** Method: **SW8260**

MS Sample ID: 1305241-10A MS				Units: µg/L			Analysis Date: 05/12/13 04:33 AM			
Client ID: WG-17360-050113-MR-010			Run ID: VMS9_130511B		SeqNo: 2314636		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	22.13	1.0	20	0	111	65-130	0			
1,1,2,2-Tetrachloroethane	17.45	1.0	20	0	87.2	65-130	0			
1,1,2-Trichloroethane	19.13	1.0	20	0	95.6	75-125	0			
1,1-Dichloroethane	20.41	1.0	20	0	102	70-135	0			
1,1-Dichloroethene	22.42	1.0	20	0	112	70-130	0			
1,2,4-Trichlorobenzene	18.11	1.0	20	0	90.6	65-135	0			
1,2-Dibromo-3-chloropropane	14.81	1.0	20	0	74	50-130	0			
1,2-Dibromoethane	18.77	1.0	20	0	93.8	80-120	0			
1,2-Dichlorobenzene	19.16	1.0	20	0	95.8	70-120	0			
1,2-Dichloroethane	19.59	1.0	20	0	98	70-130	0			
1,2-Dichloropropane	20.4	2.0	20	0	102	75-125	0			
1,3-Dichlorobenzene	19.92	2.0	20	0	99.6	75-125	0			
1,4-Dichlorobenzene	19.58	2.0	20	0	97.9	75-125	0			
2-Butanone	16.66	5.0	20	0	83.3	30-150	0			
2-Hexanone	16.66	5.0	20	0	83.3	55-130	0			
4-Methyl-2-pentanone	20.54	5.0	20	0	103	60-135	0			
Acetone	16.09	20	20	0	80.4	40-140	0			J
Benzene	20.8	1.0	20	0	104	80-120	0			
Bromodichloromethane	20.79	1.0	20	0	104	75-120	0			
Bromoform	17.88	1.0	20	0	89.4	70-130	0			
Bromomethane	20.05	1.0	20	0	100	30-145	0			
Carbon disulfide	23.43	2.5	20	0	117	35-165	0			
Carbon tetrachloride	19.75	1.0	20	0	98.8	65-140	0			
Chlorobenzene	20.67	1.0	20	0	103	80-120	0			
Chloroethane	23.89	1.0	20	0	119	60-135	0			
Chloroform	21.37	1.0	20	0	107	65-135	0			
Chloromethane	19.96	1.0	20	0	99.8	70-125	0			
cis-1,2-Dichloroethene	20.13	1.0	20	0	101	70-125	0			
cis-1,3-Dichloropropene	19.83	1.0	20	0	99.2	70-130	0			
Dibromochloromethane	18.38	1.0	20	0	91.9	60-135	0			
Dichlorodifluoromethane	23.48	1.0	20	0	117	30-155	0			
Ethylbenzene	21.25	1.0	20	0	106	75-125	0			
Isopropylbenzene	21.79	1.0	20	0	109	75-125	0			
Methyl tert-butyl ether	18.88	5.0	20	0	94.4	65-125	0			
Methylene chloride	18.98	5.0	20	0	94.9	55-140	0			
Styrene	21.57	1.0	20	0	108	65-135	0			
Tetrachloroethene	18.35	2.0	20	0	91.8	45-150	0			
Toluene	20.58	1.0	20	0	103	75-120	0			
trans-1,2-Dichloroethene	21.76	1.0	20	0	109	60-140	0			
trans-1,3-Dichloropropene	18.77	1.0	20	0	93.8	55-140	0			
Trichloroethene	19.36	1.0	20	0	96.8	70-125	0			
Trichlorofluoromethane	23.59	1.0	20	0	118	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120587	Instrument ID VMS9	Method: SW8260					
Vinyl chloride	22.42	1.0	20	0	112	50-145	0
Xylenes, Total	62.57	3.0	60	0	104	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	18.98	0	20	0	94.9	70-120	0
<i>Surr: 4-Bromofluorobenzene</i>	20.35	0	20	0	102	75-120	0
<i>Surr: Dibromofluoromethane</i>	20.82	0	20	0	104	85-115	0
<i>Surr: Toluene-d8</i>	19.87	0	20	0	99.4	85-120	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120587** Instrument ID **VMS9** Method: **SW8260**

MSD Sample ID: 1305241-10A MSD				Units: µg/L			Analysis Date: 05/12/13 04:55 AM			
Client ID: WG-17360-050113-MR-010			Run ID: VMS9_130511B		SeqNo: 2314637		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	22.81	1.0	20	0	114	65-130	22.13	3.03	30	
1,1,2,2-Tetrachloroethane	17.74	1.0	20	0	88.7	65-130	17.45	1.65	30	
1,1,2-Trichloroethane	19.23	1.0	20	0	96.2	75-125	19.13	0.521	30	
1,1-Dichloroethane	20.55	1.0	20	0	103	70-135	20.41	0.684	30	
1,1-Dichloroethene	22.61	1.0	20	0	113	70-130	22.42	0.844	30	
1,2,4-Trichlorobenzene	19.03	1.0	20	0	95.2	65-135	18.11	4.95	30	
1,2-Dibromo-3-chloropropane	15.18	1.0	20	0	75.9	50-130	14.81	2.47	30	
1,2-Dibromoethane	19.38	1.0	20	0	96.9	80-120	18.77	3.2	30	
1,2-Dichlorobenzene	19.95	1.0	20	0	99.8	70-120	19.16	4.04	30	
1,2-Dichloroethane	20.03	1.0	20	0	100	70-130	19.59	2.22	30	
1,2-Dichloropropane	20.48	2.0	20	0	102	75-125	20.4	0.391	30	
1,3-Dichlorobenzene	21.03	2.0	20	0	105	75-125	19.92	5.42	30	
1,4-Dichlorobenzene	20.18	2.0	20	0	101	75-125	19.58	3.02	30	
2-Butanone	16.52	5.0	20	0	82.6	30-150	16.66	0.844	30	
2-Hexanone	16.22	5.0	20	0	81.1	55-130	16.66	2.68	30	
4-Methyl-2-pentanone	20.21	5.0	20	0	101	60-135	20.54	1.62	30	
Acetone	16.41	20	20	0	82	40-140	16.09	0	30	J
Benzene	21.37	1.0	20	0	107	80-120	20.8	2.7	30	
Bromodichloromethane	21.29	1.0	20	0	106	75-120	20.79	2.38	30	
Bromoform	18	1.0	20	0	90	70-130	17.88	0.669	30	
Bromomethane	20.62	1.0	20	0	103	30-145	20.05	2.8	30	
Carbon disulfide	23.79	2.5	20	0	119	35-165	23.43	1.52	30	
Carbon tetrachloride	19.7	1.0	20	0	98.5	65-140	19.75	0.253	30	
Chlorobenzene	20.79	1.0	20	0	104	80-120	20.67	0.579	30	
Chloroethane	23.92	1.0	20	0	120	60-135	23.89	0.125	30	
Chloroform	21.85	1.0	20	0	109	65-135	21.37	2.22	30	
Chloromethane	20.71	1.0	20	0	104	70-125	19.96	3.69	30	
cis-1,2-Dichloroethene	20.12	1.0	20	0	101	70-125	20.13	0.0497	30	
cis-1,3-Dichloropropene	20.24	1.0	20	0	101	70-130	19.83	2.05	30	
Dibromochloromethane	18.73	1.0	20	0	93.6	60-135	18.38	1.89	30	
Dichlorodifluoromethane	23.21	1.0	20	0	116	30-155	23.48	1.16	30	
Ethylbenzene	21.18	1.0	20	0	106	75-125	21.25	0.33	30	
Isopropylbenzene	21.94	1.0	20	0	110	75-125	21.79	0.686	30	
Methyl tert-butyl ether	18.89	5.0	20	0	94.4	65-125	18.88	0.053	30	
Methylene chloride	19.4	5.0	20	0	97	55-140	18.98	2.19	30	
Styrene	21.61	1.0	20	0	108	65-135	21.57	0.185	30	
Tetrachloroethene	18.31	2.0	20	0	91.6	45-150	18.35	0.218	30	
Toluene	20.86	1.0	20	0	104	75-120	20.58	1.35	30	
trans-1,2-Dichloroethene	21.65	1.0	20	0	108	60-140	21.76	0.507	30	
trans-1,3-Dichloropropene	19.04	1.0	20	0	95.2	55-140	18.77	1.43	30	
Trichloroethene	19.8	1.0	20	0	99	70-125	19.36	2.25	30	
Trichlorofluoromethane	24.25	1.0	20	0	121	60-145	23.59	2.76	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120587	Instrument ID VMS9			Method: SW8260					
Vinyl chloride	22.32	1.0	20	0	112	50-145	22.42	0.447	30
Xylenes, Total	62.09	3.0	60	0	103	75-130	62.57	0.77	30
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.46</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.3</i>	<i>70-120</i>	<i>18.98</i>	<i>2.5</i>	<i>30</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.33</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>75-120</i>	<i>20.35</i>	<i>0.0983</i>	<i>30</i>
<i>Surr: Dibromofluoromethane</i>	<i>21.42</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>107</i>	<i>85-115</i>	<i>20.82</i>	<i>2.84</i>	<i>30</i>
<i>Surr: Toluene-d8</i>	<i>19.8</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99</i>	<i>85-120</i>	<i>19.87</i>	<i>0.353</i>	<i>30</i>

The following samples were analyzed in this batch:

1305241-01A	1305241-02A	1305241-03A
1305241-04A	1305241-05A	1305241-06A
1305241-07A	1305241-08A	1305241-09A
1305241-10A	1305241-11A	1305241-12A
1305241-13A	1305241-14A	1305241-15A
1305241-16A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120588** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: VBLKW1-130512-R120588				Units: µg/L		Analysis Date: 05/12/13 10:30 AM		
Client ID:		Run ID: VMS9_130512A				SeqNo: 2315200		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								
Toluene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120588	Instrument ID VMS9	Method: SW8260						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.23</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.2</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.25</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.2</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>20.23</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.28</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.4</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120588** Instrument ID **VMS9** Method: **SW8260**

LCS		Sample ID: VLCSW1-130512-R120588				Units: µg/L		Analysis Date: 05/12/13 09:48 AM		
Client ID:		Run ID: VMS9_130512A				SeqNo: 2315198		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.23	1.0	20	0	101	65-130	0			
1,1,2,2-Tetrachloroethane	17.28	1.0	20	0	86.4	65-130	0			
1,1,2-Trichloroethane	18.39	1.0	20	0	92	75-125	0			
1,1-Dichloroethane	18.97	1.0	20	0	94.8	70-135	0			
1,1-Dichloroethene	19.9	1.0	20	0	99.5	70-130	0			
1,2,4-Trichlorobenzene	19.53	1.0	20	0	97.6	65-135	0			
1,2-Dibromo-3-chloropropane	15.88	1.0	20	0	79.4	50-130	0			
1,2-Dibromoethane	18.42	1.0	20	0	92.1	80-120	0			
1,2-Dichlorobenzene	19.21	1.0	20	0	96	70-120	0			
1,2-Dichloroethane	18.76	1.0	20	0	93.8	70-130	0			
1,2-Dichloropropane	19.29	2.0	20	0	96.4	75-125	0			
1,3-Dichlorobenzene	19.62	2.0	20	0	98.1	75-125	0			
1,4-Dichlorobenzene	19.49	2.0	20	0	97.4	75-125	0			
2-Butanone	16.97	5.0	20	0	84.8	30-150	0			
2-Hexanone	15.35	5.0	20	0	76.8	55-130	0			
4-Methyl-2-pentanone	18.44	5.0	20	0	92.2	60-135	0			
Acetone	16.37	20	20	0	81.8	40-140	0			J
Benzene	18.99	1.0	20	0	95	80-120	0			
Bromodichloromethane	20.68	1.0	20	0	103	75-120	0			
Bromoform	18.43	1.0	20	0	92.2	70-130	0			
Bromomethane	19.49	1.0	20	0	97.4	30-145	0			
Carbon disulfide	23.5	2.5	20	0	118	35-165	0			
Carbon tetrachloride	18.19	1.0	20	0	91	65-140	0			
Chlorobenzene	19.51	1.0	20	0	97.6	80-120	0			
Chloroethane	20.9	1.0	20	0	104	60-135	0			
Chloroform	18.95	1.0	20	0	94.8	65-135	0			
Chloromethane	17.75	1.0	20	0	88.8	70-125	0			
cis-1,2-Dichloroethene	19.15	1.0	20	0	95.8	70-125	0			
cis-1,3-Dichloropropene	20.1	1.0	20	0	100	70-130	0			
Dibromochloromethane	18.5	1.0	20	0	92.5	60-135	0			
Dichlorodifluoromethane	19.69	1.0	20	0	98.4	30-155	0			
Ethylbenzene	19.45	1.0	20	0	97.2	75-125	0			
Isopropylbenzene	20.09	1.0	20	0	100	75-125	0			
Methyl tert-butyl ether	18.24	5.0	20	0	91.2	65-125	0			
Methylene chloride	17.83	5.0	20	0	89.2	55-140	0			
Styrene	20.13	1.0	20	0	101	65-135	0			
Tetrachloroethene	16.43	2.0	20	0	82.2	45-150	0			
Toluene	18.99	1.0	20	0	95	75-120	0			
trans-1,2-Dichloroethene	20.04	1.0	20	0	100	60-140	0			
trans-1,3-Dichloropropene	19.39	1.0	20	0	97	55-140	0			
Trichloroethene	17.57	1.0	20	0	87.8	70-125	0			
Trichlorofluoromethane	20.56	1.0	20	0	103	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120588	Instrument ID VMS9		Method: SW8260				
Vinyl chloride	19.31	1.0	20	0	96.6	50-145	0
Xylenes, Total	56.9	3.0	60	0	94.8	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.14</i>	0	<i>20</i>	0	<i>95.7</i>	<i>70-120</i>	0
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.1</i>	0	<i>20</i>	0	<i>100</i>	<i>75-120</i>	0
<i>Surr: Dibromofluoromethane</i>	<i>20.98</i>	0	<i>20</i>	0	<i>105</i>	<i>85-115</i>	0
<i>Surr: Toluene-d8</i>	<i>19.6</i>	0	<i>20</i>	0	<i>98</i>	<i>85-120</i>	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120588** Instrument ID **VMS9** Method: **SW8260**

MS Sample ID: 1305481-01A MS				Units: µg/L			Analysis Date: 05/12/13 05:58 PM			
Client ID:		Run ID: VMS9_130512A		SeqNo: 2315222		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	22.67	1.0	20	0	113	65-130	0			
1,1,2,2-Tetrachloroethane	17.57	1.0	20	0	87.8	65-130	0			
1,1,2-Trichloroethane	19.55	1.0	20	0	97.8	75-125	0			
1,1-Dichloroethane	20.68	1.0	20	0	103	70-135	0			
1,1-Dichloroethene	23.49	1.0	20	0	117	70-130	0			
1,2,4-Trichlorobenzene	18.41	1.0	20	0	92	65-135	0			
1,2-Dibromo-3-chloropropane	14.39	1.0	20	0	72	50-130	0			
1,2-Dibromoethane	19.57	1.0	20	0	97.8	80-120	0			
1,2-Dichlorobenzene	19.73	1.0	20	0	98.6	70-120	0			
1,2-Dichloroethane	20.05	1.0	20	0	100	70-130	0			
1,2-Dichloropropane	20.92	2.0	20	0	105	75-125	0			
1,3-Dichlorobenzene	20.55	2.0	20	0	103	75-125	0			
1,4-Dichlorobenzene	19.98	2.0	20	0	99.9	75-125	0			
2-Butanone	25.18	5.0	20	0	126	30-150	0			
2-Hexanone	22.58	5.0	20	0	113	55-130	0			
4-Methyl-2-pentanone	20.59	5.0	20	0	103	60-135	0			
Acetone	35.72	20	20	0	179	40-140	0			S
Benzene	21.53	1.0	20	0	108	80-120	0			
Bromodichloromethane	21.58	1.0	20	0	108	75-120	0			
Bromoform	18.07	1.0	20	0	90.4	70-130	0			
Bromomethane	21.12	1.0	20	0	106	30-145	0			
Carbon disulfide	24.32	2.5	20	0	122	35-165	0			
Carbon tetrachloride	19.04	1.0	20	0	95.2	65-140	0			
Chlorobenzene	21.23	1.0	20	0	106	80-120	0			
Chloroethane	24.08	1.0	20	0	120	60-135	0			
Chloroform	21.32	1.0	20	0	107	65-135	0			
Chloromethane	20.82	1.0	20	0	104	70-125	0			
cis-1,2-Dichloroethene	20.88	1.0	20	0	104	70-125	0			
cis-1,3-Dichloropropene	20.47	1.0	20	0	102	70-130	0			
Dibromochloromethane	19.23	1.0	20	0	96.2	60-135	0			
Dichlorodifluoromethane	23.6	1.0	20	0	118	30-155	0			
Ethylbenzene	21.71	1.0	20	0	109	75-125	0			
Isopropylbenzene	22.32	1.0	20	0	112	75-125	0			
Methyl tert-butyl ether	19.28	5.0	20	0	96.4	65-125	0			
Methylene chloride	19.76	5.0	20	0	98.8	55-140	0			
Styrene	22.05	1.0	20	0	110	65-135	0			
Tetrachloroethene	22.15	2.0	20	0	111	45-150	0			
Toluene	21.17	1.0	20	0	106	75-120	0			
trans-1,2-Dichloroethene	22.71	1.0	20	0	114	60-140	0			
trans-1,3-Dichloropropene	19.21	1.0	20	0	96	55-140	0			
Trichloroethene	19.57	1.0	20	0	97.8	70-125	0			
Trichlorofluoromethane	24.65	1.0	20	0	123	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120588	Instrument ID VMS9		Method: SW8260				
Vinyl chloride	23.09	1.0	20	0	115	50-145	0
Xylenes, Total	63.8	3.0	60	0	106	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.21</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.28</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.82</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>104</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>19.59</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120588** Instrument ID **VMS9** Method: **SW8260**

MSD Sample ID: 1305481-01A MSD				Units: µg/L			Analysis Date: 05/12/13 06:19 PM			
Client ID:		Run ID: VMS9_130512A			SeqNo: 2315223		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	22.94	1.0	20	0	115	65-130	22.67	1.18	30	
1,1,2,2-Tetrachloroethane	17.02	1.0	20	0	85.1	65-130	17.57	3.18	30	
1,1,2-Trichloroethane	19.19	1.0	20	0	96	75-125	19.55	1.86	30	
1,1-Dichloroethane	21.15	1.0	20	0	106	70-135	20.68	2.25	30	
1,1-Dichloroethene	23.21	1.0	20	0	116	70-130	23.49	1.2	30	
1,2,4-Trichlorobenzene	19.4	1.0	20	0	97	65-135	18.41	5.24	30	
1,2-Dibromo-3-chloropropane	15.16	1.0	20	0	75.8	50-130	14.39	5.21	30	
1,2-Dibromoethane	19.51	1.0	20	0	97.6	80-120	19.57	0.307	30	
1,2-Dichlorobenzene	20.28	1.0	20	0	101	70-120	19.73	2.75	30	
1,2-Dichloroethane	20.16	1.0	20	0	101	70-130	20.05	0.547	30	
1,2-Dichloropropane	20.85	2.0	20	0	104	75-125	20.92	0.335	30	
1,3-Dichlorobenzene	20.96	2.0	20	0	105	75-125	20.55	1.98	30	
1,4-Dichlorobenzene	20.02	2.0	20	0	100	75-125	19.98	0.2	30	
2-Butanone	25.24	5.0	20	0	126	30-150	25.18	0.238	30	
2-Hexanone	22.03	5.0	20	0	110	55-130	22.58	2.47	30	
4-Methyl-2-pentanone	20.54	5.0	20	0	103	60-135	20.59	0.243	30	
Acetone	37.71	20	20	0	189	40-140	35.72	5.42	30	S
Benzene	21.34	1.0	20	0	107	80-120	21.53	0.886	30	
Bromodichloromethane	21.32	1.0	20	0	107	75-120	21.58	1.21	30	
Bromoform	18	1.0	20	0	90	70-130	18.07	0.388	30	
Bromomethane	21	1.0	20	0	105	30-145	21.12	0.57	30	
Carbon disulfide	24.86	2.5	20	0	124	35-165	24.32	2.2	30	
Carbon tetrachloride	19.8	1.0	20	0	99	65-140	19.04	3.91	30	
Chlorobenzene	21.06	1.0	20	0	105	80-120	21.23	0.804	30	
Chloroethane	24.05	1.0	20	0	120	60-135	24.08	0.125	30	
Chloroform	21.43	1.0	20	0	107	65-135	21.32	0.515	30	
Chloromethane	20.34	1.0	20	0	102	70-125	20.82	2.33	30	
cis-1,2-Dichloroethene	20.94	1.0	20	0	105	70-125	20.88	0.287	30	
cis-1,3-Dichloropropene	20.68	1.0	20	0	103	70-130	20.47	1.02	30	
Dibromochloromethane	18.65	1.0	20	0	93.2	60-135	19.23	3.06	30	
Dichlorodifluoromethane	22.99	1.0	20	0	115	30-155	23.6	2.62	30	
Ethylbenzene	21.42	1.0	20	0	107	75-125	21.71	1.34	30	
Isopropylbenzene	22.39	1.0	20	0	112	75-125	22.32	0.313	30	
Methyl tert-butyl ether	19.27	5.0	20	0	96.4	65-125	19.28	0.0519	30	
Methylene chloride	19.76	5.0	20	0	98.8	55-140	19.76	0	30	
Styrene	22	1.0	20	0	110	65-135	22.05	0.227	30	
Tetrachloroethene	22.07	2.0	20	0	110	45-150	22.15	0.362	30	
Toluene	20.97	1.0	20	0	105	75-120	21.17	0.949	30	
trans-1,2-Dichloroethene	22.64	1.0	20	0	113	60-140	22.71	0.309	30	
trans-1,3-Dichloropropene	19.53	1.0	20	0	97.6	55-140	19.21	1.65	30	
Trichloroethene	19.6	1.0	20	0	98	70-125	19.57	0.153	30	
Trichlorofluoromethane	24.77	1.0	20	0	124	60-145	24.65	0.486	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120588	Instrument ID VMS9			Method: SW8260					
Vinyl chloride	22.41	1.0	20	0	112	50-145	23.09	2.99	30
Xylenes, Total	62.82	3.0	60	0	105	75-130	63.8	1.55	30
<i>Surr: 1,2-Dichloroethane-d4</i>	19.39	0	20	0	97	70-120	19.21	0.933	30
<i>Surr: 4-Bromofluorobenzene</i>	20.31	0	20	0	102	75-120	20.28	0.148	30
<i>Surr: Dibromofluoromethane</i>	21.45	0	20	0	107	85-115	20.82	2.98	30
<i>Surr: Toluene-d8</i>	19.78	0	20	0	98.9	85-120	19.59	0.965	30

The following samples were analyzed in this batch: | 1305241-11A | 1305241-35A | 1305241-36A |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120600** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: VBLKW2-130512-R120600				Units: µg/L		Analysis Date: 05/12/13 08:48 PM		
Client ID:		Run ID: VMS9_130512B				SeqNo: 2315226		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								
Toluene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120600	Instrument ID VMS9	Method: SW8260						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.76</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.8</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.11</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.6</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>20.57</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>103</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.15</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.8</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120600** Instrument ID **VMS9** Method: **SW8260**

LCS		Sample ID: VLCSW2-130512-R120600				Units: µg/L		Analysis Date: 05/12/13 08:05 PM		
Client ID:		Run ID: VMS9_130512B				SeqNo: 2315225		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	21.21	1.0	20	0	106	65-130	0			
1,1,2,2-Tetrachloroethane	18.08	1.0	20	0	90.4	65-130	0			
1,1,2-Trichloroethane	19.35	1.0	20	0	96.8	75-125	0			
1,1-Dichloroethane	20.58	1.0	20	0	103	70-135	0			
1,1-Dichloroethene	21.45	1.0	20	0	107	70-130	0			
1,2,4-Trichlorobenzene	20.4	1.0	20	0	102	65-135	0			
1,2-Dibromo-3-chloropropane	16.28	1.0	20	0	81.4	50-130	0			
1,2-Dibromoethane	19.54	1.0	20	0	97.7	80-120	0			
1,2-Dichlorobenzene	20.39	1.0	20	0	102	70-120	0			
1,2-Dichloroethane	19.67	1.0	20	0	98.4	70-130	0			
1,2-Dichloropropane	20.22	2.0	20	0	101	75-125	0			
1,3-Dichlorobenzene	21.03	2.0	20	0	105	75-125	0			
1,4-Dichlorobenzene	20.51	2.0	20	0	103	75-125	0			
2-Butanone	18.62	5.0	20	0	93.1	30-150	0			
2-Hexanone	17.04	5.0	20	0	85.2	55-130	0			
4-Methyl-2-pentanone	21.12	5.0	20	0	106	60-135	0			
Acetone	19.83	20	20	0	99.2	40-140	0			J
Benzene	20.36	1.0	20	0	102	80-120	0			
Bromodichloromethane	21.73	1.0	20	0	109	75-120	0			
Bromoform	19.08	1.0	20	0	95.4	70-130	0			
Bromomethane	21.1	1.0	20	0	106	30-145	0			
Carbon disulfide	24.47	2.5	20	0	122	35-165	0			
Carbon tetrachloride	18.33	1.0	20	0	91.6	65-140	0			
Chlorobenzene	20.72	1.0	20	0	104	80-120	0			
Chloroethane	23.12	1.0	20	0	116	60-135	0			
Chloroform	20.8	1.0	20	0	104	65-135	0			
Chloromethane	18.99	1.0	20	0	95	70-125	0			
cis-1,2-Dichloroethene	20.52	1.0	20	0	103	70-125	0			
cis-1,3-Dichloropropene	21.15	1.0	20	0	106	70-130	0			
Dibromochloromethane	19.46	1.0	20	0	97.3	60-135	0			
Dichlorodifluoromethane	19.52	1.0	20	0	97.6	30-155	0			
Ethylbenzene	20.69	1.0	20	0	103	75-125	0			
Isopropylbenzene	21.34	1.0	20	0	107	75-125	0			
Methyl tert-butyl ether	20.78	5.0	20	0	104	65-125	0			
Methylene chloride	19.66	5.0	20	0	98.3	55-140	0			
Styrene	21.52	1.0	20	0	108	65-135	0			
Tetrachloroethene	17.41	2.0	20	0	87	45-150	0			
Toluene	20.37	1.0	20	0	102	75-120	0			
trans-1,2-Dichloroethene	21.71	1.0	20	0	109	60-140	0			
trans-1,3-Dichloropropene	20.05	1.0	20	0	100	55-140	0			
Trichloroethene	18.77	1.0	20	0	93.8	70-125	0			
Trichlorofluoromethane	21.57	1.0	20	0	108	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120600	Instrument ID VMS9		Method: SW8260				
Vinyl chloride	20.04	1.0	20	0	100	50-145	0
Xylenes, Total	60.96	3.0	60	0	102	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.2</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.07</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.95</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>105</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>19.78</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.9</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120600** Instrument ID **VMS9** Method: **SW8260**

MS Sample ID: 1305342-01A MS				Units: µg/L			Analysis Date: 05/13/13 04:40 AM			
Client ID:		Run ID: VMS9_130512B		SeqNo: 2315242		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	23.14	1.0	20	0	116	65-130	0			
1,1,2,2-Tetrachloroethane	18.23	1.0	20	0	91.2	65-130	0			
1,1,2-Trichloroethane	20.45	1.0	20	0	102	75-125	0			
1,1-Dichloroethane	21.83	1.0	20	0	109	70-135	0			
1,1-Dichloroethene	24.61	1.0	20	0	123	70-130	0			
1,2,4-Trichlorobenzene	18.49	1.0	20	0	92.4	65-135	0			
1,2-Dibromo-3-chloropropane	16.08	1.0	20	0	80.4	50-130	0			
1,2-Dibromoethane	19.56	1.0	20	0	97.8	80-120	0			
1,2-Dichlorobenzene	29.45	1.0	20	8	107	70-120	0			
1,2-Dichloroethane	20.75	1.0	20	0	104	70-130	0			
1,2-Dichloropropane	21.58	2.0	20	0	108	75-125	0			
1,3-Dichlorobenzene	20.62	2.0	20	0	103	75-125	0			
1,4-Dichlorobenzene	40.57	2.0	20	18.47	110	75-125	0			
2-Butanone	19.11	5.0	20	0	95.6	30-150	0			
2-Hexanone	17.43	5.0	20	0	87.2	55-130	0			
4-Methyl-2-pentanone	21.59	5.0	20	0	108	60-135	0			
Acetone	18.32	20	20	0	91.6	40-140	0			J
Benzene	32.89	1.0	20	9.94	115	80-120	0			
Bromodichloromethane	21.36	1.0	20	0	107	75-120	0			
Bromoform	17.62	1.0	20	0	88.1	70-130	0			
Bromomethane	21.33	1.0	20	0	107	30-145	0			
Carbon disulfide	23.76	2.5	20	0	119	35-165	0			
Carbon tetrachloride	19.8	1.0	20	0	99	65-140	0			
Chlorobenzene	3258	1.0	20	3231	136	80-120	0			SEO
Chloroethane	25.53	1.0	20	0	128	60-135	0			
Chloroform	21.76	1.0	20	0	109	65-135	0			
Chloromethane	21.44	1.0	20	0	107	70-125	0			
cis-1,2-Dichloroethene	103.2	1.0	20	77.18	130	70-125	0			SE
cis-1,3-Dichloropropene	20.43	1.0	20	0	102	70-130	0			
Dibromochloromethane	18.18	1.0	20	0	90.9	60-135	0			
Dichlorodifluoromethane	24.25	1.0	20	0	121	30-155	0			
Ethylbenzene	22.32	1.0	20	0.95	107	75-125	0			
Isopropylbenzene	21.58	1.0	20	0	108	75-125	0			
Methyl tert-butyl ether	20.33	5.0	20	0	102	65-125	0			
Methylene chloride	20.75	5.0	20	0	104	55-140	0			
Styrene	21.37	1.0	20	0	107	65-135	0			
Tetrachloroethene	151.6	2.0	20	74	388	45-150	0			SE
Toluene	21.2	1.0	20	0	106	75-120	0			
trans-1,2-Dichloroethene	24.88	1.0	20	1.66	116	60-140	0			
trans-1,3-Dichloropropene	18.85	1.0	20	0	94.2	55-140	0			
Trichloroethene	161	1.0	20	127.7	166	70-125	0			SEO
Trichlorofluoromethane	25.14	1.0	20	0	126	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120600		Instrument ID VMS9		Method: SW8260			
Vinyl chloride	31.24	1.0	20	7.55	118	50-145	0
Xylenes, Total	61.74	3.0	60	0	103	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	19.63	0	20	0	98.2	70-120	0
<i>Surr: 4-Bromofluorobenzene</i>	20.15	0	20	0	101	75-120	0
<i>Surr: Dibromofluoromethane</i>	20.93	0	20	0	105	85-115	0
<i>Surr: Toluene-d8</i>	19.38	0	20	0	96.9	85-120	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120600** Instrument ID **VMS9** Method: **SW8260**

MSD					Sample ID: 1305342-01A MSD			Units: µg/L		Analysis Date: 05/13/13 05:02 AM	
Client ID:			Run ID: VMS9_130512B			SeqNo: 2315243		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
1,1,1-Trichloroethane	22.75	1.0	20	0	114	65-130	23.14	1.7	30		
1,1,2,2-Tetrachloroethane	18.12	1.0	20	0	90.6	65-130	18.23	0.605	30		
1,1,2-Trichloroethane	19.4	1.0	20	0	97	75-125	20.45	5.27	30		
1,1-Dichloroethane	21.8	1.0	20	0	109	70-135	21.83	0.138	30		
1,1-Dichloroethene	24.24	1.0	20	0	121	70-130	24.61	1.51	30		
1,2,4-Trichlorobenzene	18.94	1.0	20	0	94.7	65-135	18.49	2.4	30		
1,2-Dibromo-3-chloropropane	16.01	1.0	20	0	80	50-130	16.08	0.436	30		
1,2-Dibromoethane	19.49	1.0	20	0	97.4	80-120	19.56	0.359	30		
1,2-Dichlorobenzene	29.31	1.0	20	8	107	70-120	29.45	0.477	30		
1,2-Dichloroethane	20.6	1.0	20	0	103	70-130	20.75	0.726	30		
1,2-Dichloropropane	21.32	2.0	20	0	107	75-125	21.58	1.21	30		
1,3-Dichlorobenzene	20.55	2.0	20	0	103	75-125	20.62	0.34	30		
1,4-Dichlorobenzene	40.42	2.0	20	18.47	110	75-125	40.57	0.37	30		
2-Butanone	18.53	5.0	20	0	92.6	30-150	19.11	3.08	30		
2-Hexanone	17.83	5.0	20	0	89.2	55-130	17.43	2.27	30		
4-Methyl-2-pentanone	21.06	5.0	20	0	105	60-135	21.59	2.49	30		
Acetone	18.28	20	20	0	91.4	40-140	18.32	0	30	J	
Benzene	32.49	1.0	20	9.94	113	80-120	32.89	1.22	30		
Bromodichloromethane	21.99	1.0	20	0	110	75-120	21.36	2.91	30		
Bromoform	18.12	1.0	20	0	90.6	70-130	17.62	2.8	30		
Bromomethane	20.4	1.0	20	0	102	30-145	21.33	4.46	30		
Carbon disulfide	24.81	2.5	20	0	124	35-165	23.76	4.32	30		
Carbon tetrachloride	19.71	1.0	20	0	98.6	65-140	19.8	0.456	30		
Chlorobenzene	3244	1.0	20	3231	65.4	80-120	3258	0.437	30	SEO	
Chloroethane	24.4	1.0	20	0	122	60-135	25.53	4.53	30		
Chloroform	21.57	1.0	20	0	108	65-135	21.76	0.877	30		
Chloromethane	20.86	1.0	20	0	104	70-125	21.44	2.74	30		
cis-1,2-Dichloroethene	102.4	1.0	20	77.18	126	70-125	103.2	0.691	30	SE	
cis-1,3-Dichloropropene	20.45	1.0	20	0	102	70-130	20.43	0.0978	30		
Dibromochloromethane	19.07	1.0	20	0	95.4	60-135	18.18	4.78	30		
Dichlorodifluoromethane	23.16	1.0	20	0	116	30-155	24.25	4.6	30		
Ethylbenzene	22.27	1.0	20	0.95	107	75-125	22.32	0.224	30		
Isopropylbenzene	21.48	1.0	20	0	107	75-125	21.58	0.464	30		
Methyl tert-butyl ether	20.29	5.0	20	0	101	65-125	20.33	0.197	30		
Methylene chloride	20.37	5.0	20	0	102	55-140	20.75	1.85	30		
Styrene	21.64	1.0	20	0	108	65-135	21.37	1.26	30		
Tetrachloroethene	148.1	2.0	20	74	370	45-150	151.6	2.36	30	SE	
Toluene	21.22	1.0	20	0	106	75-120	21.2	0.0943	30		
trans-1,2-Dichloroethene	24.73	1.0	20	1.66	115	60-140	24.88	0.605	30		
trans-1,3-Dichloropropene	18.9	1.0	20	0	94.5	55-140	18.85	0.265	30		
Trichloroethene	158.2	1.0	20	127.7	152	70-125	161	1.8	30	SEO	
Trichlorofluoromethane	24.67	1.0	20	0	123	60-145	25.14	1.89	30		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120600	Instrument ID VMS9			Method: SW8260					
Vinyl chloride	30.44	1.0	20	7.55	114	50-145	31.24	2.59	30
Xylenes, Total	61.51	3.0	60	0	103	75-130	61.74	0.373	30
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.77</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.8</i>	<i>70-120</i>	<i>19.63</i>	<i>0.711</i>	<i>30</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.34</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>75-120</i>	<i>20.15</i>	<i>0.939</i>	<i>30</i>
<i>Surr: Dibromofluoromethane</i>	<i>21.1</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>106</i>	<i>85-115</i>	<i>20.93</i>	<i>0.809</i>	<i>30</i>
<i>Surr: Toluene-d8</i>	<i>19.51</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.6</i>	<i>85-120</i>	<i>19.38</i>	<i>0.669</i>	<i>30</i>

The following samples were analyzed in this batch: | 1305241-40A | 1305241-41A | 1305241-42A |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120665A** Instrument ID **VMS7** Method: **SW8260**

MBLK		Sample ID: VBLKW2-130513-R120665A				Units: µg/L		Analysis Date: 05/14/13 03:22 AM		
Client ID:		Run ID: VMS7_130513B				SeqNo: 2317625		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								
Toluene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120665A	Instrument ID VMS7	Method: SW8260						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.44</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.2</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>18.91</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.6</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>19.41</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.16</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.8</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120665A** Instrument ID **VMS7** Method: **SW8260**

LCS		Sample ID: VLCSW2-130513-R120665A				Units: µg/L		Analysis Date: 05/14/13 02:32 AM		
Client ID:		Run ID: VMS7_130513B				SeqNo: 2317624		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	22.26	1.0	20	0	111	65-130	0			
1,1,2,2-Tetrachloroethane	21.37	1.0	20	0	107	65-130	0			
1,1,2-Trichloroethane	19.91	1.0	20	0	99.6	75-125	0			
1,1-Dichloroethane	19.85	1.0	20	0	99.2	70-135	0			
1,1-Dichloroethene	22.18	1.0	20	0	111	70-130	0			
1,2,4-Trichlorobenzene	20.39	1.0	20	0	102	65-135	0			
1,2-Dibromo-3-chloropropane	27.19	1.0	20	0	136	50-130	0			S
1,2-Dibromoethane	22.28	1.0	20	0	111	80-120	0			
1,2-Dichlorobenzene	20.38	1.0	20	0	102	70-120	0			
1,2-Dichloroethane	21.25	1.0	20	0	106	70-130	0			
1,2-Dichloropropane	20.45	2.0	20	0	102	75-125	0			
1,3-Dichlorobenzene	20.66	2.0	20	0	103	75-125	0			
1,4-Dichlorobenzene	20.01	2.0	20	0	100	75-125	0			
2-Butanone	26.54	5.0	20	0	133	30-150	0			
2-Hexanone	23.82	5.0	20	0	119	55-130	0			
4-Methyl-2-pentanone	28.08	5.0	20	0	140	60-135	0			S
Acetone	28.76	20	20	0	144	40-140	0			S
Benzene	21.25	1.0	20	0	106	80-120	0			
Bromodichloromethane	22.53	1.0	20	0	113	75-120	0			
Bromoform	21.72	1.0	20	0	109	70-130	0			
Bromomethane	21.29	1.0	20	0	106	30-145	0			
Carbon disulfide	22.64	2.5	20	0	113	35-165	0			
Carbon tetrachloride	24.27	1.0	20	0	121	65-140	0			
Chlorobenzene	20.57	1.0	20	0	103	80-120	0			
Chloroethane	18.91	1.0	20	0	94.6	60-135	0			
Chloroform	20.89	1.0	20	0	104	65-135	0			
Chloromethane	25.31	1.0	20	0	127	70-125	0			S
cis-1,2-Dichloroethene	19.8	1.0	20	0	99	70-125	0			
cis-1,3-Dichloropropene	20.61	1.0	20	0	103	70-130	0			
Dibromochloromethane	19.7	1.0	20	0	98.5	60-135	0			
Dichlorodifluoromethane	18.82	1.0	20	0	94.1	30-155	0			
Ethylbenzene	20.66	1.0	20	0	103	75-125	0			
Isopropylbenzene	20.33	1.0	20	0	102	75-125	0			
Methyl tert-butyl ether	22.92	5.0	20	0	115	65-125	0			
Methylene chloride	22.97	5.0	20	0	115	55-140	0			
Styrene	20.72	1.0	20	0	104	65-135	0			
Tetrachloroethene	20.71	2.0	20	0	104	45-150	0			
Toluene	20.15	1.0	20	0	101	75-120	0			
trans-1,2-Dichloroethene	22	1.0	20	0	110	60-140	0			
trans-1,3-Dichloropropene	20.65	1.0	20	0	103	55-140	0			
Trichloroethene	21.6	1.0	20	0	108	70-125	0			
Trichlorofluoromethane	20.31	1.0	20	0	102	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates

Work Order: 1305241

Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120665A	Instrument ID VMS7	Method: SW8260					
Vinyl chloride	19.32	1.0	20	0	96.6	50-145	0
Xylenes, Total	60.65	3.0	60	0	101	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.51</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.6</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.51</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>103</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.22</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>19.18</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.9</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120665A** Instrument ID **VMS7** Method: **SW8260**

MS Sample ID: 1305241-32A MS				Units: µg/L		Analysis Date: 05/14/13 12:41 PM				
Client ID: WG-17360-050313-MR-032			Run ID: VMS7_130513B		SeqNo: 2317652		Prep Date:		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	96.75	5.0	100	0	96.8	65-130	0			
1,1,2,2-Tetrachloroethane	98.15	5.0	100	0	98.2	65-130	0			
1,1,2-Trichloroethane	96.65	5.0	100	0	96.6	75-125	0			
1,1-Dichloroethane	98.65	5.0	100	0	98.6	70-135	0			
1,1-Dichloroethene	112.2	5.0	100	0	112	70-130	0			
1,2,4-Trichlorobenzene	67.75	5.0	100	0	67.8	65-135	0			
1,2-Dibromo-3-chloropropane	109.7	5.0	100	0	110	50-130	0			
1,2-Dibromoethane	105.2	5.0	100	0	105	80-120	0			
1,2-Dichlorobenzene	86.25	5.0	100	0	86.2	70-120	0			
1,2-Dichloroethane	102	5.0	100	0	102	70-130	0			
1,2-Dichloropropane	97.75	10	100	0	97.8	75-125	0			
1,3-Dichlorobenzene	82.45	10	100	0	82.4	75-125	0			
1,4-Dichlorobenzene	81.2	10	100	0	81.2	75-125	0			
2-Butanone	156.1	25	100	33.4	123	30-150	0			
2-Hexanone	119.4	25	100	0	119	55-130	0			
4-Methyl-2-pentanone	153	25	100	11.55	141	60-135	0			S
Acetone	328	100	100	85	243	40-140	0			S
Benzene	98.5	5.0	100	0	98.5	80-120	0			
Bromodichloromethane	99.45	5.0	100	0	99.4	75-120	0			
Bromoform	91.2	5.0	100	0	91.2	70-130	0			
Bromomethane	205.6	5.0	100	0	206	30-145	0			S
Carbon disulfide	109.2	12	100	0	109	35-165	0			
Carbon tetrachloride	103	5.0	100	0	103	65-140	0			
Chlorobenzene	91.6	5.0	100	0	91.6	80-120	0			
Chloroethane	87	5.0	100	0	87	60-135	0			
Chloroform	100.1	5.0	100	0	100	65-135	0			
Chloromethane	95.6	5.0	100	0	95.6	70-125	0			
cis-1,2-Dichloroethene	116.6	5.0	100	0	117	70-125	0			
cis-1,3-Dichloropropene	82.85	5.0	100	0	82.8	70-130	0			
Dibromochloromethane	84.5	5.0	100	0	84.5	60-135	0			
Dichlorodifluoromethane	62.9	5.0	100	0	62.9	30-155	0			
Ethylbenzene	86.95	5.0	100	0	87	75-125	0			
Isopropylbenzene	73.4	5.0	100	0	73.4	75-125	0			S
Methyl tert-butyl ether	111.6	25	100	0	112	65-125	0			
Methylene chloride	111.6	25	100	0	112	55-140	0			
Styrene	82.55	5.0	100	0	82.6	65-135	0			
Tetrachloroethene	83.55	10	100	0	83.6	45-150	0			
Toluene	93.75	5.0	100	0	93.8	75-120	0			
trans-1,2-Dichloroethene	107	5.0	100	0	107	60-140	0			
trans-1,3-Dichloropropene	89.4	5.0	100	0	89.4	55-140	0			
Trichloroethene	99.25	5.0	100	0	99.2	70-125	0			
Trichlorofluoromethane	104.6	5.0	100	0	105	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120665A	Instrument ID VMS7		Method: SW8260				
Vinyl chloride	77.05	5.0	100	0	77	50-145	0
Xylenes, Total	254.6	15	300	0	84.9	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>98.1</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>98.1</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>100.6</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>101</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>98.2</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>98.2</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>94.7</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>94.7</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120665A** Instrument ID **VMS7** Method: **SW8260**

MSD Sample ID: 1305241-32A MSD				Units: µg/L			Analysis Date: 05/14/13 01:08 PM			
Client ID: WG-17360-050313-MR-032			Run ID: VMS7_130513B		SeqNo: 2317653		Prep Date:		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	94.7	5.0	100	0	94.7	65-130	96.75	2.14	30	
1,1,2,2-Tetrachloroethane	100.7	5.0	100	0	101	65-130	98.15	2.56	30	
1,1,2-Trichloroethane	92.05	5.0	100	0	92	75-125	96.65	4.88	30	
1,1-Dichloroethane	93	5.0	100	0	93	70-135	98.65	5.9	30	
1,1-Dichloroethene	107.1	5.0	100	0	107	70-130	112.2	4.7	30	
1,2,4-Trichlorobenzene	79.9	5.0	100	0	79.9	65-135	67.75	16.5	30	
1,2-Dibromo-3-chloropropane	112.5	5.0	100	0	112	50-130	109.7	2.52	30	
1,2-Dibromoethane	104.7	5.0	100	0	105	80-120	105.2	0.524	30	
1,2-Dichlorobenzene	86.95	5.0	100	0	87	70-120	86.25	0.808	30	
1,2-Dichloroethane	98.55	5.0	100	0	98.6	70-130	102	3.39	30	
1,2-Dichloropropane	93.8	10	100	0	93.8	75-125	97.75	4.12	30	
1,3-Dichlorobenzene	85.05	10	100	0	85	75-125	82.45	3.1	30	
1,4-Dichlorobenzene	83.1	10	100	0	83.1	75-125	81.2	2.31	30	
2-Butanone	125.7	25	100	33.4	92.3	30-150	156.1	21.6	30	
2-Hexanone	118.4	25	100	0	118	55-130	119.4	0.757	30	
4-Methyl-2-pentanone	156.3	25	100	11.55	145	60-135	153	2.13	30	S
Acetone	327.8	100	100	85	243	40-140	328	0.0762	30	S
Benzene	94.75	5.0	100	0	94.8	80-120	98.5	3.88	30	
Bromodichloromethane	97.7	5.0	100	0	97.7	75-120	99.45	1.78	30	
Bromoform	91.35	5.0	100	0	91.4	70-130	91.2	0.164	30	
Bromomethane	212.7	5.0	100	0	213	30-145	205.6	3.42	30	S
Carbon disulfide	108.5	12	100	0	108	35-165	109.2	0.689	30	
Carbon tetrachloride	103	5.0	100	0	103	65-140	103	0.0486	30	
Chlorobenzene	91.6	5.0	100	0	91.6	80-120	91.6	0	30	
Chloroethane	84.5	5.0	100	0	84.5	60-135	87	2.92	30	
Chloroform	97.35	5.0	100	0	97.4	65-135	100.1	2.79	30	
Chloromethane	89.6	5.0	100	0	89.6	70-125	95.6	6.48	30	
cis-1,2-Dichloroethene	90.15	5.0	100	0	90.2	70-125	116.6	25.6	30	
cis-1,3-Dichloropropene	81.65	5.0	100	0	81.6	70-130	82.85	1.46	30	
Dibromochloromethane	84.85	5.0	100	0	84.8	60-135	84.5	0.413	30	
Dichlorodifluoromethane	60.6	5.0	100	0	60.6	30-155	62.9	3.72	30	
Ethylbenzene	86.35	5.0	100	0	86.4	75-125	86.95	0.692	30	
Isopropylbenzene	77.9	5.0	100	0	77.9	75-125	73.4	5.95	30	
Methyl tert-butyl ether	111.3	25	100	0	111	65-125	111.6	0.314	30	
Methylene chloride	108	25	100	0	108	55-140	111.6	3.19	30	
Styrene	84.2	5.0	100	0	84.2	65-135	82.55	1.98	30	
Tetrachloroethene	90.4	10	100	0	90.4	45-150	83.55	7.88	30	
Toluene	92.75	5.0	100	0	92.8	75-120	93.75	1.07	30	
trans-1,2-Dichloroethene	102	5.0	100	0	102	60-140	107	4.74	30	
trans-1,3-Dichloropropene	88.95	5.0	100	0	89	55-140	89.4	0.505	30	
Trichloroethene	96.05	5.0	100	0	96	70-125	99.25	3.28	30	
Trichlorofluoromethane	100.4	5.0	100	0	100	60-145	104.6	4.05	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120665A	Instrument ID VMS7			Method: SW8260					
Vinyl chloride	73	5.0	100	0	73	50-145	77.05	5.4	30
Xylenes, Total	255.8	15	300	0	85.3	75-130	254.6	0.49	30
<i>Surr: 1,2-Dichloroethane-d4</i>	95.55	0	100	0	95.6	70-120	98.1	2.63	30
<i>Surr: 4-Bromofluorobenzene</i>	95.15	0	100	0	95.2	75-120	100.6	5.52	30
<i>Surr: Dibromofluoromethane</i>	95.5	0	100	0	95.5	85-115	98.2	2.79	30
<i>Surr: Toluene-d8</i>	94.45	0	100	0	94.4	85-120	94.7	0.264	30

The following samples were analyzed in this batch:

1305241-32A
1305241-39A

1305241-34A

1305241-38A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120692** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: VBLKW1-130514-R120692				Units: µg/L		Analysis Date: 05/14/13 12:30 PM		
Client ID:		Run ID: VMS6_130514A				SeqNo: 2318715		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								
Toluene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120692	Instrument ID VMS6	Method: SW8260						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.06</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.76</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.8</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>20.29</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>20.26</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120692** Instrument ID **VMS6** Method: **SW8260**

LCS		Sample ID: VLCSW1-130514-R120692				Units: µg/L		Analysis Date: 05/14/13 11:41 AM		
Client ID:		Run ID: VMS6_130514A				SeqNo: 2318714		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	21.24	1.0	20	0	106	65-130	0			
1,1,2,2-Tetrachloroethane	19.89	1.0	20	0	99.4	65-130	0			
1,1,2-Trichloroethane	19.65	1.0	20	0	98.2	75-125	0			
1,1-Dichloroethane	20.38	1.0	20	0	102	70-135	0			
1,1-Dichloroethene	20.79	1.0	20	0	104	70-130	0			
1,2,4-Trichlorobenzene	20.16	1.0	20	0	101	65-135	0			
1,2-Dibromo-3-chloropropane	19.25	1.0	20	0	96.2	50-130	0			
1,2-Dibromoethane	21.46	1.0	20	0	107	80-120	0			
1,2-Dichlorobenzene	19.78	1.0	20	0	98.9	70-120	0			
1,2-Dichloroethane	20.23	1.0	20	0	101	70-130	0			
1,2-Dichloropropane	19.79	2.0	20	0	99	75-125	0			
1,3-Dichlorobenzene	18.79	2.0	20	0	94	75-125	0			
1,4-Dichlorobenzene	18.92	2.0	20	0	94.6	75-125	0			
2-Butanone	20.52	5.0	20	0	103	30-150	0			
2-Hexanone	22.47	5.0	20	0	112	55-130	0			
4-Methyl-2-pentanone	27.61	5.0	20	0	138	60-135	0			S
Acetone	17.93	20	20	0	89.6	40-140	0			J
Benzene	20.82	1.0	20	0	104	80-120	0			
Bromodichloromethane	21.79	1.0	20	0	109	75-120	0			
Bromoform	20.52	1.0	20	0	103	70-130	0			
Bromomethane	26.92	1.0	20	0	135	30-145	0			
Carbon disulfide	22.2	2.5	20	0	111	35-165	0			
Carbon tetrachloride	19.32	1.0	20	0	96.6	65-140	0			
Chlorobenzene	20.18	1.0	20	0	101	80-120	0			
Chloroethane	21.26	1.0	20	0	106	60-135	0			
Chloroform	20.45	1.0	20	0	102	65-135	0			
Chloromethane	20.71	1.0	20	0	104	70-125	0			
cis-1,2-Dichloroethene	20.25	1.0	20	0	101	70-125	0			
cis-1,3-Dichloropropene	21.34	1.0	20	0	107	70-130	0			
Dibromochloromethane	19.93	1.0	20	0	99.6	60-135	0			
Dichlorodifluoromethane	20.26	1.0	20	0	101	30-155	0			
Ethylbenzene	20.16	1.0	20	0	101	75-125	0			
Isopropylbenzene	19.71	1.0	20	0	98.6	75-125	0			
Methyl tert-butyl ether	21.94	5.0	20	0	110	65-125	0			
Methylene chloride	21.58	5.0	20	0	108	55-140	0			
Styrene	20.74	1.0	20	0	104	65-135	0			
Tetrachloroethene	19.99	2.0	20	0	100	45-150	0			
Toluene	20.17	1.0	20	0	101	75-120	0			
trans-1,2-Dichloroethene	20.75	1.0	20	0	104	60-140	0			
trans-1,3-Dichloropropene	21.18	1.0	20	0	106	55-140	0			
Trichloroethene	20.66	1.0	20	0	103	70-125	0			
Trichlorofluoromethane	21.02	1.0	20	0	105	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120692	Instrument ID VMS6		Method: SW8260				
Vinyl chloride	21.42	1.0	20	0	107	50-145	0
Xylenes, Total	60.27	3.0	60	0	100	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.89</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.4</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.83</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.2</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.83</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>104</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>20.12</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120692** Instrument ID **VMS6** Method: **SW8260**

MS Sample ID: 1305518-01A MS				Units: µg/L			Analysis Date: 05/14/13 09:05 PM			
Client ID:		Run ID: VMS6_130514A		SeqNo: 2318737		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	19.26	1.0	20	0	96.3	65-130	0			
1,1,2,2-Tetrachloroethane	17.22	1.0	20	0	86.1	65-130	0			
1,1,2-Trichloroethane	16.76	1.0	20	0	83.8	75-125	0			
1,1-Dichloroethane	17.78	1.0	20	0	88.9	70-135	0			
1,1-Dichloroethene	18.76	1.0	20	0	93.8	70-130	0			
1,2,4-Trichlorobenzene	16.64	1.0	20	0	83.2	65-135	0			
1,2-Dibromo-3-chloropropane	15.47	1.0	20	0	77.4	50-130	0			
1,2-Dibromoethane	18.36	1.0	20	0	91.8	80-120	0			
1,2-Dichlorobenzene	17.43	1.0	20	0	87.2	70-120	0			
1,2-Dichloroethane	17.13	1.0	20	0	85.6	70-130	0			
1,2-Dichloropropane	17.64	2.0	20	0	88.2	75-125	0			
1,3-Dichlorobenzene	16.76	2.0	20	0	83.8	75-125	0			
1,4-Dichlorobenzene	16.77	2.0	20	0	83.8	75-125	0			
2-Butanone	19.42	5.0	20	0	97.1	30-150	0			
2-Hexanone	19.96	5.0	20	0	99.8	55-130	0			
4-Methyl-2-pentanone	25.12	5.0	20	0	126	60-135	0			
Acetone	21.28	20	20	0	106	40-140	0			
Benzene	18.36	1.0	20	0	91.8	80-120	0			
Bromodichloromethane	18.58	1.0	20	0	92.9	75-120	0			
Bromoform	17.25	1.0	20	0	86.2	70-130	0			
Bromomethane	18.46	1.0	20	0	92.3	30-145	0			
Carbon disulfide	19.72	2.5	20	0	98.6	35-165	0			
Carbon tetrachloride	18.27	1.0	20	0	91.4	65-140	0			
Chlorobenzene	17.89	1.0	20	0	89.4	80-120	0			
Chloroethane	18.17	1.0	20	0	90.8	60-135	0			
Chloroform	18.01	1.0	20	0	90	65-135	0			
Chloromethane	15.41	1.0	20	0	77	70-125	0			
cis-1,2-Dichloroethene	17.56	1.0	20	0	87.8	70-125	0			
cis-1,3-Dichloropropene	18.23	1.0	20	0	91.2	70-130	0			
Dibromochloromethane	16.92	1.0	20	0	84.6	60-135	0			
Dichlorodifluoromethane	15.77	1.0	20	0	78.8	30-155	0			
Ethylbenzene	18.6	1.0	20	0	93	75-125	0			
Isopropylbenzene	19	1.0	20	0	95	75-125	0			
Methyl tert-butyl ether	18.95	5.0	20	0	94.8	65-125	0			
Methylene chloride	18.46	5.0	20	0	92.3	55-140	0			
Styrene	18.93	1.0	20	0	94.6	65-135	0			
Tetrachloroethene	19.16	2.0	20	0	95.8	45-150	0			
Toluene	18.13	1.0	20	0	90.6	75-120	0			
trans-1,2-Dichloroethene	18.15	1.0	20	0	90.8	60-140	0			
trans-1,3-Dichloropropene	17.5	1.0	20	0	87.5	55-140	0			
Trichloroethene	19.25	1.0	20	0	96.2	70-125	0			
Trichlorofluoromethane	19.68	1.0	20	0	98.4	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120692	Instrument ID VMS6	Method: SW8260					
Vinyl chloride	17.4	1.0	20	0	87	50-145	0
Xylenes, Total	55.4	3.0	60	0	92.3	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.17</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.14</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.41</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>20.19</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120692** Instrument ID **VMS6** Method: **SW8260**

MSD Sample ID: 1305518-01A MSD				Units: µg/L			Analysis Date: 05/14/13 09:30 PM			
Client ID:		Run ID: VMS6_130514A		SeqNo: 2318738		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	18.83	1.0	20	0	94.2	65-130	19.26	2.26	30	
1,1,2,2-Tetrachloroethane	17.62	1.0	20	0	88.1	65-130	17.22	2.3	30	
1,1,2-Trichloroethane	17.04	1.0	20	0	85.2	75-125	16.76	1.66	30	
1,1-Dichloroethane	16.89	1.0	20	0	84.4	70-135	17.78	5.13	30	
1,1-Dichloroethene	18	1.0	20	0	90	70-130	18.76	4.13	30	
1,2,4-Trichlorobenzene	17.8	1.0	20	0	89	65-135	16.64	6.74	30	
1,2-Dibromo-3-chloropropane	16.56	1.0	20	0	82.8	50-130	15.47	6.81	30	
1,2-Dibromoethane	18.43	1.0	20	0	92.2	80-120	18.36	0.381	30	
1,2-Dichlorobenzene	17.74	1.0	20	0	88.7	70-120	17.43	1.76	30	
1,2-Dichloroethane	17.36	1.0	20	0	86.8	70-130	17.13	1.33	30	
1,2-Dichloropropane	17.41	2.0	20	0	87	75-125	17.64	1.31	30	
1,3-Dichlorobenzene	16.93	2.0	20	0	84.6	75-125	16.76	1.01	30	
1,4-Dichlorobenzene	16.8	2.0	20	0	84	75-125	16.77	0.179	30	
2-Butanone	19.37	5.0	20	0	96.8	30-150	19.42	0.258	30	
2-Hexanone	20.11	5.0	20	0	101	55-130	19.96	0.749	30	
4-Methyl-2-pentanone	25.85	5.0	20	0	129	60-135	25.12	2.86	30	
Acetone	21.19	20	20	0	106	40-140	21.28	0.424	30	
Benzene	17.88	1.0	20	0	89.4	80-120	18.36	2.65	30	
Bromodichloromethane	18.62	1.0	20	0	93.1	75-120	18.58	0.215	30	
Bromoform	17.21	1.0	20	0	86	70-130	17.25	0.232	30	
Bromomethane	19.75	1.0	20	0	98.8	30-145	18.46	6.75	30	
Carbon disulfide	18.28	2.5	20	0	91.4	35-165	19.72	7.58	30	
Carbon tetrachloride	18.29	1.0	20	0	91.4	65-140	18.27	0.109	30	
Chlorobenzene	17.27	1.0	20	0	86.4	80-120	17.89	3.53	30	
Chloroethane	17.03	1.0	20	0	85.2	60-135	18.17	6.48	30	
Chloroform	17.68	1.0	20	0	88.4	65-135	18.01	1.85	30	
Chloromethane	15.21	1.0	20	0	76	70-125	15.41	1.31	30	
cis-1,2-Dichloroethene	16.94	1.0	20	0	84.7	70-125	17.56	3.59	30	
cis-1,3-Dichloropropene	18.25	1.0	20	0	91.2	70-130	18.23	0.11	30	
Dibromochloromethane	16.89	1.0	20	0	84.4	60-135	16.92	0.177	30	
Dichlorodifluoromethane	14.76	1.0	20	0	73.8	30-155	15.77	6.62	30	
Ethylbenzene	17.94	1.0	20	0	89.7	75-125	18.6	3.61	30	
Isopropylbenzene	18.58	1.0	20	0	92.9	75-125	19	2.24	30	
Methyl tert-butyl ether	19.2	5.0	20	0	96	65-125	18.95	1.31	30	
Methylene chloride	17.66	5.0	20	0	88.3	55-140	18.46	4.43	30	
Styrene	18.34	1.0	20	0	91.7	65-135	18.93	3.17	30	
Tetrachloroethene	18.39	2.0	20	0	92	45-150	19.16	4.1	30	
Toluene	17.11	1.0	20	0	85.6	75-120	18.13	5.79	30	
trans-1,2-Dichloroethene	17.56	1.0	20	0	87.8	60-140	18.15	3.3	30	
trans-1,3-Dichloropropene	17.3	1.0	20	0	86.5	55-140	17.5	1.15	30	
Trichloroethene	18	1.0	20	0	90	70-125	19.25	6.71	30	
Trichlorofluoromethane	18.76	1.0	20	0	93.8	60-145	19.68	4.79	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120692	Instrument ID VMS6			Method: SW8260					
Vinyl chloride	16.33	1.0	20	0	81.6	50-145	17.4	6.34	30
Xylenes, Total	53.25	3.0	60	0	88.8	75-130	55.4	3.96	30
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.31</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>70-120</i>	<i>20.17</i>	<i>0.692</i>	<i>30</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.81</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99</i>	<i>75-120</i>	<i>20.14</i>	<i>1.65</i>	<i>30</i>
<i>Surr: Dibromofluoromethane</i>	<i>21.03</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>105</i>	<i>85-115</i>	<i>20.41</i>	<i>2.99</i>	<i>30</i>
<i>Surr: Toluene-d8</i>	<i>19.72</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.6</i>	<i>85-120</i>	<i>20.19</i>	<i>2.36</i>	<i>30</i>

The following samples were analyzed in this batch: | 1305241-64A | 1305241-65A |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120709A** Instrument ID **VMS9** Method: **SW8260**

MBLK		Sample ID: VBLKW1-130514-R120709A				Units: µg/L		Analysis Date: 05/14/13 02:45 PM		
Client ID:		Run ID: VMS9_130514A				SeqNo: 2318627		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								
Toluene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120709A	Instrument ID VMS9	Method: SW8260						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.41</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.98</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.9</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>20.76</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>104</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.99</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120709A** Instrument ID **VMS9** Method: **SW8260**

LCS Sample ID: VLCSW1-130514-R120709A				Units: µg/L			Analysis Date: 05/14/13 02:01 PM			
Client ID:		Run ID: VMS9_130514A			SeqNo: 2318625		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.87	1.0	20	0	104	65-130	0			
1,1,2,2-Tetrachloroethane	20.88	1.0	20	0	104	65-130	0			
1,1,2-Trichloroethane	20.22	1.0	20	0	101	75-125	0			
1,1-Dichloroethane	21.16	1.0	20	0	106	70-135	0			
1,1-Dichloroethene	21.78	1.0	20	0	109	70-130	0			
1,2,4-Trichlorobenzene	21.78	1.0	20	0	109	65-135	0			
1,2-Dibromo-3-chloropropane	21.61	1.0	20	0	108	50-130	0			
1,2-Dibromoethane	21.02	1.0	20	0	105	80-120	0			
1,2-Dichlorobenzene	20.21	1.0	20	0	101	70-120	0			
1,2-Dichloroethane	20.38	1.0	20	0	102	70-130	0			
1,2-Dichloropropane	21.21	2.0	20	0	106	75-125	0			
1,3-Dichlorobenzene	20.78	2.0	20	0	104	75-125	0			
1,4-Dichlorobenzene	20.26	2.0	20	0	101	75-125	0			
2-Butanone	24.5	5.0	20	0	122	30-150	0			
2-Hexanone	23.62	5.0	20	0	118	55-130	0			
4-Methyl-2-pentanone	29.1	5.0	20	0	146	60-135	0			S
Acetone	24.26	20	20	0	121	40-140	0			
Benzene	20.31	1.0	20	0	102	80-120	0			
Bromodichloromethane	21.72	1.0	20	0	109	75-120	0			
Bromoform	21.72	1.0	20	0	109	70-130	0			
Bromomethane	17.53	1.0	20	0	87.6	30-145	0			
Carbon disulfide	23.76	2.5	20	0	119	35-165	0			
Carbon tetrachloride	17.75	1.0	20	0	88.8	65-140	0			
Chlorobenzene	20.46	1.0	20	0	102	80-120	0			
Chloroethane	19.88	1.0	20	0	99.4	60-135	0			
Chloroform	21.03	1.0	20	0	105	65-135	0			
Chloromethane	17.68	1.0	20	0	88.4	70-125	0			
cis-1,2-Dichloroethene	20.07	1.0	20	0	100	70-125	0			
cis-1,3-Dichloropropene	21.38	1.0	20	0	107	70-130	0			
Dibromochloromethane	20.59	1.0	20	0	103	60-135	0			
Dichlorodifluoromethane	14.71	1.0	20	0	73.6	30-155	0			
Ethylbenzene	20.85	1.0	20	0	104	75-125	0			
Isopropylbenzene	21.19	1.0	20	0	106	75-125	0			
Methyl tert-butyl ether	22.54	5.0	20	0	113	65-125	0			
Methylene chloride	20.34	5.0	20	0	102	55-140	0			
Styrene	21.47	1.0	20	0	107	65-135	0			
Tetrachloroethene	13.91	2.0	20	0	69.6	45-150	0			
Toluene	20.49	1.0	20	0	102	75-120	0			
trans-1,2-Dichloroethene	22.01	1.0	20	0	110	60-140	0			
trans-1,3-Dichloropropene	21.03	1.0	20	0	105	55-140	0			
Trichloroethene	17.63	1.0	20	0	88.2	70-125	0			
Trichlorofluoromethane	20.86	1.0	20	0	104	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120709A	Instrument ID VMS9	Method: SW8260					
Vinyl chloride	17.25	1.0	20	0	86.2	50-145	0
Xylenes, Total	61.7	3.0	60	0	103	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	20.01	0	20	0	100	70-120	0
<i>Surr: 4-Bromofluorobenzene</i>	20.67	0	20	0	103	75-120	0
<i>Surr: Dibromofluoromethane</i>	20.82	0	20	0	104	85-115	0
<i>Surr: Toluene-d8</i>	20.13	0	20	0	101	85-120	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120709A** Instrument ID **VMS9** Method: **SW8260**

MS Sample ID: 1305241-32A MS				Units: µg/L		Analysis Date: 05/14/13 10:45 PM				
Client ID: WG-17360-050313-MR-032			Run ID: VMS9_130514A		SeqNo: 2318650		Prep Date:		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	89.1	5.0	100	0	89.1	65-130	0			
1,1,2,2-Tetrachloroethane	103.8	5.0	100	0	104	65-130	0			
1,1,2-Trichloroethane	98.4	5.0	100	0	98.4	75-125	0			
1,1-Dichloroethane	88.8	5.0	100	0	88.8	70-135	0			
1,1-Dichloroethene	82.2	5.0	100	0	82.2	70-130	0			
1,2,4-Trichlorobenzene	87.7	5.0	100	0	87.7	65-135	0			
1,2-Dibromo-3-chloropropane	104.1	5.0	100	0	104	50-130	0			
1,2-Dibromoethane	107	5.0	100	0	107	80-120	0			
1,2-Dichlorobenzene	89.25	5.0	100	0	89.2	70-120	0			
1,2-Dichloroethane	98.8	5.0	100	0	98.8	70-130	0			
1,2-Dichloropropane	96.9	10	100	0	96.9	75-125	0			
1,3-Dichlorobenzene	89.55	10	100	0	89.6	75-125	0			
1,4-Dichlorobenzene	87.4	10	100	0	87.4	75-125	0			
2-Butanone	55.45	25	100	0	55.4	30-150	0			
2-Hexanone	129.8	25	100	0	130	55-130	0			
4-Methyl-2-pentanone	163.4	25	100	15.4	148	60-135	0			S
Acetone	60.05	100	100	0	60	40-140	0			J
Benzene	89.15	5.0	100	0	89.2	80-120	0			
Bromodichloromethane	106.6	5.0	100	0	107	75-120	0			
Bromoform	98.35	5.0	100	0	98.4	70-130	0			
Bromomethane	104.2	5.0	100	0	104	30-145	0			
Carbon disulfide	88.3	12	100	0	88.3	35-165	0			
Carbon tetrachloride	93.5	5.0	100	0	93.5	65-140	0			
Chlorobenzene	90.85	5.0	100	0	90.8	80-120	0			
Chloroethane	84.3	5.0	100	0	84.3	60-135	0			
Chloroform	94.55	5.0	100	0	94.6	65-135	0			
Chloromethane	69.55	5.0	100	0	69.6	70-125	0			S
cis-1,2-Dichloroethene	89.75	5.0	100	0	89.8	70-125	0			
cis-1,3-Dichloropropene	107	5.0	100	0	107	70-130	0			
Dibromochloromethane	104.4	5.0	100	0	104	60-135	0			
Dichlorodifluoromethane	52.55	5.0	100	0	52.6	30-155	0			
Ethylbenzene	86.25	5.0	100	0	86.2	75-125	0			
Isopropylbenzene	83.6	5.0	100	0	83.6	75-125	0			
Methyl tert-butyl ether	77.1	25	100	0	77.1	65-125	0			
Methylene chloride	87.75	25	100	0	87.8	55-140	0			
Styrene	93.95	5.0	100	0	94	65-135	0			
Tetrachloroethene	56.2	10	100	0	56.2	45-150	0			
Toluene	87.25	5.0	100	0	87.2	75-120	0			
trans-1,2-Dichloroethene	87.6	5.0	100	0	87.6	60-140	0			
trans-1,3-Dichloropropene	108.2	5.0	100	0	108	55-140	0			
Trichloroethene	76.65	5.0	100	0	76.6	70-125	0			
Trichlorofluoromethane	83	5.0	100	0	83	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120709A	Instrument ID VMS9		Method: SW8260				
Vinyl chloride	67.25	5.0	100	0	67.2	50-145	0
Xylenes, Total	258.2	15	300	0	86.1	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>101</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>101</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>101.6</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>102</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>104.8</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>105</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>98.3</i>	<i>0</i>	<i>100</i>	<i>0</i>	<i>98.3</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120709A** Instrument ID **VMS9** Method: **SW8260**

MSD Sample ID: 1305241-32A MSD				Units: µg/L			Analysis Date: 05/14/13 11:07 PM			
Client ID: WG-17360-050313-MR-032			Run ID: VMS9_130514A		SeqNo: 2318651		Prep Date:		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	86.25	5.0	100	0	86.2	65-130	89.1	3.25	30	
1,1,2,2-Tetrachloroethane	103	5.0	100	0	103	65-130	103.8	0.677	30	
1,1,2-Trichloroethane	97.45	5.0	100	0	97.4	75-125	98.4	0.97	30	
1,1-Dichloroethane	87.25	5.0	100	0	87.2	70-135	88.8	1.76	30	
1,1-Dichloroethene	77.75	5.0	100	0	77.8	70-130	82.2	5.56	30	
1,2,4-Trichlorobenzene	85	5.0	100	0	85	65-135	87.7	3.13	30	
1,2-Dibromo-3-chloropropane	97.95	5.0	100	0	98	50-130	104.1	6.09	30	
1,2-Dibromoethane	99.35	5.0	100	0	99.4	80-120	107	7.46	30	
1,2-Dichlorobenzene	90.85	5.0	100	0	90.8	70-120	89.25	1.78	30	
1,2-Dichloroethane	96.85	5.0	100	0	96.8	70-130	98.8	1.99	30	
1,2-Dichloropropane	94.8	10	100	0	94.8	75-125	96.9	2.19	30	
1,3-Dichlorobenzene	89.9	10	100	0	89.9	75-125	89.55	0.39	30	
1,4-Dichlorobenzene	87.75	10	100	0	87.8	75-125	87.4	0.4	30	
2-Butanone	67.5	25	100	0	67.5	30-150	55.45	19.6	30	
2-Hexanone	128.4	25	100	0	128	55-130	129.8	1.05	30	
4-Methyl-2-pentanone	162.8	25	100	15.4	147	60-135	163.4	0.399	30	S
Acetone	69.4	100	100	0	69.4	40-140	60.05	0	30	J
Benzene	87.9	5.0	100	0	87.9	80-120	89.15	1.41	30	
Bromodichloromethane	97.35	5.0	100	0	97.4	75-120	106.6	9.02	30	
Bromoform	99.35	5.0	100	0	99.4	70-130	98.35	1.01	30	
Bromomethane	98.45	5.0	100	0	98.4	30-145	104.2	5.67	30	
Carbon disulfide	84.65	12	100	0	84.6	35-165	88.3	4.22	30	
Carbon tetrachloride	70.25	5.0	100	0	70.2	65-140	93.5	28.4	30	
Chlorobenzene	90.05	5.0	100	0	90	80-120	90.85	0.884	30	
Chloroethane	79.3	5.0	100	0	79.3	60-135	84.3	6.11	30	
Chloroform	91.25	5.0	100	0	91.2	65-135	94.55	3.55	30	
Chloromethane	67.95	5.0	100	0	68	70-125	69.55	2.33	30	S
cis-1,2-Dichloroethene	89.25	5.0	100	0	89.2	70-125	89.75	0.559	30	
cis-1,3-Dichloropropene	95.45	5.0	100	0	95.4	70-130	107	11.5	30	
Dibromochloromethane	98.7	5.0	100	0	98.7	60-135	104.4	5.57	30	
Dichlorodifluoromethane	50.7	5.0	100	0	50.7	30-155	52.55	3.58	30	
Ethylbenzene	86.2	5.0	100	0	86.2	75-125	86.25	0.058	30	
Isopropylbenzene	83.35	5.0	100	0	83.4	75-125	83.6	0.299	30	
Methyl tert-butyl ether	98.8	25	100	0	98.8	65-125	77.1	24.7	30	
Methylene chloride	85.6	25	100	0	85.6	55-140	87.75	2.48	30	
Styrene	92.95	5.0	100	0	93	65-135	93.95	1.07	30	
Tetrachloroethene	55.55	10	100	0	55.6	45-150	56.2	1.16	30	
Toluene	87.6	5.0	100	0	87.6	75-120	87.25	0.4	30	
trans-1,2-Dichloroethene	83.5	5.0	100	0	83.5	60-140	87.6	4.79	30	
trans-1,3-Dichloropropene	98.45	5.0	100	0	98.4	55-140	108.2	9.48	30	
Trichloroethene	76.3	5.0	100	0	76.3	70-125	76.65	0.458	30	
Trichlorofluoromethane	77.55	5.0	100	0	77.6	60-145	83	6.79	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120709A	Instrument ID VMS9			Method: SW8260					
Vinyl chloride	64.6	5.0	100	0	64.6	50-145	67.25	4.02	30
Xylenes, Total	255.5	15	300	0	85.2	75-130	258.2	1.07	30
Surr: 1,2-Dichloroethane-d4	98.5	0	100	0	98.5	70-120	101	2.56	30
Surr: 4-Bromofluorobenzene	101.6	0	100	0	102	75-120	101.6	0.0984	30
Surr: Dibromofluoromethane	104.4	0	100	0	104	85-115	104.8	0.478	30
Surr: Toluene-d8	100.6	0	100	0	101	85-120	98.3	2.36	30

The following samples were analyzed in this batch:	1305241-32A	1305241-38A	1305241-39A	
	1305241-43A	1305241-44A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120735** Instrument ID **VMS5** Method: **SW8260**

MBLK		Sample ID: VBLKW2-130514-R120735				Units: µg/L		Analysis Date: 05/14/13 07:00 PM		
Client ID:		Run ID: VMS5_130514A				SeqNo: 2319045		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								
Toluene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120735	Instrument ID VMS5	Method: SW8260						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.09</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.73</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.6</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>20.11</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>20.22</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120735** Instrument ID **VMS5** Method: **SW8260**

LCS		Sample ID: VLCSW1-130514-R120735				Units: µg/L		Analysis Date: 05/14/13 05:25 PM		
Client ID:		Run ID: VMS5_130514A				SeqNo: 2319044		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	18.05	1.0	20	0	90.2	65-130	0			
1,1,2,2-Tetrachloroethane	17.57	1.0	20	0	87.8	65-130	0			
1,1,2-Trichloroethane	17.76	1.0	20	0	88.8	75-125	0			
1,1-Dichloroethane	18.57	1.0	20	0	92.8	70-135	0			
1,1-Dichloroethene	19.1	1.0	20	0	95.5	70-130	0			
1,2,4-Trichlorobenzene	19.82	1.0	20	0	99.1	65-135	0			
1,2-Dibromo-3-chloropropane	18.82	1.0	20	0	94.1	50-130	0			
1,2-Dibromoethane	19.43	1.0	20	0	97.2	80-120	0			
1,2-Dichlorobenzene	18.89	1.0	20	0	94.4	70-120	0			
1,2-Dichloroethane	18.31	1.0	20	0	91.6	70-130	0			
1,2-Dichloropropane	17.89	2.0	20	0	89.4	75-125	0			
1,3-Dichlorobenzene	18.39	2.0	20	0	92	75-125	0			
1,4-Dichlorobenzene	18.25	2.0	20	0	91.2	75-125	0			
2-Butanone	21.64	5.0	20	0	108	30-150	0			
2-Hexanone	20.63	5.0	20	0	103	55-130	0			
4-Methyl-2-pentanone	27.57	5.0	20	0	138	60-135	0			S
Acetone	18.89	20	20	0	94.4	40-140	0			J
Benzene	18.34	1.0	20	0	91.7	80-120	0			
Bromodichloromethane	18.05	1.0	20	0	90.2	75-120	0			
Bromoform	17.25	1.0	20	0	86.2	70-130	0			
Bromomethane	27.37	1.0	20	0	137	30-145	0			
Carbon disulfide	21.1	2.5	20	0	106	35-165	0			
Carbon tetrachloride	18.4	1.0	20	0	92	65-140	0			
Chlorobenzene	18.48	1.0	20	0	92.4	80-120	0			
Chloroethane	19.34	1.0	20	0	96.7	60-135	0			
Chloroform	19.18	1.0	20	0	95.9	65-135	0			
Chloromethane	18.13	1.0	20	0	90.6	70-125	0			
cis-1,2-Dichloroethene	19.32	1.0	20	0	96.6	70-125	0			
cis-1,3-Dichloropropene	18.25	1.0	20	0	91.2	70-130	0			
Dibromochloromethane	17.64	1.0	20	0	88.2	60-135	0			
Dichlorodifluoromethane	15.87	1.0	20	0	79.4	30-155	0			
Ethylbenzene	18.55	1.0	20	0	92.8	75-125	0			
Isopropylbenzene	18.5	1.0	20	0	92.5	75-125	0			
Methyl tert-butyl ether	20.81	5.0	20	0	104	65-125	0			
Methylene chloride	21.26	5.0	20	0	106	55-140	0			
Styrene	18.88	1.0	20	0	94.4	65-135	0			
Tetrachloroethene	18.91	2.0	20	0	94.6	45-150	0			
Toluene	18.54	1.0	20	0	92.7	75-120	0			
trans-1,2-Dichloroethene	19.07	1.0	20	0	95.4	60-140	0			
trans-1,3-Dichloropropene	19.26	1.0	20	0	96.3	55-140	0			
Trichloroethene	18.47	1.0	20	0	92.4	70-125	0			
Trichlorofluoromethane	20.47	1.0	20	0	102	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120735	Instrument ID VMS5		Method: SW8260				
Vinyl chloride	18.02	1.0	20	0	90.1	50-145	0
Xylenes, Total	55.92	3.0	60	0	93.2	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.82</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.1</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.88</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.4</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>20.12</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>20.31</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120735** Instrument ID **VMS5** Method: **SW8260**

MS Sample ID: 1305241-47A MS				Units: µg/L		Analysis Date: 05/15/13 03:36 AM				
Client ID: WG-17360-050613-EB-044			Run ID: VMS5_130514A		SeqNo: 2319063		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	18.78	1.0	20	0	93.9	65-130	0			
1,1,2,2-Tetrachloroethane	16.81	1.0	20	0	84	65-130	0			
1,1,2-Trichloroethane	17.19	1.0	20	0	86	75-125	0			
1,1-Dichloroethane	19.46	1.0	20	0	97.3	70-135	0			
1,1-Dichloroethene	20.66	1.0	20	0	103	70-130	0			
1,2,4-Trichlorobenzene	16.98	1.0	20	0	84.9	65-135	0			
1,2-Dibromo-3-chloropropane	14.83	1.0	20	0	74.2	50-130	0			
1,2-Dibromoethane	17.9	1.0	20	0	89.5	80-120	0			
1,2-Dichlorobenzene	18.18	1.0	20	0	90.9	70-120	0			
1,2-Dichloroethane	18.55	1.0	20	0	92.8	70-130	0			
1,2-Dichloropropane	17.1	2.0	20	0	85.5	75-125	0			
1,3-Dichlorobenzene	17.8	2.0	20	0	89	75-125	0			
1,4-Dichlorobenzene	17.67	2.0	20	0	88.4	75-125	0			
2-Butanone	18.77	5.0	20	0	93.8	30-150	0			
2-Hexanone	18.63	5.0	20	0	93.2	55-130	0			
4-Methyl-2-pentanone	25.13	5.0	20	0	126	60-135	0			
Acetone	18.33	20	20	4.56	68.8	40-140	0			J
Benzene	18.57	1.0	20	0	92.8	80-120	0			
Bromodichloromethane	17.27	1.0	20	0	86.4	75-120	0			
Bromoform	15.15	1.0	20	0	75.8	70-130	0			
Bromomethane	40.2	1.0	20	0	201	30-145	0			S
Carbon disulfide	22.02	2.5	20	0	110	35-165	0			
Carbon tetrachloride	18.05	1.0	20	0	90.2	65-140	0			
Chlorobenzene	18.21	1.0	20	0	91	80-120	0			
Chloroethane	22.44	1.0	20	0	112	60-135	0			
Chloroform	19.65	1.0	20	0	98.2	65-135	0			
Chloromethane	18.12	1.0	20	0	90.6	70-125	0			
cis-1,2-Dichloroethene	19.3	1.0	20	0	96.5	70-125	0			
cis-1,3-Dichloropropene	17.26	1.0	20	0	86.3	70-130	0			
Dibromochloromethane	15.91	1.0	20	0	79.6	60-135	0			
Dichlorodifluoromethane	17.18	1.0	20	0	85.9	30-155	0			
Ethylbenzene	18.95	1.0	20	0	94.8	75-125	0			
Isopropylbenzene	19.04	1.0	20	0	95.2	75-125	0			
Methyl tert-butyl ether	20.27	5.0	20	0	101	65-125	0			
Methylene chloride	21.14	5.0	20	0	106	55-140	0			
Styrene	18.51	1.0	20	0	92.6	65-135	0			
Tetrachloroethene	19.37	2.0	20	0	96.8	45-150	0			
Toluene	18.61	1.0	20	0	93	75-120	0			
trans-1,2-Dichloroethene	20.02	1.0	20	0	100	60-140	0			
trans-1,3-Dichloropropene	18.11	1.0	20	0	90.6	55-140	0			
Trichloroethene	18.13	1.0	20	0	90.6	70-125	0			
Trichlorofluoromethane	22.6	1.0	20	0	113	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120735		Instrument ID VMS5		Method: SW8260			
Vinyl chloride	19.18	1.0	20	0	95.9	50-145	0
Xylenes, Total	57.02	3.0	60	0	95	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	20.77	0	20	0	104	70-120	0
<i>Surr: 4-Bromofluorobenzene</i>	20.34	0	20	0	102	75-120	0
<i>Surr: Dibromofluoromethane</i>	20	0	20	0	100	85-115	0
<i>Surr: Toluene-d8</i>	20.5	0	20	0	102	85-120	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120735** Instrument ID **VMS5** Method: **SW8260**

MSD Sample ID: 1305241-47A MSD				Units: µg/L			Analysis Date: 05/15/13 03:59 AM			
Client ID: WG-17360-050613-EB-044			Run ID: VMS5_130514A		SeqNo: 2319064		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	18.62	1.0	20	0	93.1	65-130	18.78	0.856	30	
1,1,2,2-Tetrachloroethane	16.71	1.0	20	0	83.6	65-130	16.81	0.597	30	
1,1,2-Trichloroethane	17.27	1.0	20	0	86.4	75-125	17.19	0.464	30	
1,1-Dichloroethane	18.92	1.0	20	0	94.6	70-135	19.46	2.81	30	
1,1-Dichloroethene	20.36	1.0	20	0	102	70-130	20.66	1.46	30	
1,2,4-Trichlorobenzene	18.16	1.0	20	0	90.8	65-135	16.98	6.72	30	
1,2-Dibromo-3-chloropropane	15.12	1.0	20	0	75.6	50-130	14.83	1.94	30	
1,2-Dibromoethane	17.84	1.0	20	0	89.2	80-120	17.9	0.336	30	
1,2-Dichlorobenzene	18.61	1.0	20	0	93	70-120	18.18	2.34	30	
1,2-Dichloroethane	17.88	1.0	20	0	89.4	70-130	18.55	3.68	30	
1,2-Dichloropropane	16.97	2.0	20	0	84.8	75-125	17.1	0.763	30	
1,3-Dichlorobenzene	18.26	2.0	20	0	91.3	75-125	17.8	2.55	30	
1,4-Dichlorobenzene	18	2.0	20	0	90	75-125	17.67	1.85	30	
2-Butanone	19.23	5.0	20	0	96.2	30-150	18.77	2.42	30	
2-Hexanone	19.3	5.0	20	0	96.5	55-130	18.63	3.53	30	
4-Methyl-2-pentanone	25.44	5.0	20	0	127	60-135	25.13	1.23	30	
Acetone	20.69	20	20	4.56	80.6	40-140	18.33	12.1	30	
Benzene	18.25	1.0	20	0	91.2	80-120	18.57	1.74	30	
Bromodichloromethane	16.71	1.0	20	0	83.6	75-120	17.27	3.3	30	
Bromoform	14.88	1.0	20	0	74.4	70-130	15.15	1.8	30	
Bromomethane	35.56	1.0	20	0	178	30-145	40.2	12.2	30	S
Carbon disulfide	20.97	2.5	20	0	105	35-165	22.02	4.88	30	
Carbon tetrachloride	18.25	1.0	20	0	91.2	65-140	18.05	1.1	30	
Chlorobenzene	17.91	1.0	20	0	89.6	80-120	18.21	1.66	30	
Chloroethane	21.54	1.0	20	0	108	60-135	22.44	4.09	30	
Chloroform	19.63	1.0	20	0	98.2	65-135	19.65	0.102	30	
Chloromethane	18.14	1.0	20	0	90.7	70-125	18.12	0.11	30	
cis-1,2-Dichloroethene	19.2	1.0	20	0	96	70-125	19.3	0.519	30	
cis-1,3-Dichloropropene	17.05	1.0	20	0	85.2	70-130	17.26	1.22	30	
Dibromochloromethane	15.89	1.0	20	0	79.4	60-135	15.91	0.126	30	
Dichlorodifluoromethane	17.24	1.0	20	0	86.2	30-155	17.18	0.349	30	
Ethylbenzene	18.99	1.0	20	0	95	75-125	18.95	0.211	30	
Isopropylbenzene	19.45	1.0	20	0	97.2	75-125	19.04	2.13	30	
Methyl tert-butyl ether	20.56	5.0	20	0	103	65-125	20.27	1.42	30	
Methylene chloride	21.26	5.0	20	0	106	55-140	21.14	0.566	30	
Styrene	18.31	1.0	20	0	91.6	65-135	18.51	1.09	30	
Tetrachloroethene	18.92	2.0	20	0	94.6	45-150	19.37	2.35	30	
Toluene	18.53	1.0	20	0	92.6	75-120	18.61	0.431	30	
trans-1,2-Dichloroethene	19.79	1.0	20	0	99	60-140	20.02	1.16	30	
trans-1,3-Dichloropropene	18.07	1.0	20	0	90.4	55-140	18.11	0.221	30	
Trichloroethene	17.8	1.0	20	0	89	70-125	18.13	1.84	30	
Trichlorofluoromethane	22.54	1.0	20	0	113	60-145	22.6	0.266	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120735	Instrument ID VMS5			Method: SW8260					
Vinyl chloride	18.31	1.0	20	0	91.6	50-145	19.18	4.64	30
Xylenes, Total	56.53	3.0	60	0	94.2	75-130	57.02	0.863	30
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.4</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>70-120</i>	<i>20.77</i>	<i>1.8</i>	<i>30</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.88</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.4</i>	<i>75-120</i>	<i>20.34</i>	<i>2.29</i>	<i>30</i>
<i>Surr: Dibromofluoromethane</i>	<i>19.96</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.8</i>	<i>85-115</i>	<i>20</i>	<i>0.2</i>	<i>30</i>
<i>Surr: Toluene-d8</i>	<i>20.27</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-120</i>	<i>20.5</i>	<i>1.13</i>	<i>30</i>

The following samples were analyzed in this batch:

1305241-45A	1305241-46A	1305241-47A
1305241-48A	1305241-49A	1305241-50A
1305241-51A	1305241-52A	1305241-53A
1305241-54A	1305241-55A	1305241-56A
1305241-57A	1305241-58A	1305241-59A
1305241-60A	1305241-61A	1305241-62A
1305241-63A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120753** Instrument ID **VMS8** Method: **SW8260**

MBLK	Sample ID: VBLKW1-130515-R120753					Units: µg/L		Analysis Date: 05/15/13 11:45 AM		
Client ID:	Run ID: VMS8_130515A				SeqNo: 2321066		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Tetrachloroethene	U	2.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	19.62	0	20	0	98.1	70-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	19.69	0	20	0	98.4	75-120	0			
<i>Surr: Dibromofluoromethane</i>	19.39	0	20	0	97	85-115	0			
<i>Surr: Toluene-d8</i>	19.57	0	20	0	97.8	85-120	0			

LCS	Sample ID: VLCSW1-130515-R120753					Units: µg/L		Analysis Date: 05/15/13 10:10 AM		
Client ID:	Run ID: VMS8_130515A				SeqNo: 2321065		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Tetrachloroethene	21.61	2.0	20	0	108	45-150	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	19.8	0	20	0	99	70-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	19.21	0	20	0	96	75-120	0			
<i>Surr: Dibromofluoromethane</i>	20.03	0	20	0	100	85-115	0			
<i>Surr: Toluene-d8</i>	19.87	0	20	0	99.4	85-120	0			

The following samples were analyzed in this batch:

1305241-58A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305241
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120395A** Instrument ID **WETCHEM** Method: **SW7196A**

MBLK		Sample ID: MB-R120395-R120395A				Units: mg/L		Analysis Date: 05/08/13 05:00 PM		
Client ID:		Run ID: WETCHEM_130508L		SeqNo: 2310429		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent U 0.0050

LCS		Sample ID: LCS-R120395-R120395A				Units: mg/L		Analysis Date: 05/08/13 05:00 PM		
Client ID:		Run ID: WETCHEM_130508L		SeqNo: 2310430		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.1979 0.0050 0.2 0 99 80-120 0

MS		Sample ID: 1305241-64D MS				Units: mg/L		Analysis Date: 05/08/13 05:00 PM		
Client ID: WG-17360-050713-EB-061		Run ID: WETCHEM_130508L		SeqNo: 2310432		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.1979 0.0050 0.2 0.001 98.4 75-125 0

MSD		Sample ID: 1305241-64D MSD				Units: mg/L		Analysis Date: 05/08/13 05:00 PM		
Client ID: WG-17360-050713-EB-061		Run ID: WETCHEM_130508L		SeqNo: 2310433		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Chromium, Hexavalent 0.1967 0.0050 0.2 0.001 97.8 75-125 0.1979 0.608 30

The following samples were analyzed in this batch:

1305241-64D

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



**CONESTOGA-ROVERS
& ASSOCIATES**

CHAIN OF CUSTODY RECORD

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1305241
COC NO.: **PL-10093**
PAGE 1 OF 3

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 017360 - T01Y13				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 17360-701-020																																									
Project Name: FRMR GRMP - RACER				Lab Contact: Tom Beamish				Lab Quote No:				Cooler No:																																									
Project Location: Grand Rapids				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)				Carrier:																																									
Chemistry Contact: Paul Wiseman				<table border="1" style="width:100%; border-collapse: collapse; font-size: 8px;"> <tr> <th>SAMPLE TYPE</th> <th>Unpreserved</th> <th>Hydrochloric Acid (HCl)</th> <th>Nitric Acid (HNO₃)</th> <th>Sulfuric Acid (H₂SO₄)</th> <th>Sodium Hydroxide (NaOH)</th> <th>Methanol/Water (Soil VOC)</th> <th>EnCores 3x5-g, 1x25-g</th> <th>Other:</th> <th>Total Containers/Sample</th> <th>VOCs</th> <th>TAL Metals</th> <th>SVOCs</th> <th>MS/MSD Request</th> </tr> <tr> <td>Matrix Code (see back of COC)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Grab (G) or Comp (C)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>				SAMPLE TYPE	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	VOCs	TAL Metals	SVOCs	MS/MSD Request	Matrix Code (see back of COC)														Grab (G) or Comp (C)														Airbill No:			
SAMPLE TYPE	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO ₃)					Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	VOCs	TAL Metals	SVOCs	MS/MSD Request																																				
Matrix Code (see back of COC)																																																					
Grab (G) or Comp (C)																																																					
Sampler(s): MDR												Date Shipped:																																									
												COMMENTS/ SPECIAL INSTRUCTIONS:																																									

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 ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	VOCs	TAL Metals	SVOCs	MS/MSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:
1	WG-17360-043013-MR-001	4/30/13	1245	WG	G		3							3	X				
2	WG-17360-043013-MR-002		1408																
3	WG-17360-043013-MR-003		1529																
4	WG-17360-043013-MR-004		1539																
5	WG-17360-043013-MR-005		1643																
6	WG-17360-050113-MR-006	5/1/13	830																
7	" -007		1010																
8	" -008		1159					1						4	X				
9	WS-17360-050113-MR-009		1215	WS										3					
10	WG-1736-050113-MR-010		1252	WG										9					MS/MSD
11	" -011		1355											3					
12	WS-17360-050113-MR-012		1420	WS															
13	" -013		1435																
14	WG-17360-050113-MR-014		1539	WG															
15	" -015		1549																

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 Notes/ Special Requirements: 5.0'c			
All Samples in Cooler must be on COC							

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
1. <i>[Signature]</i>	CRA	5/6/13	1050	1. <i>[Signature]</i>	ALS	5/6/13	1050
2.				2.			
3.				3.			

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CRA Form: COC-10A (20110804)

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**CONESTOGA-ROVERS
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CHAIN OF CUSTODY RECORD

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170

Phone: (734) 453-5123

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COC NO.: **PL-10083**

PAGE 2 OF 3

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 017360 - T01Y13				Laboratory Name: ALS				Lab Location: Holland, MT				SSOW ID: 17360-T01-020																			
Project Name: FRMR GRMP- RACER				Lab Contact: Tom Beamish				Lab Quote No:				Cooler No:																			
Project Location: Grand Rapids				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)																			
Chemistry Contact: Paul Wiseman				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other:				Total Containers/Sample VOCs																			
Sampler(s): MDR																															
Carrier:				Airbill No:				Date Shipped:				COMMENTS/ SPECIAL INSTRUCTIONS:																			
MS/MSD Request																															
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)			DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	VOCs	MS/MSD Request													
16	WG-17360-050113-MR-016			5/1/13	1609	WG	G	2								2	X														
17	" -017			↓	1700											3															
18	" -018			↓	1842																										
19	WG-17360-050213-MR-019			5/2/13	859																										
20	" -020			↓	1004											0		MS/MSD													
21	" -021			↓	1039											3															
22	" -022			↓	1235																										
23	" -023			↓	1318																										
24	" -024			↓	1354																										
25	" -025			↓	1404																										
26	" -026			↓	1531																										
27	" -027			↓	1622																										
28	" -028			↓	1702																										
29	WG-17360-050313-MR-029			5/3/13	1040																										
30	" -030			↓	1140																										
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: 50								Notes/ Special Requirements: 5.0°C															
All Samples in Cooler must be on COC																															
RELINQUISHED BY				COMPANY				DATE				TIME				RECEIVED BY				COMPANY				DATE				TIME			
1. <i>[Signature]</i>				CRA				5/6/13				1050				1. <i>[Signature]</i>				ALS				5/6/13				1050			
2.																2.															
3.																3.															

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1305471
COC NO.: **PL-10082**
PAGE **3** OF **3**
(See Reverse Side for Instructions)

Project No/Phase/Task Code: 017360-T01X13				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 17360-T01-020									
Project Name: FRMR GRMP - RACER				Lab Contact: Tom Beamish				Lab Quote No:				Cooler No:									
Project Location: Grand Rapids				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)									
Chemistry Contact: Paul Wiseman				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other:				Total Containers/Sample VOCs TAL Metals SVOCs									
Sampler(s): MOR																					
Carrier:				Airbill No:				Date Shipped:				COMMENTS/ SPECIAL INSTRUCTIONS:									
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)			DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	VOCs	TAL Metals	SVOCs	MS/MSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:
1	~~W6-17360-050313-MR-029~~			~~5/3/13~~	~~1040~~	~~W6~~	~~6~~	~~3~~								~~3~~	~~X~~				
2	~~11 -030~~			~~1140~~				~~3~~								~~3~~	~~X~~				~~MS/MSD~~
31	11 -031			1021			2	3	1							6	X	X	X		
32	11 -032			1142			6	9	3							18	X	X	X		MS/MSD
33	11 -033			1155				3								3	X				
34	11 -034			1220			2	3								5	X		X		
35	11 -035			1652				3	1							4	X	X			
36	11 -036			1647				3	1							4	X	X			
37	11 -037			1640			2	3								5	X		X		
38	11 -038			1650			2	3								5	X		X		
39	11 -039			1720			2	3								5	X		X		
40	TB-17360 11 050313-MR-040			-		TB		1								1	X				
41	11 -041			-				1								1	X				
42	11 -042			-				1								1	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: 58				Notes/ Special Requirements: 5.0 C									
All Samples in Cooler must be on COC																					
RELINQUISHED BY Math				COMPANY CRA		DATE 5/6/13		TIME 1050		RECEIVED BY [Signature]				COMPANY ALS		DATE 5/6/13		TIME 1050			
1.										1.											
2.										2.											
3.										3.											

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**CONESTOGA-ROVERS
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CHAIN OF CUSTODY RECORD

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1305241

COC NO.: **PL-10096**

PAGE 1 OF 2

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 17360-T01Y13				Laboratory Name: ALS				Lab Location: Holland MI				SSOW ID: 17360-T01Y13																																																															
Project Name: Former GRAP				Lab Contact: T. Beamish				Lab Quote No:				Cooler No: -																																																															
Project Location: Wyandotte MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)																																																															
Chemistry Contact: Paul Wiseman				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other:				Total Containers/Sample VOCs Metals SVOCs CPA																																																															
Sampler(s): E. Baderberg, M. Ramsey, B. Williams																																																																											
<table border="1"> <thead> <tr> <th>Item</th> <th>SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)</th> <th>DATE (mm/dd/yy)</th> <th>TIME (hh:mm)</th> </tr> </thead> <tbody> <tr><td>1</td><td>WG-17360-050613-EB-040</td><td>5-6-13</td><td>1155</td></tr> <tr><td>2</td><td>↓ -041</td><td>↓</td><td>1225</td></tr> <tr><td>3</td><td>↓ -042</td><td>↓</td><td>1250</td></tr> <tr><td>4</td><td>↓ -043</td><td>↓</td><td>1315</td></tr> <tr><td>5</td><td>↓ -044</td><td>↓</td><td>1428</td></tr> <tr><td>6</td><td>↓ -045</td><td>↓</td><td>1550</td></tr> <tr><td>7</td><td>WG-17360-050713-EB-046</td><td>5-7-13</td><td>1045</td></tr> <tr><td>8</td><td>↓ -047</td><td>↓</td><td>1205</td></tr> <tr><td>9</td><td>GW-17360-050713-BW-048</td><td>↓</td><td>1034</td></tr> <tr><td>10</td><td>↓ -049</td><td>↓</td><td>1125</td></tr> <tr><td>11</td><td>↓ -050</td><td>↓</td><td>1220</td></tr> <tr><td>12</td><td>WG-17360-050713-MR-051</td><td>↓</td><td>1050</td></tr> <tr><td>13</td><td>↓ -052</td><td>↓</td><td>1125</td></tr> <tr><td>14</td><td>BW-17360-050713-BW-053</td><td>↓</td><td>1426</td></tr> <tr><td>15</td><td>↓ -054</td><td>↓</td><td>1355</td></tr> </tbody> </table>				Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	1	WG-17360-050613-EB-040	5-6-13	1155	2	↓ -041	↓	1225	3	↓ -042	↓	1250	4	↓ -043	↓	1315	5	↓ -044	↓	1428	6	↓ -045	↓	1550	7	WG-17360-050713-EB-046	5-7-13	1045	8	↓ -047	↓	1205	9	GW-17360-050713-BW-048	↓	1034	10	↓ -049	↓	1125	11	↓ -050	↓	1220	12	WG-17360-050713-MR-051	↓	1050	13	↓ -052	↓	1125	14	BW-17360-050713-BW-053	↓	1426	15	↓ -054	↓	1355	MS/MSD Request				Carrier: drop off Airbill No: - Date Shipped: - COMMENTS/ SPECIAL INSTRUCTIONS:			
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)																																																																								
1	WG-17360-050613-EB-040	5-6-13	1155																																																																								
2	↓ -041	↓	1225																																																																								
3	↓ -042	↓	1250																																																																								
4	↓ -043	↓	1315																																																																								
5	↓ -044	↓	1428																																																																								
6	↓ -045	↓	1550																																																																								
7	WG-17360-050713-EB-046	5-7-13	1045																																																																								
8	↓ -047	↓	1205																																																																								
9	GW-17360-050713-BW-048	↓	1034																																																																								
10	↓ -049	↓	1125																																																																								
11	↓ -050	↓	1220																																																																								
12	WG-17360-050713-MR-051	↓	1050																																																																								
13	↓ -052	↓	1125																																																																								
14	BW-17360-050713-BW-053	↓	1426																																																																								
15	↓ -054	↓	1355																																																																								
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:				Notes/ Special Requirements: 3.4°C																																																																			
All Samples in Cooler must be on COC																																																																											
RELINQUISHED BY		COMPANY		DATE		TIME		RECEIVED BY		COMPANY		DATE		TIME																																																													
1.		CRA		5-8-13		1605		1. Joseph R. J.		ALS		5/8/13		1605																																																													
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)



**CONESTOGA-ROVERS
& ASSOCIATES**

CHAIN OF CUSTODY RECORD

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170

Phone: (734) 453-5123

Fax: (734) 453-5201

COC NO.: **PL-10095**

PAGE 2 OF 2

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 17360-T01-020				Laboratory Name: ALS				Lab Location: Holbrook MI				SSOW ID: 17360-T01-020			
Project Name: Former GR Retail Plant				Lab Contact: T. Branch				Lab Quote No:				Cooler No:			
Project Location: Wyandeg MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)			
Chemistry Contact: Paul Wiseman				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other:				Total Containers/Sample VOCs Metals SVOCs Gr			
Sampler(s): Paul B. Branch, M. Kinsley, R. Williams															
SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)				DATE (mm/dd/yy)				TIME (hh:mm)				MS/MSD Request			
Item															
1 GW-17360-050713-BW-055				5-7-03				1315				COMMENTS/ SPECIAL INSTRUCTIONS: Try Blk			
2 WG-17360-050713-MR-056				1355				3							
3 ↓ ↓ ↓ -057				1425				4							
4 ↓ ↓ ↓ -060				1510				3							
5 WG-17360-050713-EB-058				1430				3							
6 ↓ ↓ ↓ -059				1530				4							
7 ↓ ↓ ↓ -061				1635				7							
8 TB-17360-050813-EB-062				-				1							
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:				Notes/ Special Requirements:			
								All Samples in Cooler must be on COC				Cr IV → Short Hold 3.4°C			
RELINQUISHED BY				COMPANY				DATE				TIME			
1.				CRA				5-8-13				1605			
2.															
3.															
RECEIVED BY				COMPANY				DATE				TIME			
1.				ALS				5/8/13				1605			
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)

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Sample Receipt Checklist

Client Name: **CRA - PLYMOUTH**

Date/Time Received: **06-May-13 10:50**

Work Order: **1305241**

Received by: **KRW**

Checklist completed by Diane Shaw 06-May-13
eSignature Date

Reviewed by: Tom Bramish 06-May-13
eSignature Date

Matrices: Groundwater

Carrier name: Client

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>5.0 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>5/6/2013 1:27:32 PM</u>		
Water - VOA vials have zero headspace?	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☒	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☒	N/A ☐
pH adjusted by:			
Login Notes:			

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:



21-May-2013

Paul Wiseman
Conestoga-Rovers & Associates
14496 Sheldon Road
Suite 200
Plymouth, MI 48170

Re: **Former GRMP (017360-T01Y13)**

Work Order: **1305508**

Dear Paul,

ALS Environmental received 3 samples on 13-May-2013 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 29.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Beamish".

Electronically approved by: Tom Beamish

Tom Beamish
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

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Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Work Order: 1305508

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1305508-01	WG-17360-051313-EB-004	Groundwater		05/13/13 14:40	05/13/13 16:45	☐
1305508-02	WG-17360-051313-EB-005	Groundwater		05/13/13 15:35	05/13/13 16:45	☐
1305508-03	TB-17360-051313-EB	Water		05/13/13	05/13/13 16:45	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
WorkOrder: 1305508

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Work Order: 1305508

Case Narrative**QC Comments:**

Batch R120886A, Method VOC_8260_W, Sample VLCSW1-130516: The LCS recoveries were above the upper control limit. All sample results in the batch were non-detect. No qualification is necessary for 4-Methyl-2-pentanone and Acetone.

Batch R120896, Method VOC_8260_W, Sample VLCSW2-130516: The LCS recoveries were above the upper control limit. All sample results in the batch were non-detect. No qualification is necessary for 1,2-Dibromoethane and 4-Methyl-2-pentanone.

ALS Group USA, Corp

Date: 21-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-051313-EB-004
Collection Date: 05/13/13 02:40 PM

Work Order: 1305508
Lab ID: 1305508-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: AK
BatchID: <u>R120896</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/17/13 07:19
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/17/13 07:19
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/17/13 07:19
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/17/13 07:19
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/17/13 07:19
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/17/13 07:19
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/17/13 07:19
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/17/13 07:19
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/17/13 07:19
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/17/13 07:19
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/17/13 07:19
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/17/13 07:19
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/17/13 07:19
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/17/13 07:19
2-Butanone	U		0.22	25	µg/L	1	05/17/13 07:19
2-Hexanone	U		0.12	50	µg/L	1	05/17/13 07:19
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/17/13 07:19
Acetone	U		0.33	50	µg/L	1	05/17/13 07:19
Benzene	U		0.18	1.0	µg/L	1	05/17/13 07:19
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/17/13 07:19
Bromoform	U		0.15	1.0	µg/L	1	05/17/13 07:19
Bromomethane	U		0.21	5.0	µg/L	1	05/17/13 07:19
Carbon disulfide	U		0.17	5.0	µg/L	1	05/17/13 07:19
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/17/13 07:19
Chlorobenzene	U		0.13	1.0	µg/L	1	05/17/13 07:19
Chloroethane	U		0.46	5.0	µg/L	1	05/17/13 07:19
Chloroform	U		0.15	1.0	µg/L	1	05/17/13 07:19
Chloromethane	U		0.16	5.0	µg/L	1	05/17/13 07:19
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/17/13 07:19
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/17/13 07:19
Cyclohexane	U		0.22	1.0	µg/L	1	05/17/13 07:19
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/17/13 07:19
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/17/13 07:19
Ethylbenzene	U		0.13	1.0	µg/L	1	05/17/13 07:19
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/17/13 07:19
Methyl acetate	U		0.19	10	µg/L	1	05/17/13 07:19
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/17/13 07:19

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 21-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-051313-EB-004
Collection Date: 05/13/13 02:40 PM

Work Order: 1305508
Lab ID: 1305508-01
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/17/13 07:19
Methylene chloride	U		0.19	5.0	µg/L	1	05/17/13 07:19
Styrene	U		0.11	1.0	µg/L	1	05/17/13 07:19
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/17/13 07:19
Toluene	U		0.12	1.0	µg/L	1	05/17/13 07:19
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/17/13 07:19
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/17/13 07:19
Trichloroethene	U		0.14	1.0	µg/L	1	05/17/13 07:19
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/17/13 07:19
Vinyl chloride	U		0.17	1.0	µg/L	1	05/17/13 07:19
Xylenes, Total	U		0.29	3.0	µg/L	1	05/17/13 07:19
Surr: 1,2-Dichloroethane-d4	97.5			70-120	%REC	1	05/17/13 07:19
Surr: 4-Bromofluorobenzene	99.4			75-120	%REC	1	05/17/13 07:19
Surr: Dibromofluoromethane	96.4			85-115	%REC	1	05/17/13 07:19
Surr: Toluene-d8	96.3			85-120	%REC	1	05/17/13 07:19

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 21-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-051313-EB-005
Collection Date: 05/13/13 03:35 PM

Work Order: 1305508
Lab ID: 1305508-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: AK
BatchID: <u>R120896</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/17/13 07:43
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/17/13 07:43
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/17/13 07:43
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/17/13 07:43
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/17/13 07:43
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/17/13 07:43
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/17/13 07:43
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/17/13 07:43
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/17/13 07:43
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/17/13 07:43
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/17/13 07:43
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/17/13 07:43
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/17/13 07:43
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/17/13 07:43
2-Butanone	U		0.22	25	µg/L	1	05/17/13 07:43
2-Hexanone	U		0.12	50	µg/L	1	05/17/13 07:43
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/17/13 07:43
Acetone	U		0.33	50	µg/L	1	05/17/13 07:43
Benzene	U		0.18	1.0	µg/L	1	05/17/13 07:43
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/17/13 07:43
Bromoform	U		0.15	1.0	µg/L	1	05/17/13 07:43
Bromomethane	U		0.21	5.0	µg/L	1	05/17/13 07:43
Carbon disulfide	U		0.17	5.0	µg/L	1	05/17/13 07:43
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/17/13 07:43
Chlorobenzene	U		0.13	1.0	µg/L	1	05/17/13 07:43
Chloroethane	U		0.46	5.0	µg/L	1	05/17/13 07:43
Chloroform	U		0.15	1.0	µg/L	1	05/17/13 07:43
Chloromethane	U		0.16	5.0	µg/L	1	05/17/13 07:43
cis-1,2-Dichloroethene	2.3		0.11	1.0	µg/L	1	05/17/13 07:43
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/17/13 07:43
Cyclohexane	U		0.22	1.0	µg/L	1	05/17/13 07:43
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/17/13 07:43
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/17/13 07:43
Ethylbenzene	U		0.13	1.0	µg/L	1	05/17/13 07:43
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/17/13 07:43
Methyl acetate	U		0.19	10	µg/L	1	05/17/13 07:43
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/17/13 07:43

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 21-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: WG-17360-051313-EB-005
Collection Date: 05/13/13 03:35 PM

Work Order: 1305508
Lab ID: 1305508-02
Matrix: GROUNDWATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/17/13 07:43
Methylene chloride	U		0.19	5.0	µg/L	1	05/17/13 07:43
Styrene	U		0.11	1.0	µg/L	1	05/17/13 07:43
Toluene	U		0.12	1.0	µg/L	1	05/17/13 07:43
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/17/13 07:43
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/17/13 07:43
Trichloroethene	U		0.14	1.0	µg/L	1	05/17/13 07:43
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/17/13 07:43
Vinyl chloride	U		0.17	1.0	µg/L	1	05/17/13 07:43
Xylenes, Total	U		0.29	3.0	µg/L	1	05/17/13 07:43
Surr: 1,2-Dichloroethane-d4	93.9			70-120	%REC	1	05/17/13 07:43
Surr: 4-Bromofluorobenzene	100			75-120	%REC	1	05/17/13 07:43
Surr: Dibromofluoromethane	95.2			85-115	%REC	1	05/17/13 07:43
Surr: Toluene-d8	94.8			85-120	%REC	1	05/17/13 07:43
BatchID: R120978							
Tetrachloroethene	260		0.76	5.0	µg/L	5	05/17/13 20:49
Surr: 1,2-Dichloroethane-d4	97.4			70-120	%REC	5	05/17/13 20:49
Surr: 4-Bromofluorobenzene	97.3			75-120	%REC	5	05/17/13 20:49
Surr: Dibromofluoromethane	100			85-115	%REC	5	05/17/13 20:49
Surr: Toluene-d8	99.0			85-120	%REC	5	05/17/13 20:49

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 21-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: TB-17360-051313-EB
Collection Date: 05/13/13

Work Order: 1305508
Lab ID: 1305508-03
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260				Analyst: AK
<u>BatchID: R120886</u>							
1,1,1-Trichloroethane	U		0.14	1.0	µg/L	1	05/16/13 17:05
1,1,2,2-Tetrachloroethane	U		0.13	1.0	µg/L	1	05/16/13 17:05
1,1,2-Trichloroethane	U		0.084	1.0	µg/L	1	05/16/13 17:05
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/16/13 17:05
1,1-Dichloroethane	U		0.11	1.0	µg/L	1	05/16/13 17:05
1,1-Dichloroethene	U		0.12	1.0	µg/L	1	05/16/13 17:05
1,2,4-Trichlorobenzene	U		0.16	5.0	µg/L	1	05/16/13 17:05
1,2-Dibromo-3-chloropropane	U		0.31	1.0	µg/L	1	05/16/13 17:05
1,2-Dibromoethane	U		0.16	1.0	µg/L	1	05/16/13 17:05
1,2-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/16/13 17:05
1,2-Dichloroethane	U		0.15	1.0	µg/L	1	05/16/13 17:05
1,2-Dichloropropane	U		0.13	1.0	µg/L	1	05/16/13 17:05
1,3-Dichlorobenzene	U		0.16	1.0	µg/L	1	05/16/13 17:05
1,4-Dichlorobenzene	U		0.15	1.0	µg/L	1	05/16/13 17:05
2-Butanone	U		0.22	25	µg/L	1	05/16/13 17:05
2-Hexanone	U		0.12	50	µg/L	1	05/16/13 17:05
4-Methyl-2-pentanone	U		0.096	50	µg/L	1	05/16/13 17:05
Acetone	3.5	J	0.33	50	µg/L	1	05/16/13 17:05
Benzene	U		0.18	1.0	µg/L	1	05/16/13 17:05
Bromodichloromethane	U		0.12	1.0	µg/L	1	05/16/13 17:05
Bromoform	U		0.15	1.0	µg/L	1	05/16/13 17:05
Bromomethane	U		0.21	5.0	µg/L	1	05/16/13 17:05
Carbon disulfide	U		0.17	5.0	µg/L	1	05/16/13 17:05
Carbon tetrachloride	U		0.12	1.0	µg/L	1	05/16/13 17:05
Chlorobenzene	U		0.13	1.0	µg/L	1	05/16/13 17:05
Chloroethane	U		0.46	5.0	µg/L	1	05/16/13 17:05
Chloroform	U		0.15	1.0	µg/L	1	05/16/13 17:05
Chloromethane	U		0.16	5.0	µg/L	1	05/16/13 17:05
cis-1,2-Dichloroethene	U		0.11	1.0	µg/L	1	05/16/13 17:05
cis-1,3-Dichloropropene	U		0.081	1.0	µg/L	1	05/16/13 17:05
Cyclohexane	U		0.22	1.0	µg/L	1	05/16/13 17:05
Dibromochloromethane	U		0.13	5.0	µg/L	1	05/16/13 17:05
Dichlorodifluoromethane	U		0.20	5.0	µg/L	1	05/16/13 17:05
Ethylbenzene	U		0.13	1.0	µg/L	1	05/16/13 17:05
Isopropylbenzene	U		0.14	5.0	µg/L	1	05/16/13 17:05
Methyl acetate	U		0.19	10	µg/L	1	05/16/13 17:05
Methyl tert-butyl ether	U		0.070	5.0	µg/L	1	05/16/13 17:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 21-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T01Y13)
Sample ID: TB-17360-051313-EB
Collection Date: 05/13/13

Work Order: 1305508
Lab ID: 1305508-03
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		0.99	1.0	µg/L	1	05/16/13 17:05
Methylene chloride	1.2	J	0.19	5.0	µg/L	1	05/16/13 17:05
Styrene	U		0.11	1.0	µg/L	1	05/16/13 17:05
Tetrachloroethene	U		0.15	1.0	µg/L	1	05/16/13 17:05
Toluene	U		0.12	1.0	µg/L	1	05/16/13 17:05
trans-1,2-Dichloroethene	U		0.12	1.0	µg/L	1	05/16/13 17:05
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/16/13 17:05
Trichloroethene	U		0.14	1.0	µg/L	1	05/16/13 17:05
Trichlorofluoromethane	U		0.18	1.0	µg/L	1	05/16/13 17:05
Vinyl chloride	U		0.17	1.0	µg/L	1	05/16/13 17:05
Xylenes, Total	U		0.29	3.0	µg/L	1	05/16/13 17:05
Surr: 1,2-Dichloroethane-d4	89.8			70-120	%REC	1	05/16/13 17:05
Surr: 4-Bromofluorobenzene	95.4			75-120	%REC	1	05/16/13 17:05
Surr: Dibromofluoromethane	91.0			85-115	%REC	1	05/16/13 17:05
Surr: Toluene-d8	89.8			85-120	%REC	1	05/16/13 17:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120886A** Instrument ID **VMS7** Method: **SW8260**

MBLK Sample ID: VBLKW1-130516-R120886A					Units: µg/L		Analysis Date: 05/16/13 04:40 PM			
Client ID:			Run ID: VMS7_130516A		SeqNo: 2322255		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120886A	Instrument ID VMS7	Method: SW8260						
Toluene	U	1.0						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.05</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.2</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.27</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.4</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>19.22</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.1</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>18.52</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>92.6</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120886A** Instrument ID **VMS7** Method: **SW8260**

LCS		Sample ID: VLCSW1-130516-R120886A				Units: µg/L		Analysis Date: 05/16/13 03:49 PM		
Client ID:		Run ID: VMS7_130516A				SeqNo: 2322254		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.79	1.0	20	0	104	65-130	0			
1,1,2,2-Tetrachloroethane	21.68	1.0	20	0	108	65-130	0			
1,1,2-Trichloroethane	20.65	1.0	20	0	103	75-125	0			
1,1-Dichloroethane	19.48	1.0	20	0	97.4	70-135	0			
1,1-Dichloroethene	19.97	1.0	20	0	99.8	70-130	0			
1,2,4-Trichlorobenzene	20.59	1.0	20	0	103	65-135	0			
1,2-Dibromo-3-chloropropane	24.88	1.0	20	0	124	50-130	0			
1,2-Dibromoethane	22.67	1.0	20	0	113	80-120	0			
1,2-Dichlorobenzene	20.51	1.0	20	0	103	70-120	0			
1,2-Dichloroethane	21.18	1.0	20	0	106	70-130	0			
1,2-Dichloropropane	20.46	2.0	20	0	102	75-125	0			
1,3-Dichlorobenzene	21.15	2.0	20	0	106	75-125	0			
1,4-Dichlorobenzene	20.07	2.0	20	0	100	75-125	0			
2-Butanone	29.94	5.0	20	0	150	30-150	0			
2-Hexanone	25.27	5.0	20	0	126	55-130	0			
4-Methyl-2-pentanone	30.57	5.0	20	0	153	60-135	0			S
Acetone	31.27	20	20	0	156	40-140	0			S
Benzene	20.34	1.0	20	0	102	80-120	0			
Bromodichloromethane	22.62	1.0	20	0	113	75-120	0			
Bromoform	22.21	1.0	20	0	111	70-130	0			
Bromomethane	18.79	1.0	20	0	94	30-145	0			
Carbon disulfide	20.81	2.5	20	0	104	35-165	0			
Carbon tetrachloride	23.59	1.0	20	0	118	65-140	0			
Chlorobenzene	20.59	1.0	20	0	103	80-120	0			
Chloroethane	15.14	1.0	20	0	75.7	60-135	0			
Chloroform	21.49	1.0	20	0	107	65-135	0			
Chloromethane	17.53	1.0	20	0	87.6	70-125	0			
cis-1,2-Dichloroethene	20.53	1.0	20	0	103	70-125	0			
cis-1,3-Dichloropropene	21.35	1.0	20	0	107	70-130	0			
Dibromochloromethane	20.57	1.0	20	0	103	60-135	0			
Dichlorodifluoromethane	12.76	1.0	20	0	63.8	30-155	0			
Ethylbenzene	20.14	1.0	20	0	101	75-125	0			
Isopropylbenzene	20.17	1.0	20	0	101	75-125	0			
Methyl tert-butyl ether	24.29	5.0	20	0	121	65-125	0			
Methylene chloride	22.36	5.0	20	0	112	55-140	0			
Styrene	20.72	1.0	20	0	104	65-135	0			
Tetrachloroethene	20.49	2.0	20	0	102	45-150	0			
Toluene	19.95	1.0	20	0	99.8	75-120	0			
trans-1,2-Dichloroethene	21.1	1.0	20	0	106	60-140	0			
trans-1,3-Dichloropropene	21.66	1.0	20	0	108	55-140	0			
Trichloroethene	21.39	1.0	20	0	107	70-125	0			
Trichlorofluoromethane	17.1	1.0	20	0	85.5	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates

Work Order: 1305508

Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120886A	Instrument ID VMS7	Method: SW8260					
Vinyl chloride	14.83	1.0	20	0	74.2	50-145	0
Xylenes, Total	59.68	3.0	60	0	99.5	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>18.03</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>90.2</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.26</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>18.38</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>91.9</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>17.83</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>89.2</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120886A** Instrument ID **VMS7** Method: **SW8260**

MS Sample ID: 1305495-03A MS				Units: µg/L			Analysis Date: 05/17/13 01:33 AM			
Client ID:		Run ID: VMS7_130516A			SeqNo: 2322264		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	21.72	1.0	20	0	109	65-130	0			
1,1,2,2-Tetrachloroethane	19.93	1.0	20	0	99.6	65-130	0			
1,1,2-Trichloroethane	18.96	1.0	20	0	94.8	75-125	0			
1,1-Dichloroethane	19.56	1.0	20	0	97.8	70-135	0			
1,1-Dichloroethene	21.27	1.0	20	0	106	70-130	0			
1,2,4-Trichlorobenzene	17.29	1.0	20	0	86.4	65-135	0			
1,2-Dibromo-3-chloropropane	21.47	1.0	20	0	107	50-130	0			
1,2-Dibromoethane	21.11	1.0	20	0	106	80-120	0			
1,2-Dichlorobenzene	19.21	1.0	20	0	96	70-120	0			
1,2-Dichloroethane	20.5	1.0	20	0	102	70-130	0			
1,2-Dichloropropane	19.83	2.0	20	0	99.2	75-125	0			
1,3-Dichlorobenzene	18.86	2.0	20	0	94.3	75-125	0			
1,4-Dichlorobenzene	18.37	2.0	20	0	91.8	75-125	0			
2-Butanone	25.72	5.0	20	0	129	30-150	0			
2-Hexanone	23.11	5.0	20	0	116	55-130	0			
4-Methyl-2-pentanone	28.99	5.0	20	0	145	60-135	0			S
Acetone	32.12	20	20	0	161	40-140	0			S
Benzene	20.59	1.0	20	0	103	80-120	0			
Bromodichloromethane	21.47	1.0	20	0	107	75-120	0			
Bromoform	19.68	1.0	20	0	98.4	70-130	0			
Bromomethane	19.19	1.0	20	0	96	30-145	0			
Carbon disulfide	21.27	2.5	20	0	106	35-165	0			
Carbon tetrachloride	24.71	1.0	20	0	124	65-140	0			
Chlorobenzene	19.47	1.0	20	0	97.4	80-120	0			
Chloroethane	18.12	1.0	20	0	90.6	60-135	0			
Chloroform	20.62	1.0	20	0	103	65-135	0			
Chloromethane	19.83	1.0	20	0	99.2	70-125	0			
cis-1,2-Dichloroethene	19.49	1.0	20	0	97.4	70-125	0			
cis-1,3-Dichloropropene	19.72	1.0	20	0	98.6	70-130	0			
Dibromochloromethane	18.41	1.0	20	0	92	60-135	0			
Dichlorodifluoromethane	13	1.0	20	0	65	30-155	0			
Ethylbenzene	20.11	1.0	20	0	101	75-125	0			
Isopropylbenzene	19.75	1.0	20	0	98.8	75-125	0			
Methyl tert-butyl ether	22.58	5.0	20	0	113	65-125	0			
Methylene chloride	20.83	5.0	20	0	104	55-140	0			
Styrene	19.37	1.0	20	0	96.8	65-135	0			
Tetrachloroethene	22.08	2.0	20	0	110	45-150	0			
Toluene	20.09	1.0	20	0	100	75-120	0			
trans-1,2-Dichloroethene	21.51	1.0	20	0	108	60-140	0			
trans-1,3-Dichloropropene	19.7	1.0	20	0	98.5	55-140	0			
Trichloroethene	21.9	1.0	20	0	110	70-125	0			
Trichlorofluoromethane	21.17	1.0	20	0	106	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120886A	Instrument ID VMS7	Method: SW8260					
Vinyl chloride	15.82	1.0	20	0	79.1	50-145	0
Xylenes, Total	58.6	3.0	60	0	97.7	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>18.78</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>93.9</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.99</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>19.51</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.6</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>18.95</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.8</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120886A** Instrument ID **VMS7** Method: **SW8260**

MSD Sample ID: 1305495-03A MSD				Units: µg/L			Analysis Date: 05/17/13 01:58 AM			
Client ID:		Run ID: VMS7_130516A			SeqNo: 2322265		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	21.67	1.0	20	0	108	65-130	21.72	0.23	30	
1,1,2,2-Tetrachloroethane	19.33	1.0	20	0	96.6	65-130	19.93	3.06	30	
1,1,2-Trichloroethane	18.52	1.0	20	0	92.6	75-125	18.96	2.35	30	
1,1-Dichloroethane	19.09	1.0	20	0	95.4	70-135	19.56	2.43	30	
1,1-Dichloroethene	21.3	1.0	20	0	106	70-130	21.27	0.141	30	
1,2,4-Trichlorobenzene	17.99	1.0	20	0	90	65-135	17.29	3.97	30	
1,2-Dibromo-3-chloropropane	21.46	1.0	20	0	107	50-130	21.47	0.0466	30	
1,2-Dibromoethane	21.23	1.0	20	0	106	80-120	21.11	0.567	30	
1,2-Dichlorobenzene	18.88	1.0	20	0	94.4	70-120	19.21	1.73	30	
1,2-Dichloroethane	20.23	1.0	20	0	101	70-130	20.5	1.33	30	
1,2-Dichloropropane	19.43	2.0	20	0	97.2	75-125	19.83	2.04	30	
1,3-Dichlorobenzene	19.5	2.0	20	0	97.5	75-125	18.86	3.34	30	
1,4-Dichlorobenzene	18.46	2.0	20	0	92.3	75-125	18.37	0.489	30	
2-Butanone	25.63	5.0	20	0	128	30-150	25.72	0.351	30	
2-Hexanone	23.91	5.0	20	0	120	55-130	23.11	3.4	30	
4-Methyl-2-pentanone	29.25	5.0	20	0	146	60-135	28.99	0.893	30	S
Acetone	30.69	20	20	0	153	40-140	32.12	4.55	30	S
Benzene	20.51	1.0	20	0	103	80-120	20.59	0.389	30	
Bromodichloromethane	20.97	1.0	20	0	105	75-120	21.47	2.36	30	
Bromoform	19.01	1.0	20	0	95	70-130	19.68	3.46	30	
Bromomethane	18.05	1.0	20	0	90.2	30-145	19.19	6.12	30	
Carbon disulfide	21.17	2.5	20	0	106	35-165	21.27	0.471	30	
Carbon tetrachloride	24.8	1.0	20	0	124	65-140	24.71	0.364	30	
Chlorobenzene	19.4	1.0	20	0	97	80-120	19.47	0.36	30	
Chloroethane	16.79	1.0	20	0	84	60-135	18.12	7.62	30	
Chloroform	20.22	1.0	20	0	101	65-135	20.62	1.96	30	
Chloromethane	18.32	1.0	20	0	91.6	70-125	19.83	7.92	30	
cis-1,2-Dichloroethene	19.38	1.0	20	0	96.9	70-125	19.49	0.566	30	
cis-1,3-Dichloropropene	19.51	1.0	20	0	97.6	70-130	19.72	1.07	30	
Dibromochloromethane	18.26	1.0	20	0	91.3	60-135	18.41	0.818	30	
Dichlorodifluoromethane	13.35	1.0	20	0	66.8	30-155	13	2.66	30	
Ethylbenzene	19.41	1.0	20	0	97	75-125	20.11	3.54	30	
Isopropylbenzene	19.34	1.0	20	0	96.7	75-125	19.75	2.1	30	
Methyl tert-butyl ether	22.44	5.0	20	0	112	65-125	22.58	0.622	30	
Methylene chloride	20.63	5.0	20	0	103	55-140	20.83	0.965	30	
Styrene	19.19	1.0	20	0	96	65-135	19.37	0.934	30	
Tetrachloroethene	21.34	2.0	20	0	107	45-150	22.08	3.41	30	
Toluene	19.92	1.0	20	0	99.6	75-120	20.09	0.85	30	
trans-1,2-Dichloroethene	21.4	1.0	20	0	107	60-140	21.51	0.513	30	
trans-1,3-Dichloropropene	19	1.0	20	0	95	55-140	19.7	3.62	30	
Trichloroethene	21.99	1.0	20	0	110	70-125	21.9	0.41	30	
Trichlorofluoromethane	21.93	1.0	20	0	110	60-145	21.17	3.53	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120886A		Instrument ID VMS7		Method: SW8260					
Vinyl chloride	15.2	1.0	20	0	76	50-145	15.82	4	30
Xylenes, Total	57.12	3.0	60	0	95.2	75-130	58.6	2.56	30
Surr: 1,2-Dichloroethane-d4	19.48	0	20	0	97.4	70-120	18.78	3.66	30
Surr: 4-Bromofluorobenzene	20.58	0	20	0	103	75-120	19.99	2.91	30
Surr: Dibromofluoromethane	19.76	0	20	0	98.8	85-115	19.51	1.27	30
Surr: Toluene-d8	18.79	0	20	0	94	85-120	18.95	0.848	30

The following samples were analyzed in this batch: | 1305508-03A |

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120896** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: VBLKW2-130516-R120896				Units: µg/L		Analysis Date: 05/17/13 12:37 PM		
Client ID:		Run ID: VMS8_130516B				SeqNo: 2322363		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	1.0								
1,1,2,2-Tetrachloroethane	U	1.0								
1,1,2-Trichloroethane	U	1.0								
1,1,2-Trichlorotrifluoroethane	U	1.0								
1,1-Dichloroethane	U	1.0								
1,1-Dichloroethene	U	1.0								
1,2,4-Trichlorobenzene	U	1.0								
1,2-Dibromo-3-chloropropane	U	1.0								
1,2-Dibromoethane	U	1.0								
1,2-Dichlorobenzene	U	1.0								
1,2-Dichloroethane	U	1.0								
1,2-Dichloropropane	U	2.0								
1,3-Dichlorobenzene	U	2.0								
1,4-Dichlorobenzene	U	2.0								
2-Butanone	U	5.0								
2-Hexanone	U	5.0								
4-Methyl-2-pentanone	U	5.0								
Acetone	U	20								
Benzene	U	1.0								
Bromodichloromethane	U	1.0								
Bromoform	U	1.0								
Bromomethane	U	1.0								
Carbon disulfide	U	2.5								
Carbon tetrachloride	U	1.0								
Chlorobenzene	U	1.0								
Chloroethane	U	1.0								
Chloroform	U	1.0								
Chloromethane	U	1.0								
cis-1,2-Dichloroethene	U	1.0								
cis-1,3-Dichloropropene	U	1.0								
Cyclohexane	U	5.0								
Dibromochloromethane	U	1.0								
Dichlorodifluoromethane	U	1.0								
Ethylbenzene	U	1.0								
Isopropylbenzene	U	1.0								
Methyl acetate	U	2.0								
Methyl tert-butyl ether	U	5.0								
Methylcyclohexane	U	5.0								
Methylene chloride	U	5.0								
Styrene	U	1.0								
Tetrachloroethene	U	2.0								
Toluene	U	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120896	Instrument ID VMS8	Method: SW8260						
trans-1,2-Dichloroethene	U	1.0						
trans-1,3-Dichloropropene	U	1.0						
Trichloroethene	U	1.0						
Trichlorofluoromethane	U	1.0						
Vinyl chloride	U	1.0						
Xylenes, Total	U	3.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.79</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99</i>	<i>70-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.79</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>19.77</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.8</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.3</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.5</i>	<i>85-120</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120896** Instrument ID **VMS8** Method: **SW8260**

LCS Sample ID: VLCSW2-130516-R120896				Units: µg/L			Analysis Date: 05/16/13 11:50 PM			
Client ID:		Run ID: VMS8_130516B			SeqNo: 2322346		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	21.65	1.0	20	0	108	65-130	0			
1,1,2,2-Tetrachloroethane	20.9	1.0	20	0	104	65-130	0			
1,1,2-Trichloroethane	21.08	1.0	20	0	105	75-125	0			
1,1-Dichloroethane	20.75	1.0	20	0	104	70-135	0			
1,1-Dichloroethene	19.51	1.0	20	0	97.6	70-130	0			
1,2,4-Trichlorobenzene	21.55	1.0	20	0	108	65-135	0			
1,2-Dibromo-3-chloropropane	20.99	1.0	20	0	105	50-130	0			
1,2-Dibromoethane	25.85	1.0	20	0	129	80-120	0			S
1,2-Dichlorobenzene	20.6	1.0	20	0	103	70-120	0			
1,2-Dichloroethane	20.84	1.0	20	0	104	70-130	0			
1,2-Dichloropropane	20.85	2.0	20	0	104	75-125	0			
1,3-Dichlorobenzene	21.37	2.0	20	0	107	75-125	0			
1,4-Dichlorobenzene	21.14	2.0	20	0	106	75-125	0			
2-Butanone	21.82	5.0	20	0	109	30-150	0			
2-Hexanone	20.69	5.0	20	0	103	55-130	0			
4-Methyl-2-pentanone	29.97	5.0	20	0	150	60-135	0			S
Acetone	23.6	20	20	0	118	40-140	0			
Benzene	20.48	1.0	20	0	102	80-120	0			
Bromodichloromethane	22.3	1.0	20	0	112	75-120	0			
Bromoform	21.06	1.0	20	0	105	70-130	0			
Bromomethane	16.44	1.0	20	0	82.2	30-145	0			
Carbon disulfide	21.05	2.5	20	0	105	35-165	0			
Carbon tetrachloride	21.52	1.0	20	0	108	65-140	0			
Chlorobenzene	21.02	1.0	20	0	105	80-120	0			
Chloroethane	16.15	1.0	20	0	80.8	60-135	0			
Chloroform	21.12	1.0	20	0	106	65-135	0			
Chloromethane	16.32	1.0	20	0	81.6	70-125	0			
cis-1,2-Dichloroethene	21.04	1.0	20	0	105	70-125	0			
cis-1,3-Dichloropropene	20.85	1.0	20	0	104	70-130	0			
Dibromochloromethane	21.94	1.0	20	0	110	60-135	0			
Dichlorodifluoromethane	13.85	1.0	20	0	69.2	30-155	0			
Ethylbenzene	20.97	1.0	20	0	105	75-125	0			
Isopropylbenzene	21.46	1.0	20	0	107	75-125	0			
Methyl tert-butyl ether	22.22	5.0	20	0	111	65-125	0			
Methylene chloride	19.35	5.0	20	0	96.8	55-140	0			
Styrene	21.45	1.0	20	0	107	65-135	0			
Tetrachloroethene	21.35	2.0	20	0	107	45-150	0			
Toluene	21.06	1.0	20	0	105	75-120	0			
trans-1,2-Dichloroethene	21.05	1.0	20	0	105	60-140	0			
trans-1,3-Dichloropropene	20.82	1.0	20	0	104	55-140	0			
Trichloroethene	21.61	1.0	20	0	108	70-125	0			
Trichlorofluoromethane	19.02	1.0	20	0	95.1	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120896		Instrument ID VMS8		Method: SW8260				
Vinyl chloride	16.02	1.0	20	0	80.1	50-145	0	
Xylenes, Total	63.51	3.0	60	0	106	75-130	0	
<i>Surr: 1,2-Dichloroethane-d4</i>	19.85	0	20	0	99.2	70-120	0	
<i>Surr: 4-Bromofluorobenzene</i>	20.29	0	20	0	101	75-120	0	
<i>Surr: Dibromofluoromethane</i>	20.17	0	20	0	101	85-115	0	
<i>Surr: Toluene-d8</i>	19.97	0	20	0	99.8	85-120	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120896** Instrument ID **VMS8** Method: **SW8260**

MS Sample ID: 1305502-01E MS				Units: µg/L			Analysis Date: 05/17/13 08:53 AM			
Client ID:		Run ID: VMS8_130516B		SeqNo: 2322357		Prep Date:		DF: 20		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	401	20	400	0	100	65-130	0			
1,1,2,2-Tetrachloroethane	401	20	400	0	100	65-130	0			
1,1,2-Trichloroethane	398	20	400	0	99.5	75-125	0			
1,1-Dichloroethane	383.8	20	400	0	96	70-135	0			
1,1-Dichloroethene	369	20	400	0	92.2	70-130	0			
1,2,4-Trichlorobenzene	341.4	20	400	0	85.4	65-135	0			
1,2-Dibromo-3-chloropropane	378	20	400	0	94.5	50-130	0			
1,2-Dibromoethane	493.4	20	400	0	123	80-120	0			S
1,2-Dichlorobenzene	377.8	20	400	0	94.4	70-120	0			
1,2-Dichloroethane	389.2	20	400	0	97.3	70-130	0			
1,2-Dichloropropane	391	40	400	0	97.8	75-125	0			
1,3-Dichlorobenzene	382	40	400	0	95.5	75-125	0			
1,4-Dichlorobenzene	370.2	40	400	0	92.6	75-125	0			
2-Butanone	437	100	400	0	109	30-150	0			
2-Hexanone	390.8	100	400	0	97.7	55-130	0			
4-Methyl-2-pentanone	566.8	100	400	0	142	60-135	0			S
Acetone	478	400	400	0	120	40-140	0			
Benzene	715.8	20	400	316.4	99.8	80-120	0			
Bromodichloromethane	406.2	20	400	0	102	75-120	0			
Bromoform	381.2	20	400	0	95.3	70-130	0			
Bromomethane	298	20	400	0	74.5	30-145	0			
Carbon disulfide	377.8	50	400	0	94.4	35-165	0			
Carbon tetrachloride	411.6	20	400	0	103	65-140	0			
Chlorobenzene	1534	20	400	1002	133	80-120	0			S
Chloroethane	302.6	20	400	0	75.6	60-135	0			
Chloroform	393.4	20	400	0	98.4	65-135	0			
Chloromethane	300.2	20	400	0	75	70-125	0			
cis-1,2-Dichloroethene	379.6	20	400	0	94.9	70-125	0			
cis-1,3-Dichloropropene	374.2	20	400	0	93.6	70-130	0			
Dibromochloromethane	391.6	20	400	0	97.9	60-135	0			
Dichlorodifluoromethane	258	20	400	0	64.5	30-155	0			
Ethylbenzene	471.6	20	400	76.6	98.8	75-125	0			
Isopropylbenzene	395.4	20	400	0	98.8	75-125	0			
Methyl tert-butyl ether	462.6	100	400	41.6	105	65-125	0			
Methylene chloride	362	100	400	0	90.5	55-140	0			
Styrene	384.6	20	400	0	96.2	65-135	0			
Tetrachloroethene	383.2	40	400	0	95.8	45-150	0			
Toluene	382.4	20	400	51.6	82.7	75-120	0			
trans-1,2-Dichloroethene	383.2	20	400	0	95.8	60-140	0			
trans-1,3-Dichloropropene	368.8	20	400	0	92.2	55-140	0			
Trichloroethene	388.4	20	400	0	97.1	70-125	0			
Trichlorofluoromethane	350.4	20	400	0	87.6	60-145	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120896	Instrument ID VMS8	Method: SW8260					
Vinyl chloride	301.8	20	400	0	75.4	50-145	0
Xylenes, Total	1610	60	1200	408.8	100	75-130	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>382.8</i>	<i>0</i>	<i>400</i>	<i>0</i>	<i>95.7</i>	<i>70-120</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>402.2</i>	<i>0</i>	<i>400</i>	<i>0</i>	<i>101</i>	<i>75-120</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>392.2</i>	<i>0</i>	<i>400</i>	<i>0</i>	<i>98</i>	<i>85-115</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>390.6</i>	<i>0</i>	<i>400</i>	<i>0</i>	<i>97.6</i>	<i>85-120</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120896** Instrument ID **VMS8** Method: **SW8260**

MSD Sample ID: 1305502-01E MSD				Units: µg/L			Analysis Date: 05/17/13 09:17 AM			
Client ID:		Run ID: VMS8_130516B		SeqNo: 2322360		Prep Date:		DF: 20		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	395	20	400	0	98.8	65-130	401	1.51	30	
1,1,2,2-Tetrachloroethane	396.2	20	400	0	99	65-130	401	1.2	30	
1,1,2-Trichloroethane	387.6	20	400	0	96.9	75-125	398	2.65	30	
1,1-Dichloroethane	383.2	20	400	0	95.8	70-135	383.8	0.156	30	
1,1-Dichloroethene	376.4	20	400	0	94.1	70-130	369	1.99	30	
1,2,4-Trichlorobenzene	349.2	20	400	0	87.3	65-135	341.4	2.26	30	
1,2-Dibromo-3-chloropropane	368.2	20	400	0	92	50-130	378	2.63	30	
1,2-Dibromoethane	482	20	400	0	120	80-120	493.4	2.34	30	S
1,2-Dichlorobenzene	368.2	20	400	0	92	70-120	377.8	2.57	30	
1,2-Dichloroethane	391.2	20	400	0	97.8	70-130	389.2	0.513	30	
1,2-Dichloropropane	385.8	40	400	0	96.4	75-125	391	1.34	30	
1,3-Dichlorobenzene	382.8	40	400	0	95.7	75-125	382	0.209	30	
1,4-Dichlorobenzene	374.2	40	400	0	93.6	75-125	370.2	1.07	30	
2-Butanone	440	100	400	0	110	30-150	437	0.684	30	
2-Hexanone	389	100	400	0	97.2	55-130	390.8	0.462	30	
4-Methyl-2-pentanone	567.4	100	400	0	142	60-135	566.8	0.106	30	S
Acetone	503.8	400	400	0	126	40-140	478	5.26	30	
Benzene	701	20	400	316.4	96.2	80-120	715.8	2.09	30	
Bromodichloromethane	403.2	20	400	0	101	75-120	406.2	0.741	30	
Bromoform	382	20	400	0	95.5	70-130	381.2	0.21	30	
Bromomethane	293.2	20	400	0	73.3	30-145	298	1.62	30	
Carbon disulfide	380.8	50	400	0	95.2	35-165	377.8	0.791	30	
Carbon tetrachloride	396	20	400	0	99	65-140	411.6	3.86	30	
Chlorobenzene	1497	20	400	1002	124	80-120	1534	2.43	30	S
Chloroethane	297.4	20	400	0	74.4	60-135	302.6	1.73	30	
Chloroform	393.2	20	400	0	98.3	65-135	393.4	0.0509	30	
Chloromethane	299	20	400	0	74.8	70-125	300.2	0.401	30	
cis-1,2-Dichloroethene	383.6	20	400	0	95.9	70-125	379.6	1.05	30	
cis-1,3-Dichloropropene	366.2	20	400	0	91.6	70-130	374.2	2.16	30	
Dibromochloromethane	388.8	20	400	0	97.2	60-135	391.6	0.718	30	
Dichlorodifluoromethane	263.2	20	400	0	65.8	30-155	258	2	30	
Ethylbenzene	463.2	20	400	76.6	96.6	75-125	471.6	1.8	30	
Isopropylbenzene	388	20	400	0	97	75-125	395.4	1.89	30	
Methyl tert-butyl ether	472.4	100	400	41.6	108	65-125	462.6	2.1	30	
Methylene chloride	363	100	400	0	90.8	55-140	362	0.276	30	
Styrene	385.4	20	400	0	96.4	65-135	384.6	0.208	30	
Tetrachloroethene	377	40	400	0	94.2	45-150	383.2	1.63	30	
Toluene	375	20	400	51.6	80.8	75-120	382.4	1.95	30	
trans-1,2-Dichloroethene	392.2	20	400	0	98	60-140	383.2	2.32	30	
trans-1,3-Dichloropropene	361.2	20	400	0	90.3	55-140	368.8	2.08	30	
Trichloroethene	392.8	20	400	0	98.2	70-125	388.4	1.13	30	
Trichlorofluoromethane	361.4	20	400	0	90.4	60-145	350.4	3.09	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: R120896	Instrument ID VMS8	Method: SW8260							
Vinyl chloride	303.8	20	400	0	76	50-145	301.8	0.661	30
Xylenes, Total	1589	60	1200	408.8	98.4	75-130	1610	1.31	30
<i>Surr: 1,2-Dichloroethane-d4</i>	393	0	400	0	98.2	70-120	382.8	2.63	30
<i>Surr: 4-Bromofluorobenzene</i>	400	0	400	0	100	75-120	402.2	0.548	30
<i>Surr: Dibromofluoromethane</i>	397.4	0	400	0	99.4	85-115	392.2	1.32	30
<i>Surr: Toluene-d8</i>	386.8	0	400	0	96.7	85-120	390.6	0.978	30

The following samples were analyzed in this batch:

1305508-01A

1305508-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 1305508
Project: Former GRMP (017360-T01Y13)

QC BATCH REPORT

Batch ID: **R120978A** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: VBLKW1-130517-R120978A				Units: µg/L		Analysis Date: 05/17/13 02:40 PM		
Client ID:		Run ID: VMS6_130517A				SeqNo: 2324257		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Tetrachloroethene	U	2.0								
Surr: 1,2-Dichloroethane-d4	19.91	0	20	0	99.6	70-120	0			
Surr: 4-Bromofluorobenzene	19.62	0	20	0	98.1	75-120	0			
Surr: Dibromofluoromethane	20.39	0	20	0	102	85-115	0			
Surr: Toluene-d8	19.95	0	20	0	99.8	85-120	0			

LCS		Sample ID: VLCSW1-130517-R120978A				Units: µg/L		Analysis Date: 05/17/13 01:51 PM		
Client ID:		Run ID: VMS6_130517A				SeqNo: 2324256		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Tetrachloroethene	20.5	2.0	20	0	102	45-150	0			
Surr: 1,2-Dichloroethane-d4	19.04	0	20	0	95.2	70-120	0			
Surr: 4-Bromofluorobenzene	20.07	0	20	0	100	75-120	0			
Surr: Dibromofluoromethane	19.47	0	20	0	97.4	85-115	0			
Surr: Toluene-d8	19.85	0	20	0	99.2	85-120	0			

MS		Sample ID: 1305566-01A MS				Units: µg/L		Analysis Date: 05/17/13 10:52 PM		
Client ID:		Run ID: VMS6_130517A				SeqNo: 2324277		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Tetrachloroethene	20.68	2.0	20	0	103	45-150	0			
Surr: 1,2-Dichloroethane-d4	20.06	0	20	0	100	70-120	0			
Surr: 4-Bromofluorobenzene	20.13	0	20	0	101	75-120	0			
Surr: Dibromofluoromethane	20.93	0	20	0	105	85-115	0			
Surr: Toluene-d8	20.31	0	20	0	102	85-120	0			

MSD		Sample ID: 1305566-01A MSD				Units: µg/L		Analysis Date: 05/17/13 11:17 PM		
Client ID:		Run ID: VMS6_130517A				SeqNo: 2324279		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Tetrachloroethene	19.48	2.0	20	0	97.4	45-150	20.68	5.98	30	
Surr: 1,2-Dichloroethane-d4	19.41	0	20	0	97	70-120	20.06	3.29	30	
Surr: 4-Bromofluorobenzene	20.28	0	20	0	101	75-120	20.13	0.742	30	
Surr: Dibromofluoromethane	20.62	0	20	0	103	85-115	20.93	1.49	30	
Surr: Toluene-d8	19.84	0	20	0	99.2	85-120	20.31	2.34	30	

The following samples were analyzed in this batch:

1305508-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



**CONESTOGA-ROVERS
& ASSOCIATES**

CHAIN OF CUSTODY RECORD

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170

Phone: (734) 453-5123

Fax: (734) 453-5201

COC NO.: **PL-10094**

PAGE **1** OF **1**

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 17360-T01Y13				Laboratory Name: ALS				Lab Location: Holland MI				SSOW ID: 17360-T01-020																																																																			
Project Name: Former GRMP				Lab Contact: T. Beamish				Lab Quote No:				Cooler No:																																																																			
Project Location: Wyoming, MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)																																																																			
Chemistry Contact: P. Wiseman				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other:				Total Containers/Sample 3 TL VOCs																																																																			
Sampler(s): Z. Batenburg																																																																															
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Item</th> <th>SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)</th> <th>DATE (mm/dd/yy)</th> <th>TIME (hh:mm)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>WG-17360-051313-EB-004</td> <td>5-13-13</td> <td>1440</td> </tr> <tr> <td>2</td> <td>L ↓ L ↓ -005</td> <td>↓</td> <td>1535</td> </tr> <tr> <td>3</td> <td>TB-17360-051313-EB</td> <td>-</td> <td>-</td> </tr> <tr><td>4</td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td><td></td></tr> <tr><td>13</td><td></td><td></td><td></td></tr> <tr><td>14</td><td></td><td></td><td></td></tr> <tr><td>15</td><td></td><td></td><td></td></tr> </tbody> </table>				Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	1	WG-17360-051313-EB-004	5-13-13	1440	2	L ↓ L ↓ -005	↓	1535	3	TB-17360-051313-EB	-	-	4				5				6				7				8				9				10				11				12				13				14				15												Carrier: Drop off Airbill No: Date Shipped: COMMENTS/ SPECIAL INSTRUCTIONS: Trip Blank			
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)																																																																												
1	WG-17360-051313-EB-004	5-13-13	1440																																																																												
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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: 7 All Samples in Cooler must be on COC				Notes/ Special Requirements: 4.2°C																																																																			
RELINQUISHED BY				COMPANY		DATE		TIME		RECEIVED BY				COMPANY		DATE		TIME																																																													
1.				CRA		5-13-13		1645		1.				ALS		5/13/13		1645																																																													
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

Sample Receipt Checklist

Client Name: **CRA - PLYMOUTH**

Date/Time Received: **13-May-13 16:45**

Work Order: **1305508**

Received by: **DS**

Checklist completed by Diane Shaw 14-May-13
eSignature Date

Reviewed by: Tom Bramish 14-May-13
eSignature Date

Matrices: Groundwater

Carrier name: Client

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>4.2 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>5/14/2013 8:08:15 AM</u>		
Water - VOA vials have zero headspace?	Yes ☒	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒
pH adjusted?	Yes ☐	No ☐	N/A ☒
pH adjusted by:			
Login Notes:			

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:



06-May-2013

Paul Wiseman
Conestoga-Rovers & Associates
14496 Sheldon Road
Suite 200
Plymouth, MI 48170

Re: **Former GRMP (017360-T05Y13-01Y13)**

Work Order: **13041049**

Dear Paul,

ALS Environmental received 72 samples on 25-Apr-2013 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Sample results are compliant with NELAP standard requirements and QC results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 242.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Beamish".

Electronically approved by: Tom Beamish

Tom Beamish
Senior Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Group An ALS Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Work Order: 13041049

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
13041049-01	SO-17360-042213-DR-001	Soil		04/22/13 14:30	04/25/13 11:40	☐
13041049-02	SO-17360-042213-DR-002	Soil		04/22/13 14:45	04/25/13 11:40	☐
13041049-03	SO-17360-042313-DR-003	Soil		04/23/13 08:20	04/25/13 11:40	☐
13041049-04	SO-17360-042313-DR-004	Soil		04/23/13 08:22	04/25/13 11:40	☐
13041049-05	SO-17360-042313-DR-005	Soil		04/23/13 08:30	04/25/13 11:40	☐
13041049-06	SO-17360-042313-DR-006	Soil		04/23/13 09:00	04/25/13 11:40	☐
13041049-07	SO-17360-042313-DR-007	Soil		04/23/13 09:02	04/25/13 11:40	☐
13041049-08	SO-17360-042313-DR-008	Soil		04/23/13 09:05	04/25/13 11:40	☐
13041049-09	SO-17360-042313-DR-009	Soil		04/23/13 09:07	04/25/13 11:40	☐
13041049-10	SO-17360-042313-DR-010	Soil		04/23/13 09:10	04/25/13 11:40	☐
13041049-11	SO-17360-042313-DR-011	Soil		04/23/13 09:15	04/25/13 11:40	☐
13041049-12	SO-17360-042313-DR-012	Soil		04/23/13 10:00	04/25/13 11:40	☐
13041049-13	SO-17360-042313-DR-013	Soil		04/23/13 10:02	04/25/13 11:40	☐
13041049-14	SO-17360-042313-DR-014	Soil		04/23/13 10:05	04/25/13 11:40	☐
13041049-15	SO-17360-042313-DR-015	Soil		04/23/13 10:07	04/25/13 11:40	☐
13041049-16	SO-17360-042313-DR-016	Soil		04/23/13 10:10	04/25/13 11:40	☐
13041049-17	SO-17360-042313-DR-017	Soil		04/23/13 10:12	04/25/13 11:40	☐
13041049-18	SO-17360-042313-DR-018	Soil		04/23/13 10:15	04/25/13 11:40	☐
13041049-19	SO-17360-042313-DR-019	Soil		04/23/13 10:58	04/25/13 11:40	☐
13041049-20	SO-17360-042313-DR-020	Soil		04/23/13 11:00	04/25/13 11:40	☐
13041049-21	SO-17360-042313-DR-021	Soil		04/23/13 11:02	04/25/13 11:40	☐
13041049-22	SO-17360-042313-DR-022	Soil		04/23/13 11:05	04/25/13 11:40	☐
13041049-23	SO-17360-042313-DR-023	Soil		04/23/13 11:07	04/25/13 11:40	☐
13041049-24	SO-17360-042313-DR-024	Soil		04/23/13 11:10	04/25/13 11:40	☐
13041049-25	SO-17360-042313-DR-025	Soil		04/23/13 11:42	04/25/13 11:40	☐
13041049-26	SO-17360-042313-DR-026	Soil		04/23/13 11:45	04/25/13 11:40	☐
13041049-27	SO-17360-042313-DR-027	Soil		04/23/13 11:47	04/25/13 11:40	☐
13041049-28	SO-17360-042313-DR-028	Soil		04/23/13 11:50	04/25/13 11:40	☐
13041049-29	SO-17360-042313-DR-029	Soil		04/23/13 11:52	04/25/13 11:40	☐
13041049-30	SO-17360-042313-DR-030	Soil		04/23/13 11:55	04/25/13 11:40	☐
13041049-31	SO-17360-042313-DR-031	Soil		04/23/13 13:20	04/25/13 11:40	☐
13041049-32	SO-17360-042313-DR-032	Soil		04/23/13 13:22	04/25/13 11:40	☐
13041049-33	SO-17360-042313-DR-033	Soil		04/23/13 13:25	04/25/13 11:40	☐
13041049-34	SO-17360-042313-DR-034	Soil		04/23/13 13:30	04/25/13 11:40	☐
13041049-35	SO-17360-042313-DR-035	Soil		04/23/13 13:32	04/25/13 11:40	☐
13041049-36	SO-17360-042313-DR-036	Soil		04/23/13 13:37	04/25/13 11:40	☐
13041049-37	SO-17360-042313-DR-037	Soil		04/23/13 13:40	04/25/13 11:40	☐
13041049-38	SO-17360-042313-DR-038	Soil		04/23/13 14:22	04/25/13 11:40	☐
13041049-39	SO-17360-042313-DR-039	Soil		04/23/13 14:25	04/25/13 11:40	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Work Order: 13041049

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
13041049-40	SO-17360-042313-DR-040	Soil		04/23/13 14:30	04/25/13 11:40	☐
13041049-41	SO-17360-042313-DR-041	Soil		04/23/13 15:10	04/25/13 11:40	☐
13041049-42	SO-17360-042313-DR-042	Soil		04/23/13 15:15	04/25/13 11:40	☐
13041049-43	SO-17360-042313-DR-043	Soil		04/23/13 15:50	04/25/13 11:40	☐
13041049-44	SO-17360-042313-DR-044	Soil		04/23/13 16:00	04/25/13 11:40	☐
13041049-45	SO-17360-042413-DR-057	Soil		04/24/13 11:00	04/25/13 11:40	☐
13041049-46	SO-17360-042413-DR-058	Soil		04/24/13 11:02	04/25/13 11:40	☐
13041049-47	SO-17360-042413-DR-059	Soil		04/24/13 11:05	04/25/13 11:40	☐
13041049-48	SO-17360-042413-DR-060	Soil		04/24/13 11:07	04/25/13 11:40	☐
13041049-49	SO-17360-042413-DR-061	Soil		04/24/13 11:10	04/25/13 11:40	☐
13041049-50	SO-17360-042413-DR-062	Soil		04/24/13 11:30	04/25/13 11:40	☐
13041049-51	SO-17360-042413-DR-063	Soil		04/24/13 11:32	04/25/13 11:40	☐
13041049-52	SO-17360-042413-DR-064	Soil		04/24/13 11:35	04/25/13 11:40	☐
13041049-53	SO-17360-042413-DR-065	Soil		04/24/13 11:37	04/25/13 11:40	☐
13041049-54	SO-17360-042413-DR-066	Soil		04/24/13 11:40	04/25/13 11:40	☐
13041049-55	SO-17360-042413-DR-067	Soil		04/24/13 11:45	04/25/13 11:40	☐
13041049-56	SO-17360-042413-DR-068	Soil		04/24/13 12:05	04/25/13 11:40	☐
13041049-57	SO-17360-042413-DR-069	Soil		04/24/13 12:07	04/25/13 11:40	☐
13041049-58	SO-17360-042413-DR-070	Soil		04/24/13 12:10	04/25/13 11:40	☐
13041049-59	SO-17360-042413-DR-071	Soil		04/24/13 12:12	04/25/13 11:40	☐
13041049-60	SO-17360-042413-DR-072	Soil		04/24/13 12:15	04/25/13 11:40	☐
13041049-61	SO-17360-042413-DR-073	Soil		04/24/13 12:30	04/25/13 11:40	☐
13041049-62	SO-17360-042413-DR-074	Soil		04/24/13 12:32	04/25/13 11:40	☐
13041049-63	SO-17360-042413-DR-075	Soil		04/24/13 12:35	04/25/13 11:40	☐
13041049-64	SO-17360-042413-DR-076	Soil		04/24/13 12:45	04/25/13 11:40	☐
13041049-65	SO-17360-042413-DR-077	Soil		04/24/13 12:47	04/25/13 11:40	☐
13041049-66	SO-17360-042413-DR-078	Soil		04/24/13 12:50	04/25/13 11:40	☐
13041049-67	SO-17360-042413-DR-079	Soil		04/24/13 13:05	04/25/13 11:40	☐
13041049-68	SO-17360-042413-DR-080	Soil		04/24/13 13:07	04/25/13 11:40	☐
13041049-69	SO-17360-042413-DR-081	Soil		04/24/13 13:10	04/25/13 11:40	☐
13041049-70	SO-17360-042413-DR-082	Soil		04/24/13 13:12	04/25/13 11:40	☐
13041049-71	SO-17360-042413-DR-083	Soil		04/24/13 13:15	04/25/13 11:40	☐
13041049-72	Trip Blank	Soil		04/22/13	04/25/13 11:40	☐

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
WorkOrder: 13041049

QUALIFIERS, ACRONYMS, UNITS

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
TDL	Target Detection Limit
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
% of sample	Percent of Sample
µg/Kg	Micrograms per Kilogram
µg/Kg-dry	Micrograms per Kilogram Dry Weight
mg/Kg-dry	Milligrams per Kilogram Dry Weight

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Work Order: 13041049

Case Narrative**Analytical Comments:**

Batch 48001, Method SVO_8270_S, Sample 13041049-68B: The SVOC surrogate recoveries are unavailable due to dilution below the calibration range.

Batch 48001, Method SVO_8270_S, Sample 13041049-69B: The SVOC surrogate recoveries are unavailable due to dilution below the calibration range.

QC Comments:

Batch 48042, Method ICP_6020_S, Sample 13041049-02BMS: The MS and/or MSD recoveries were above the upper control limit. The corresponding results in the parent sample may be biased high for Barium, Iron, Lead Manganese, Vanadium, and Zinc.

Batch 48042, Method ICP_6020_S, Sample 13041049-02BMS: The MS recovery was below the control limit. The corresponding result in the parent sample may be biased low for Beryllium.

Batch 48082, Method ICP_6020_S, Sample 13041049-58BMSD: The MS and/or MSD recoveries were above the upper control limit. The corresponding results in the parent sample may be biased high for Arsenic, Chromium, Cobalt, Copper, Lead, Nickel, Vanadium, and Zinc.

Batch 47967, Method VOC_8260_S, Sample LCS-47967: The LCS recoveries were above the upper control limit. The reported results may be biased high for 4-Methyl-2-Pentanone and 1,2-Dibromo-3-chloropropane.

Batch 47967, Method VOC_8260_S, Sample LCS-47967: The LCS recovery was outside of the upper control limit but within the Sporadic Marginal Exceedence limit. No qualification is necessary for 1,2-Dibromoethane.

Batch 47968, Method VOC_8260_S, Sample LCS-47968: The LCS recoveries were above the upper control limit. The reported results may be biased high for 1,2-Dibromoethane, 4-Methyl-2-Pentanone, 2-Hexanone, and 1,2-Dibromo-3-chloropropane.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042213-DR-001
Collection Date: 04/22/13 02:30 PM

Work Order: 13041049
Lab ID: 13041049-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.014	J	0.00073	0.037	mg/Kg-dry	1	04/30/13 12:30
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 4/30/13	Analyst: ML
<u>BatchID: 48042</u>							
Antimony	0.17	J	0.0016	0.40	mg/Kg-dry	1	05/01/13 16:08
Arsenic	3.2		0.054	0.40	mg/Kg-dry	1	05/01/13 16:08
Barium	22		0.011	0.40	mg/Kg-dry	1	05/01/13 16:08
Beryllium	0.18		0.0032	0.16	mg/Kg-dry	1	05/02/13 10:57
Cadmium	0.10	J	0.0016	0.16	mg/Kg-dry	1	05/01/13 16:08
Chromium	6.7		0.065	0.40	mg/Kg-dry	1	05/02/13 10:57
Cobalt	2.9		0.0016	0.40	mg/Kg-dry	1	05/02/13 10:57
Copper	22		0.078	0.40	mg/Kg-dry	1	05/02/13 10:57
Iron	5,800		1.3	6.3	mg/Kg-dry	1	05/01/13 16:08
Lead	13		0.0016	0.40	mg/Kg-dry	1	05/01/13 16:08
Manganese	94		0.035	0.40	mg/Kg-dry	1	05/01/13 16:08
Molybdenum	0.74		0.017	0.40	mg/Kg-dry	1	05/01/13 16:08
Nickel	5.4		0.040	0.40	mg/Kg-dry	1	05/02/13 10:57
Selenium	0.24	J	0.051	0.40	mg/Kg-dry	1	05/01/13 16:08
Silver	0.017	J	0.0016	0.40	mg/Kg-dry	1	05/01/13 16:08
Thallium	U		0.0095	0.40	mg/Kg-dry	1	05/01/13 16:08
Vanadium	7.9		0.024	0.40	mg/Kg-dry	1	05/02/13 10:57
Zinc	16		0.033	0.79	mg/Kg-dry	1	05/01/13 16:08
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: RM
<u>BatchID: 47962</u>							
2-Methylnaphthalene	U		10	82	µg/Kg-dry	1	04/29/13 16:44
Acenaphthene	U		9.4	31	µg/Kg-dry	1	04/29/13 16:44
Acenaphthylene	U		9.7	31	µg/Kg-dry	1	04/29/13 16:44
Anthracene	U		10	31	µg/Kg-dry	1	04/29/13 16:44
Benzo(a)anthracene	41		13	31	µg/Kg-dry	1	04/29/13 16:44
Benzo(a)pyrene	48		16	31	µg/Kg-dry	1	04/29/13 16:44
Benzo(b)fluoranthene	41		17	31	µg/Kg-dry	1	04/29/13 16:44
Benzo(g,h,i)perylene	34		24	31	µg/Kg-dry	1	04/29/13 16:44
Benzo(k)fluoranthene	49		14	31	µg/Kg-dry	1	04/29/13 16:44
Chrysene	48		12	31	µg/Kg-dry	1	04/29/13 16:44
Dibenzo(a,h)anthracene	U		18	31	µg/Kg-dry	1	04/29/13 16:44
Fluoranthene	69		12	31	µg/Kg-dry	1	04/29/13 16:44
Fluorene	U		9.0	31	µg/Kg-dry	1	04/29/13 16:44

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042213-DR-001
Collection Date: 04/22/13 02:30 PM

Work Order: 13041049
Lab ID: 13041049-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene	28	J	19	31	µg/Kg-dry	1	04/29/13 16:44
Naphthalene	U		8.8	31	µg/Kg-dry	1	04/29/13 16:44
Phenanthrene	47		31	31	µg/Kg-dry	1	04/29/13 16:44
Pyrene	92		13	31	µg/Kg-dry	1	04/29/13 16:44
Surr: 2-Fluorobiphenyl	47.6			12-100	%REC	1	04/29/13 16:44
Surr: 4-Terphenyl-d14	74.5			25-137	%REC	1	04/29/13 16:44
Surr: Nitrobenzene-d5	49.7			37-107	%REC	1	04/29/13 16:44
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: AK
BatchID: 47967							
1,1,1-Trichloroethane	U		12	32	µg/Kg-dry	1	04/30/13 01:05
1,1,2,2-Tetrachloroethane	U		14	32	µg/Kg-dry	1	04/30/13 01:05
1,1,2-Trichloroethane	U		11	32	µg/Kg-dry	1	04/30/13 01:05
1,1,2-Trichlorotrifluoroethane	U		12	32	µg/Kg-dry	1	04/30/13 01:05
1,1-Dichloroethane	U		12	32	µg/Kg-dry	1	04/30/13 01:05
1,1-Dichloroethene	U		13	32	µg/Kg-dry	1	04/30/13 01:05
1,2,4-Trichlorobenzene	U		16	32	µg/Kg-dry	1	04/30/13 01:05
1,2-Dibromo-3-chloropropane	U		15	32	µg/Kg-dry	1	04/30/13 01:05
1,2-Dibromoethane	U		12	32	µg/Kg-dry	1	04/30/13 01:05
1,2-Dichlorobenzene	U		13	32	µg/Kg-dry	1	04/30/13 01:05
1,2-Dichloroethane	U		15	32	µg/Kg-dry	1	04/30/13 01:05
1,2-Dichloropropane	U		11	32	µg/Kg-dry	1	04/30/13 01:05
1,3-Dichlorobenzene	U		13	32	µg/Kg-dry	1	04/30/13 01:05
1,4-Dichlorobenzene	U		12	32	µg/Kg-dry	1	04/30/13 01:05
2-Butanone	U		78	210	µg/Kg-dry	1	04/30/13 01:05
2-Hexanone	U		7.8	32	µg/Kg-dry	1	04/30/13 01:05
4-Methyl-2-pentanone	U		11	32	µg/Kg-dry	1	04/30/13 01:05
Acetone	U		67	110	µg/Kg-dry	1	04/30/13 01:05
Benzene	U		13	32	µg/Kg-dry	1	04/30/13 01:05
Bromodichloromethane	U		7.1	32	µg/Kg-dry	1	04/30/13 01:05
Bromoform	U		6.2	32	µg/Kg-dry	1	04/30/13 01:05
Bromomethane	U		12	79	µg/Kg-dry	1	04/30/13 01:05
Carbon disulfide	U		16	32	µg/Kg-dry	1	04/30/13 01:05
Carbon tetrachloride	U		9.0	32	µg/Kg-dry	1	04/30/13 01:05
Chlorobenzene	U		13	32	µg/Kg-dry	1	04/30/13 01:05
Chloroethane	U		67	110	µg/Kg-dry	1	04/30/13 01:05
Chloroform	U		13	32	µg/Kg-dry	1	04/30/13 01:05
Chloromethane	U		18	110	µg/Kg-dry	1	04/30/13 01:05
cis-1,2-Dichloroethene	U		13	32	µg/Kg-dry	1	04/30/13 01:05
cis-1,3-Dichloropropene	U		11	32	µg/Kg-dry	1	04/30/13 01:05

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042213-DR-001
Collection Date: 04/22/13 02:30 PM

Work Order: 13041049
Lab ID: 13041049-01
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Cyclohexane		U	14	32	µg/Kg-dry	1	04/30/13 01:05
Dibromochloromethane		U	5.9	32	µg/Kg-dry	1	04/30/13 01:05
Dichlorodifluoromethane		U	14	32	µg/Kg-dry	1	04/30/13 01:05
Ethylbenzene		U	12	32	µg/Kg-dry	1	04/30/13 01:05
Isopropylbenzene		U	14	32	µg/Kg-dry	1	04/30/13 01:05
Methyl acetate		U	43	210	µg/Kg-dry	1	04/30/13 01:05
Methyl tert-butyl ether		U	13	32	µg/Kg-dry	1	04/30/13 01:05
Methylcyclohexane		U	15	32	µg/Kg-dry	1	04/30/13 01:05
Methylene chloride		U	12	32	µg/Kg-dry	1	04/30/13 01:05
Styrene		U	12	32	µg/Kg-dry	1	04/30/13 01:05
Tetrachloroethene		U	14	32	µg/Kg-dry	1	04/30/13 01:05
Toluene		U	12	32	µg/Kg-dry	1	04/30/13 01:05
trans-1,2-Dichloroethene		U	9.8	32	µg/Kg-dry	1	04/30/13 01:05
trans-1,3-Dichloropropene		U	11	32	µg/Kg-dry	1	04/30/13 01:05
Trichloroethene		U	15	32	µg/Kg-dry	1	04/30/13 01:05
Trichlorofluoromethane		U	8.7	32	µg/Kg-dry	1	04/30/13 01:05
Vinyl chloride		U	14	32	µg/Kg-dry	1	04/30/13 01:05
Xylenes, Total		U	37	95	µg/Kg-dry	1	04/30/13 01:05
Surr: 1,2-Dichloroethane-d4	84.2			70-130	%REC	1	04/30/13 01:05
Surr: 4-Bromofluorobenzene	100			70-130	%REC	1	04/30/13 01:05
Surr: Dibromofluoromethane	89.5			70-130	%REC	1	04/30/13 01:05
Surr: Toluene-d8	97.2			70-130	%REC	1	04/30/13 01:05
MOISTURE			A2540 G			Analyst: RLF	
<u>BatchID: R119658</u>							
Moisture	5.3		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042213-DR-002
Collection Date: 04/22/13 02:45 PM

Work Order: 13041049
Lab ID: 13041049-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.0085	J	0.00079	0.040	mg/Kg-dry	1	04/30/13 12:32
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 4/30/13	Analyst: ML
<u>BatchID: 48042</u>							
Antimony	0.061	J	0.0016	0.40	mg/Kg-dry	1	05/01/13 14:08
Arsenic	0.99		0.054	0.40	mg/Kg-dry	1	05/01/13 14:08
Barium	13		0.011	0.40	mg/Kg-dry	1	05/01/13 14:08
Beryllium	0.10	J	0.0032	0.16	mg/Kg-dry	1	05/02/13 10:40
Cadmium	0.043	J	0.0016	0.16	mg/Kg-dry	1	05/01/13 14:08
Chromium	4.1		0.065	0.40	mg/Kg-dry	1	05/01/13 14:08
Cobalt	1.3		0.0016	0.40	mg/Kg-dry	1	05/01/13 14:08
Copper	3.7		0.078	0.40	mg/Kg-dry	1	05/01/13 14:08
Iron	4,200		1.3	6.3	mg/Kg-dry	1	05/01/13 14:08
Lead	3.9		0.0016	0.40	mg/Kg-dry	1	05/01/13 14:08
Manganese	31		0.035	0.40	mg/Kg-dry	1	05/01/13 14:08
Molybdenum	0.25	J	0.017	0.40	mg/Kg-dry	1	05/01/13 14:08
Nickel	3.6		0.040	0.40	mg/Kg-dry	1	05/01/13 14:08
Selenium	0.22	J	0.051	0.40	mg/Kg-dry	1	05/01/13 14:08
Silver	0.0072	J	0.0016	0.40	mg/Kg-dry	1	05/01/13 14:08
Thallium	U		0.0095	0.40	mg/Kg-dry	1	05/01/13 14:08
Vanadium	6.8		0.024	0.40	mg/Kg-dry	1	05/01/13 14:08
Zinc	9.9		0.033	0.79	mg/Kg-dry	1	05/01/13 14:08
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	U		110	860	µg/Kg-dry	10	04/29/13 13:38
Acenaphthene	U		98	320	µg/Kg-dry	10	04/29/13 13:38
Acenaphthylene	U		100	320	µg/Kg-dry	10	04/29/13 13:38
Anthracene	U		110	320	µg/Kg-dry	10	04/29/13 13:38
Benzo(a)anthracene	U		130	320	µg/Kg-dry	10	04/29/13 13:38
Benzo(a)pyrene	U		170	320	µg/Kg-dry	10	04/29/13 13:38
Benzo(b)fluoranthene	U		170	320	µg/Kg-dry	10	04/29/13 13:38
Benzo(g,h,i)perylene	U		250	320	µg/Kg-dry	10	04/29/13 13:38
Benzo(k)fluoranthene	U		150	320	µg/Kg-dry	10	04/29/13 13:38
Chrysene	U		120	320	µg/Kg-dry	10	04/29/13 13:38
Dibenzo(a,h)anthracene	U		180	320	µg/Kg-dry	10	04/29/13 13:38
Fluoranthene	U		130	320	µg/Kg-dry	10	04/29/13 13:38
Fluorene	U		94	320	µg/Kg-dry	10	04/29/13 13:38

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042213-DR-002
Collection Date: 04/22/13 02:45 PM

Work Order: 13041049
Lab ID: 13041049-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Indeno(1,2,3-cd)pyrene		U	200	320	µg/Kg-dry	10	04/29/13 13:38
Naphthalene		U	92	320	µg/Kg-dry	10	04/29/13 13:38
Phenanthrene		U	320	320	µg/Kg-dry	10	04/29/13 13:38
Pyrene		U	130	320	µg/Kg-dry	10	04/29/13 13:38
Surr: 2-Fluorobiphenyl	64.6			12-100	%REC	10	04/29/13 13:38
Surr: 4-Terphenyl-d14	82.2			25-137	%REC	10	04/29/13 13:38
Surr: Nitrobenzene-d5	62.8			37-107	%REC	10	04/29/13 13:38
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: AK
BatchID: 47967							
1,1,1-Trichloroethane		U	12	32	µg/Kg-dry	1	04/30/13 01:29
1,1,2,2-Tetrachloroethane		U	14	32	µg/Kg-dry	1	04/30/13 01:29
1,1,2-Trichloroethane		U	11	32	µg/Kg-dry	1	04/30/13 01:29
1,1,2-Trichlorotrifluoroethane		U	12	32	µg/Kg-dry	1	04/30/13 01:29
1,1-Dichloroethane		U	12	32	µg/Kg-dry	1	04/30/13 01:29
1,1-Dichloroethene		U	14	32	µg/Kg-dry	1	04/30/13 01:29
1,2,4-Trichlorobenzene		U	17	32	µg/Kg-dry	1	04/30/13 01:29
1,2-Dibromo-3-chloropropane		U	16	32	µg/Kg-dry	1	04/30/13 01:29
1,2-Dibromoethane		U	13	32	µg/Kg-dry	1	04/30/13 01:29
1,2-Dichlorobenzene		U	13	32	µg/Kg-dry	1	04/30/13 01:29
1,2-Dichloroethane		U	15	32	µg/Kg-dry	1	04/30/13 01:29
1,2-Dichloropropane		U	11	32	µg/Kg-dry	1	04/30/13 01:29
1,3-Dichlorobenzene		U	13	32	µg/Kg-dry	1	04/30/13 01:29
1,4-Dichlorobenzene		U	12	32	µg/Kg-dry	1	04/30/13 01:29
2-Butanone		U	80	220	µg/Kg-dry	1	04/30/13 01:29
2-Hexanone		U	7.9	32	µg/Kg-dry	1	04/30/13 01:29
4-Methyl-2-pentanone		U	11	32	µg/Kg-dry	1	04/30/13 01:29
Acetone		U	69	110	µg/Kg-dry	1	04/30/13 01:29
Benzene		U	13	32	µg/Kg-dry	1	04/30/13 01:29
Bromodichloromethane		U	7.3	32	µg/Kg-dry	1	04/30/13 01:29
Bromoform		U	6.4	32	µg/Kg-dry	1	04/30/13 01:29
Bromomethane		U	12	81	µg/Kg-dry	1	04/30/13 01:29
Carbon disulfide		U	16	32	µg/Kg-dry	1	04/30/13 01:29
Carbon tetrachloride		U	9.2	32	µg/Kg-dry	1	04/30/13 01:29
Chlorobenzene		U	13	32	µg/Kg-dry	1	04/30/13 01:29
Chloroethane		U	69	110	µg/Kg-dry	1	04/30/13 01:29
Chloroform		U	13	32	µg/Kg-dry	1	04/30/13 01:29
Chloromethane		U	18	110	µg/Kg-dry	1	04/30/13 01:29
cis-1,2-Dichloroethene		U	13	32	µg/Kg-dry	1	04/30/13 01:29
cis-1,3-Dichloropropene		U	11	32	µg/Kg-dry	1	04/30/13 01:29

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042213-DR-002
Collection Date: 04/22/13 02:45 PM

Work Order: 13041049
Lab ID: 13041049-02
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Cyclohexane	U		15	32	µg/Kg-dry	1	04/30/13 01:29
Dibromochloromethane	U		6.0	32	µg/Kg-dry	1	04/30/13 01:29
Dichlorodifluoromethane	U		15	32	µg/Kg-dry	1	04/30/13 01:29
Ethylbenzene	U		12	32	µg/Kg-dry	1	04/30/13 01:29
Isopropylbenzene	U		14	32	µg/Kg-dry	1	04/30/13 01:29
Methyl acetate	U		43	220	µg/Kg-dry	1	04/30/13 01:29
Methyl tert-butyl ether	U		14	32	µg/Kg-dry	1	04/30/13 01:29
Methylcyclohexane	U		15	32	µg/Kg-dry	1	04/30/13 01:29
Methylene chloride	U		13	32	µg/Kg-dry	1	04/30/13 01:29
Styrene	U		12	32	µg/Kg-dry	1	04/30/13 01:29
Tetrachloroethene	U		14	32	µg/Kg-dry	1	04/30/13 01:29
Toluene	19	J	12	32	µg/Kg-dry	1	04/30/13 01:29
trans-1,2-Dichloroethene	U		10	32	µg/Kg-dry	1	04/30/13 01:29
trans-1,3-Dichloropropene	U		11	32	µg/Kg-dry	1	04/30/13 01:29
Trichloroethene	U		15	32	µg/Kg-dry	1	04/30/13 01:29
Trichlorofluoromethane	U		8.9	32	µg/Kg-dry	1	04/30/13 01:29
Vinyl chloride	U		15	32	µg/Kg-dry	1	04/30/13 01:29
Xylenes, Total	U		38	97	µg/Kg-dry	1	04/30/13 01:29
Surr: 1,2-Dichloroethane-d4	81.5			70-130	%REC	1	04/30/13 01:29
Surr: 4-Bromofluorobenzene	99.8			70-130	%REC	1	04/30/13 01:29
Surr: Dibromofluoromethane	89.2			70-130	%REC	1	04/30/13 01:29
Surr: Toluene-d8	96.7			70-130	%REC	1	04/30/13 01:29
MOISTURE			A2540 G			Analyst: RLF	
<u>BatchID: R119658</u>							
Moisture	7.4		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-003
Collection Date: 04/23/13 08:20 AM

Work Order: 13041049
Lab ID: 13041049-03
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		37	350	µg/Kg-dry	1	04/29/13 15:09
Aroclor 1221	U		37	350	µg/Kg-dry	1	04/29/13 15:09
Aroclor 1232	U		37	350	µg/Kg-dry	1	04/29/13 15:09
Aroclor 1242	U		37	350	µg/Kg-dry	1	04/29/13 15:09
Aroclor 1248	U		37	350	µg/Kg-dry	1	04/29/13 15:09
Aroclor 1254	U		12	350	µg/Kg-dry	1	04/29/13 15:09
Aroclor 1260	77	J	12	350	µg/Kg-dry	1	04/29/13 15:09
Surr: Decachlorobiphenyl	80.1			40-140	%REC	1	04/29/13 15:09
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	5.1		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-004
Collection Date: 04/23/13 08:22 AM

Work Order: 13041049
Lab ID: 13041049-04
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		36	330	µg/Kg-dry	1	04/29/13 16:09
Aroclor 1221	U		36	330	µg/Kg-dry	1	04/29/13 16:09
Aroclor 1232	U		36	330	µg/Kg-dry	1	04/29/13 16:09
Aroclor 1242	U		36	330	µg/Kg-dry	1	04/29/13 16:09
Aroclor 1248	U		36	330	µg/Kg-dry	1	04/29/13 16:09
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/29/13 16:09
Aroclor 1260	1,200		11	330	µg/Kg-dry	1	04/29/13 16:09
Surr: Decachlorobiphenyl	76.1			40-140	%REC	1	04/29/13 16:09
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	5.9		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-005
Collection Date: 04/23/13 08:30 AM

Work Order: 13041049
Lab ID: 13041049-05
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		37	350	µg/Kg-dry	1	04/29/13 16:29
Aroclor 1221	U		37	350	µg/Kg-dry	1	04/29/13 16:29
Aroclor 1232	U		37	350	µg/Kg-dry	1	04/29/13 16:29
Aroclor 1242	U		37	350	µg/Kg-dry	1	04/29/13 16:29
Aroclor 1248	U		37	350	µg/Kg-dry	1	04/29/13 16:29
Aroclor 1254	U		12	350	µg/Kg-dry	1	04/29/13 16:29
Surr: Decachlorobiphenyl	70.1			40-140	%REC	1	04/29/13 16:29
<u>BatchID: 47971</u>							
Aroclor 1260	8,200		58	1,700	µg/Kg-dry	5	04/30/13 10:29
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	7.1		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-006
Collection Date: 04/23/13 09:00 AM

Work Order: 13041049
Lab ID: 13041049-06
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		35	320	µg/Kg-dry	1	04/29/13 16:49
Aroclor 1221	U		35	320	µg/Kg-dry	1	04/29/13 16:49
Aroclor 1232	U		35	320	µg/Kg-dry	1	04/29/13 16:49
Aroclor 1242	U		35	320	µg/Kg-dry	1	04/29/13 16:49
Aroclor 1248	U		35	320	µg/Kg-dry	1	04/29/13 16:49
Aroclor 1254	U		11	320	µg/Kg-dry	1	04/29/13 16:49
Aroclor 1260	U		11	320	µg/Kg-dry	1	04/29/13 16:49
Surr: Decachlorobiphenyl	74.1			40-140	%REC	1	04/29/13 16:49
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	4.0		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-007
Collection Date: 04/23/13 09:02 AM

Work Order: 13041049
Lab ID: 13041049-07
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		37	340	µg/Kg-dry	1	04/29/13 17:09
Aroclor 1221	U		37	340	µg/Kg-dry	1	04/29/13 17:09
Aroclor 1232	U		37	340	µg/Kg-dry	1	04/29/13 17:09
Aroclor 1242	U		37	340	µg/Kg-dry	1	04/29/13 17:09
Aroclor 1248	U		37	340	µg/Kg-dry	1	04/29/13 17:09
Aroclor 1254	U		12	340	µg/Kg-dry	1	04/29/13 17:09
Aroclor 1260	U		12	340	µg/Kg-dry	1	04/29/13 17:09
Surr: Decachlorobiphenyl	74.1			40-140	%REC	1	04/29/13 17:09
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	3.7		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-008
Collection Date: 04/23/13 09:05 AM

Work Order: 13041049
Lab ID: 13041049-08
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		36	330	µg/Kg-dry	1	04/29/13 17:28
Aroclor 1221	U		36	330	µg/Kg-dry	1	04/29/13 17:28
Aroclor 1232	U		36	330	µg/Kg-dry	1	04/29/13 17:28
Aroclor 1242	U		36	330	µg/Kg-dry	1	04/29/13 17:28
Aroclor 1248	U		36	330	µg/Kg-dry	1	04/29/13 17:28
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/29/13 17:28
Aroclor 1260	U		11	330	µg/Kg-dry	1	04/29/13 17:28
Surr: Decachlorobiphenyl	75.1			40-140	%REC	1	04/29/13 17:28
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	4.1		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-009
Collection Date: 04/23/13 09:07 AM

Work Order: 13041049
Lab ID: 13041049-09
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		36	330	µg/Kg-dry	1	04/29/13 17:48
Aroclor 1221	U		36	330	µg/Kg-dry	1	04/29/13 17:48
Aroclor 1232	U		36	330	µg/Kg-dry	1	04/29/13 17:48
Aroclor 1242	U		36	330	µg/Kg-dry	1	04/29/13 17:48
Aroclor 1248	U		36	330	µg/Kg-dry	1	04/29/13 17:48
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/29/13 17:48
Aroclor 1260	U		11	330	µg/Kg-dry	1	04/29/13 17:48
Surr: Decachlorobiphenyl	80.1			40-140	%REC	1	04/29/13 17:48
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	4.5		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-010
Collection Date: 04/23/13 09:10 AM

Work Order: 13041049
Lab ID: 13041049-10
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		37	340	µg/Kg-dry	1	04/29/13 18:08
Aroclor 1221	U		37	340	µg/Kg-dry	1	04/29/13 18:08
Aroclor 1232	U		37	340	µg/Kg-dry	1	04/29/13 18:08
Aroclor 1242	U		37	340	µg/Kg-dry	1	04/29/13 18:08
Aroclor 1248	U		37	340	µg/Kg-dry	1	04/29/13 18:08
Aroclor 1254	U		12	340	µg/Kg-dry	1	04/29/13 18:08
Aroclor 1260	370		12	340	µg/Kg-dry	1	04/29/13 18:08
Surr: Decachlorobiphenyl	76.1			40-140	%REC	1	04/29/13 18:08
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	4.5		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-011
Collection Date: 04/23/13 09:15 AM

Work Order: 13041049
Lab ID: 13041049-11
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		36	330	µg/Kg-dry	1	04/29/13 18:48
Aroclor 1221	U		36	330	µg/Kg-dry	1	04/29/13 18:48
Aroclor 1232	U		36	330	µg/Kg-dry	1	04/29/13 18:48
Aroclor 1242	U		36	330	µg/Kg-dry	1	04/29/13 18:48
Aroclor 1248	U		36	330	µg/Kg-dry	1	04/29/13 18:48
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/29/13 18:48
Aroclor 1260	1,100		11	330	µg/Kg-dry	1	04/29/13 18:48
Surr: Decachlorobiphenyl	73.1			40-140	%REC	1	04/29/13 18:48
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	4.4		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-012
Collection Date: 04/23/13 10:00 AM

Work Order: 13041049
Lab ID: 13041049-12
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		35	330	µg/Kg-dry	1	04/29/13 19:08
Aroclor 1221	U		35	330	µg/Kg-dry	1	04/29/13 19:08
Aroclor 1232	U		35	330	µg/Kg-dry	1	04/29/13 19:08
Aroclor 1242	U		35	330	µg/Kg-dry	1	04/29/13 19:08
Aroclor 1248	U		35	330	µg/Kg-dry	1	04/29/13 19:08
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/29/13 19:08
Aroclor 1260	U		11	330	µg/Kg-dry	1	04/29/13 19:08
Surr: Decachlorobiphenyl	77.1			40-140	%REC	1	04/29/13 19:08
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	2.6		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-013
Collection Date: 04/23/13 10:02 AM

Work Order: 13041049
Lab ID: 13041049-13
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		36	330	µg/Kg-dry	1	04/29/13 19:28
Aroclor 1221	U		36	330	µg/Kg-dry	1	04/29/13 19:28
Aroclor 1232	U		36	330	µg/Kg-dry	1	04/29/13 19:28
Aroclor 1242	U		36	330	µg/Kg-dry	1	04/29/13 19:28
Aroclor 1248	U		36	330	µg/Kg-dry	1	04/29/13 19:28
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/29/13 19:28
Aroclor 1260	U		11	330	µg/Kg-dry	1	04/29/13 19:28
Surr: Decachlorobiphenyl	68.1			40-140	%REC	1	04/29/13 19:28
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	2.2		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-014
Collection Date: 04/23/13 10:05 AM

Work Order: 13041049
Lab ID: 13041049-14
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/26/13		Analyst: JD
<u>BatchID: 47971</u>							
Aroclor 1016	U		36	330	µg/Kg-dry	1	04/29/13 19:48
Aroclor 1221	U		36	330	µg/Kg-dry	1	04/29/13 19:48
Aroclor 1232	U		36	330	µg/Kg-dry	1	04/29/13 19:48
Aroclor 1242	U		36	330	µg/Kg-dry	1	04/29/13 19:48
Aroclor 1248	U		36	330	µg/Kg-dry	1	04/29/13 19:48
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/29/13 19:48
Aroclor 1260	160	J	11	330	µg/Kg-dry	1	04/29/13 19:48
Surr: Decachlorobiphenyl	70.1			40-140	%REC	1	04/29/13 19:48
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	2.6		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-015
Collection Date: 04/23/13 10:07 AM

Work Order: 13041049
Lab ID: 13041049-15
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		36	330	µg/Kg-dry	1	04/30/13 10:49
Aroclor 1221	U		36	330	µg/Kg-dry	1	04/30/13 10:49
Aroclor 1232	U		36	330	µg/Kg-dry	1	04/30/13 10:49
Aroclor 1242	U		36	330	µg/Kg-dry	1	04/30/13 10:49
Aroclor 1248	U		36	330	µg/Kg-dry	1	04/30/13 10:49
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/30/13 10:49
Aroclor 1260	390		11	330	µg/Kg-dry	1	04/30/13 10:49
Surr: Decachlorobiphenyl	85.1			40-140	%REC	1	04/30/13 10:49
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	2.9		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-016
Collection Date: 04/23/13 10:10 AM

Work Order: 13041049
Lab ID: 13041049-16
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		37	340	µg/Kg-dry	1	04/30/13 11:09
Aroclor 1221	U		37	340	µg/Kg-dry	1	04/30/13 11:09
Aroclor 1232	U		37	340	µg/Kg-dry	1	04/30/13 11:09
Aroclor 1242	U		37	340	µg/Kg-dry	1	04/30/13 11:09
Aroclor 1248	U		37	340	µg/Kg-dry	1	04/30/13 11:09
Aroclor 1254	U		11	340	µg/Kg-dry	1	04/30/13 11:09
Aroclor 1260	440		11	340	µg/Kg-dry	1	04/30/13 11:09
Surr: Decachlorobiphenyl	88.1			40-140	%REC	1	04/30/13 11:09
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	2.8		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-017
Collection Date: 04/23/13 10:12 AM

Work Order: 13041049
Lab ID: 13041049-17
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		36	340	µg/Kg-dry	1	04/30/13 11:29
Aroclor 1221	U		36	340	µg/Kg-dry	1	04/30/13 11:29
Aroclor 1232	U		36	340	µg/Kg-dry	1	04/30/13 11:29
Aroclor 1242	U		36	340	µg/Kg-dry	1	04/30/13 11:29
Aroclor 1248	U		36	340	µg/Kg-dry	1	04/30/13 11:29
Aroclor 1254	U		11	340	µg/Kg-dry	1	04/30/13 11:29
Aroclor 1260	410		11	340	µg/Kg-dry	1	04/30/13 11:29
Surr: Decachlorobiphenyl	80.1			40-140	%REC	1	04/30/13 11:29
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	3.0		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-018
Collection Date: 04/23/13 10:15 AM

Work Order: 13041049
Lab ID: 13041049-18
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		36	330	µg/Kg-dry	1	04/30/13 11:49
Aroclor 1221	U		36	330	µg/Kg-dry	1	04/30/13 11:49
Aroclor 1232	U		36	330	µg/Kg-dry	1	04/30/13 11:49
Aroclor 1242	U		36	330	µg/Kg-dry	1	04/30/13 11:49
Aroclor 1248	U		36	330	µg/Kg-dry	1	04/30/13 11:49
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/30/13 11:49
Aroclor 1260	1,700		11	330	µg/Kg-dry	1	04/30/13 11:49
Surr: Decachlorobiphenyl	78.1			40-140	%REC	1	04/30/13 11:49
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	4.1		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-019
Collection Date: 04/23/13 10:58 AM

Work Order: 13041049
Lab ID: 13041049-19
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		36	340	µg/Kg-dry	1	04/30/13 12:09
Aroclor 1221	U		36	340	µg/Kg-dry	1	04/30/13 12:09
Aroclor 1232	U		36	340	µg/Kg-dry	1	04/30/13 12:09
Aroclor 1242	U		36	340	µg/Kg-dry	1	04/30/13 12:09
Aroclor 1248	U		36	340	µg/Kg-dry	1	04/30/13 12:09
Aroclor 1254	U		11	340	µg/Kg-dry	1	04/30/13 12:09
Aroclor 1260	75	J	11	340	µg/Kg-dry	1	04/30/13 12:09
Surr: Decachlorobiphenyl	86.1			40-140	%REC	1	04/30/13 12:09
MOISTURE							
			A2540 G				Analyst: RLF
<u>BatchID: R119658</u>							
Moisture	2.2		0.025	0.050	% of sample	1	04/25/13 16:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-020
Collection Date: 04/23/13 11:00 AM

Work Order: 13041049
Lab ID: 13041049-20
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		34	320	µg/Kg-dry	1	04/30/13 12:28
Aroclor 1221	U		34	320	µg/Kg-dry	1	04/30/13 12:28
Aroclor 1232	U		34	320	µg/Kg-dry	1	04/30/13 12:28
Aroclor 1242	U		34	320	µg/Kg-dry	1	04/30/13 12:28
Aroclor 1248	U		34	320	µg/Kg-dry	1	04/30/13 12:28
Aroclor 1254	U		11	320	µg/Kg-dry	1	04/30/13 12:28
Aroclor 1260	140	J	11	320	µg/Kg-dry	1	04/30/13 12:28
Surr: Decachlorobiphenyl	90.1			40-140	%REC	1	04/30/13 12:28
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	2.4		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-021
Collection Date: 04/23/13 11:02 AM

Work Order: 13041049
Lab ID: 13041049-21
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		35	330	µg/Kg-dry	1	04/30/13 12:48
Aroclor 1221	U		35	330	µg/Kg-dry	1	04/30/13 12:48
Aroclor 1232	U		35	330	µg/Kg-dry	1	04/30/13 12:48
Aroclor 1242	U		35	330	µg/Kg-dry	1	04/30/13 12:48
Aroclor 1248	U		35	330	µg/Kg-dry	1	04/30/13 12:48
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/30/13 12:48
Aroclor 1260	390		11	330	µg/Kg-dry	1	04/30/13 12:48
Surr: Decachlorobiphenyl	87.1			40-140	%REC	1	04/30/13 12:48
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	3.0		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-022
Collection Date: 04/23/13 11:05 AM

Work Order: 13041049
Lab ID: 13041049-22
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		35	320	µg/Kg-dry	1	04/30/13 13:28
Aroclor 1221	U		35	320	µg/Kg-dry	1	04/30/13 13:28
Aroclor 1232	U		35	320	µg/Kg-dry	1	04/30/13 13:28
Aroclor 1242	U		35	320	µg/Kg-dry	1	04/30/13 13:28
Aroclor 1248	U		35	320	µg/Kg-dry	1	04/30/13 13:28
Aroclor 1254	U		11	320	µg/Kg-dry	1	04/30/13 13:28
Aroclor 1260	1,100		11	320	µg/Kg-dry	1	04/30/13 13:28
Surr: Decachlorobiphenyl	80.1			40-140	%REC	1	04/30/13 13:28
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	3.4		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-023
Collection Date: 04/23/13 11:07 AM

Work Order: 13041049
Lab ID: 13041049-23
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		35	320	µg/Kg-dry	1	04/30/13 13:48
Aroclor 1221	U		35	320	µg/Kg-dry	1	04/30/13 13:48
Aroclor 1232	U		35	320	µg/Kg-dry	1	04/30/13 13:48
Aroclor 1242	U		35	320	µg/Kg-dry	1	04/30/13 13:48
Aroclor 1248	U		35	320	µg/Kg-dry	1	04/30/13 13:48
Aroclor 1254	U		11	320	µg/Kg-dry	1	04/30/13 13:48
Aroclor 1260	U		11	320	µg/Kg-dry	1	04/30/13 13:48
Surr: Decachlorobiphenyl	91.1			40-140	%REC	1	04/30/13 13:48
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	2.7		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-024
Collection Date: 04/23/13 11:10 AM

Work Order: 13041049
Lab ID: 13041049-24
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		36	340	µg/Kg-dry	1	04/30/13 14:08
Aroclor 1221	U		36	340	µg/Kg-dry	1	04/30/13 14:08
Aroclor 1232	U		36	340	µg/Kg-dry	1	04/30/13 14:08
Aroclor 1242	U		36	340	µg/Kg-dry	1	04/30/13 14:08
Aroclor 1248	U		36	340	µg/Kg-dry	1	04/30/13 14:08
Aroclor 1254	U		11	340	µg/Kg-dry	1	04/30/13 14:08
Aroclor 1260	U		11	340	µg/Kg-dry	1	04/30/13 14:08
Surr: Decachlorobiphenyl	91.1			40-140	%REC	1	04/30/13 14:08
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	3.1		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-025
Collection Date: 04/23/13 11:42 AM

Work Order: 13041049
Lab ID: 13041049-25
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		35	320	µg/Kg-dry	1	04/30/13 14:28
Aroclor 1221	U		35	320	µg/Kg-dry	1	04/30/13 14:28
Aroclor 1232	U		35	320	µg/Kg-dry	1	04/30/13 14:28
Aroclor 1242	U		35	320	µg/Kg-dry	1	04/30/13 14:28
Aroclor 1248	U		35	320	µg/Kg-dry	1	04/30/13 14:28
Aroclor 1254	U		11	320	µg/Kg-dry	1	04/30/13 14:28
Aroclor 1260	420		11	320	µg/Kg-dry	1	04/30/13 14:28
Surr: Decachlorobiphenyl	80.1			40-140	%REC	1	04/30/13 14:28
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	3.5		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-026
Collection Date: 04/23/13 11:45 AM

Work Order: 13041049
Lab ID: 13041049-26
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		36	330	µg/Kg-dry	1	04/30/13 15:27
Aroclor 1221	U		36	330	µg/Kg-dry	1	04/30/13 15:27
Aroclor 1232	U		36	330	µg/Kg-dry	1	04/30/13 15:27
Aroclor 1242	U		36	330	µg/Kg-dry	1	04/30/13 15:27
Aroclor 1248	U		36	330	µg/Kg-dry	1	04/30/13 15:27
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/30/13 15:27
Aroclor 1260	600		11	330	µg/Kg-dry	1	04/30/13 15:27
Surr: Decachlorobiphenyl	65.1			40-140	%REC	1	04/30/13 15:27
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	2.1		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-027
Collection Date: 04/23/13 11:47 AM

Work Order: 13041049
Lab ID: 13041049-27
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		35	320	µg/Kg-dry	1	04/30/13 15:47
Aroclor 1221	U		35	320	µg/Kg-dry	1	04/30/13 15:47
Aroclor 1232	U		35	320	µg/Kg-dry	1	04/30/13 15:47
Aroclor 1242	U		35	320	µg/Kg-dry	1	04/30/13 15:47
Aroclor 1248	U		35	320	µg/Kg-dry	1	04/30/13 15:47
Aroclor 1254	U		11	320	µg/Kg-dry	1	04/30/13 15:47
Aroclor 1260	1,500		11	320	µg/Kg-dry	1	04/30/13 15:47
Surr: Decachlorobiphenyl	66.1			40-140	%REC	1	04/30/13 15:47
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	2.8		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-028
Collection Date: 04/23/13 11:50 AM

Work Order: 13041049
Lab ID: 13041049-28
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		35	320	µg/Kg-dry	1	04/30/13 16:07
Aroclor 1221	U		35	320	µg/Kg-dry	1	04/30/13 16:07
Aroclor 1232	U		35	320	µg/Kg-dry	1	04/30/13 16:07
Aroclor 1242	U		35	320	µg/Kg-dry	1	04/30/13 16:07
Aroclor 1248	U		35	320	µg/Kg-dry	1	04/30/13 16:07
Aroclor 1254	U		11	320	µg/Kg-dry	1	04/30/13 16:07
Aroclor 1260	3,000		11	320	µg/Kg-dry	1	04/30/13 16:07
Surr: Decachlorobiphenyl	71.1			40-140	%REC	1	04/30/13 16:07
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	3.1		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-029
Collection Date: 04/23/13 11:52 AM

Work Order: 13041049
Lab ID: 13041049-29
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		35	320	µg/Kg-dry	1	04/30/13 16:27
Aroclor 1221	U		35	320	µg/Kg-dry	1	04/30/13 16:27
Aroclor 1232	U		35	320	µg/Kg-dry	1	04/30/13 16:27
Aroclor 1242	U		35	320	µg/Kg-dry	1	04/30/13 16:27
Aroclor 1248	U		35	320	µg/Kg-dry	1	04/30/13 16:27
Aroclor 1254	U		11	320	µg/Kg-dry	1	04/30/13 16:27
Aroclor 1260	2,700		11	320	µg/Kg-dry	1	04/30/13 16:27
Surr: Decachlorobiphenyl	72.1			40-140	%REC	1	04/30/13 16:27
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	3.8		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-030
Collection Date: 04/23/13 11:55 AM

Work Order: 13041049
Lab ID: 13041049-30
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		37	340	µg/Kg-dry	1	04/30/13 16:47
Aroclor 1221	U		37	340	µg/Kg-dry	1	04/30/13 16:47
Aroclor 1232	U		37	340	µg/Kg-dry	1	04/30/13 16:47
Aroclor 1242	U		37	340	µg/Kg-dry	1	04/30/13 16:47
Aroclor 1248	U		37	340	µg/Kg-dry	1	04/30/13 16:47
Aroclor 1254	U		11	340	µg/Kg-dry	1	04/30/13 16:47
Aroclor 1260	U		11	340	µg/Kg-dry	1	04/30/13 16:47
Surr: Decachlorobiphenyl	74.1			40-140	%REC	1	04/30/13 16:47
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	3.5		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-031
Collection Date: 04/23/13 01:20 PM

Work Order: 13041049
Lab ID: 13041049-31
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
BatchID: 48007							
Aroclor 1016	U		36	340	µg/Kg-dry	1	04/30/13 17:07
Aroclor 1221	U		36	340	µg/Kg-dry	1	04/30/13 17:07
Aroclor 1232	U		36	340	µg/Kg-dry	1	04/30/13 17:07
Aroclor 1242	U		36	340	µg/Kg-dry	1	04/30/13 17:07
Aroclor 1248	U		36	340	µg/Kg-dry	1	04/30/13 17:07
Aroclor 1254	U		11	340	µg/Kg-dry	1	04/30/13 17:07
Aroclor 1260	580		11	340	µg/Kg-dry	1	04/30/13 17:07
Surr: Decachlorobiphenyl	69.1			40-140	%REC	1	04/30/13 17:07
MOISTURE			A2540 G				Analyst: DC
BatchID: R119732							
Moisture	2.9		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-032
Collection Date: 04/23/13 01:22 PM

Work Order: 13041049
Lab ID: 13041049-32
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		35	330	µg/Kg-dry	1	04/30/13 17:47
Aroclor 1221	U		35	330	µg/Kg-dry	1	04/30/13 17:47
Aroclor 1232	U		35	330	µg/Kg-dry	1	04/30/13 17:47
Aroclor 1242	U		35	330	µg/Kg-dry	1	04/30/13 17:47
Aroclor 1248	U		35	330	µg/Kg-dry	1	04/30/13 17:47
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/30/13 17:47
Aroclor 1260	2,300		11	330	µg/Kg-dry	1	04/30/13 17:47
Surr: Decachlorobiphenyl	72.1			40-140	%REC	1	04/30/13 17:47
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	2.8		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-033
Collection Date: 04/23/13 01:25 PM

Work Order: 13041049
Lab ID: 13041049-33
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/29/13		Analyst: JD
<u>BatchID: 48007</u>							
Aroclor 1016	U		35	330	µg/Kg-dry	1	04/30/13 18:06
Aroclor 1221	U		35	330	µg/Kg-dry	1	04/30/13 18:06
Aroclor 1232	U		35	330	µg/Kg-dry	1	04/30/13 18:06
Aroclor 1242	U		35	330	µg/Kg-dry	1	04/30/13 18:06
Aroclor 1248	U		35	330	µg/Kg-dry	1	04/30/13 18:06
Aroclor 1254	U		11	330	µg/Kg-dry	1	04/30/13 18:06
Aroclor 1260	U		11	330	µg/Kg-dry	1	04/30/13 18:06
Surr: Decachlorobiphenyl	76.1			40-140	%REC	1	04/30/13 18:06
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	4.3		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-034
Collection Date: 04/23/13 01:30 PM

Work Order: 13041049
Lab ID: 13041049-34
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
BatchID: 48039							
Aroclor 1016	U		35	330	µg/Kg-dry	1	05/01/13 12:57
Aroclor 1221	U		35	330	µg/Kg-dry	1	05/01/13 12:57
Aroclor 1232	U		35	330	µg/Kg-dry	1	05/01/13 12:57
Aroclor 1242	U		35	330	µg/Kg-dry	1	05/01/13 12:57
Aroclor 1248	U		35	330	µg/Kg-dry	1	05/01/13 12:57
Aroclor 1254	U		11	330	µg/Kg-dry	1	05/01/13 12:57
Aroclor 1260	U		11	330	µg/Kg-dry	1	05/01/13 12:57
Surr: Decachlorobiphenyl	79.1			40-140	%REC	1	05/01/13 12:57
MOISTURE			A2540 G				Analyst: DC
BatchID: R119732							
Moisture	3.3		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-035
Collection Date: 04/23/13 01:32 PM

Work Order: 13041049
Lab ID: 13041049-35
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		35	330	µg/Kg-dry	1	05/01/13 13:16
Aroclor 1221	U		35	330	µg/Kg-dry	1	05/01/13 13:16
Aroclor 1232	U		35	330	µg/Kg-dry	1	05/01/13 13:16
Aroclor 1242	U		35	330	µg/Kg-dry	1	05/01/13 13:16
Aroclor 1248	U		35	330	µg/Kg-dry	1	05/01/13 13:16
Aroclor 1254	U		11	330	µg/Kg-dry	1	05/01/13 13:16
Aroclor 1260	U		11	330	µg/Kg-dry	1	05/01/13 13:16
Surr: Decachlorobiphenyl	77.1			40-140	%REC	1	05/01/13 13:16
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119732</u>							
Moisture	3.4		0.025	0.050	% of sample	1	04/26/13 13:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-036
Collection Date: 04/23/13 01:37 PM

Work Order: 13041049
Lab ID: 13041049-36
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		36	340	µg/Kg-dry	1	05/01/13 13:36
Aroclor 1221	U		36	340	µg/Kg-dry	1	05/01/13 13:36
Aroclor 1232	U		36	340	µg/Kg-dry	1	05/01/13 13:36
Aroclor 1242	U		36	340	µg/Kg-dry	1	05/01/13 13:36
Aroclor 1248	U		36	340	µg/Kg-dry	1	05/01/13 13:36
Aroclor 1254	U		11	340	µg/Kg-dry	1	05/01/13 13:36
Aroclor 1260	U		11	340	µg/Kg-dry	1	05/01/13 13:36
Surr: Decachlorobiphenyl	88.1			40-140	%REC	1	05/01/13 13:36
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119733</u>							
Moisture	2.6		0.025	0.050	% of sample	1	04/26/13 15:30

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-037
Collection Date: 04/23/13 01:40 PM

Work Order: 13041049
Lab ID: 13041049-37
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		36	330	µg/Kg-dry	1	05/01/13 13:56
Aroclor 1221	U		36	330	µg/Kg-dry	1	05/01/13 13:56
Aroclor 1232	U		36	330	µg/Kg-dry	1	05/01/13 13:56
Aroclor 1242	U		36	330	µg/Kg-dry	1	05/01/13 13:56
Aroclor 1248	U		36	330	µg/Kg-dry	1	05/01/13 13:56
Aroclor 1254	U		11	330	µg/Kg-dry	1	05/01/13 13:56
Aroclor 1260	U		11	330	µg/Kg-dry	1	05/01/13 13:56
Surr: Decachlorobiphenyl	89.1			40-140	%REC	1	05/01/13 13:56
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119733</u>							
Moisture	2.3		0.025	0.050	% of sample	1	04/26/13 15:30

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-038
Collection Date: 04/23/13 02:22 PM

Work Order: 13041049
Lab ID: 13041049-38
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		36	330	µg/Kg-dry	1	05/01/13 14:36
Aroclor 1221	U		36	330	µg/Kg-dry	1	05/01/13 14:36
Aroclor 1232	U		36	330	µg/Kg-dry	1	05/01/13 14:36
Aroclor 1242	U		36	330	µg/Kg-dry	1	05/01/13 14:36
Aroclor 1248	U		36	330	µg/Kg-dry	1	05/01/13 14:36
Aroclor 1254	U		11	330	µg/Kg-dry	1	05/01/13 14:36
Aroclor 1260	580		11	330	µg/Kg-dry	1	05/01/13 14:36
Surr: Decachlorobiphenyl	82.1			40-140	%REC	1	05/01/13 14:36
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119733</u>							
Moisture	4.0		0.025	0.050	% of sample	1	04/26/13 15:30

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-039
Collection Date: 04/23/13 02:25 PM

Work Order: 13041049
Lab ID: 13041049-39
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		35	330	µg/Kg-dry	1	05/01/13 14:56
Aroclor 1221	U		35	330	µg/Kg-dry	1	05/01/13 14:56
Aroclor 1232	U		35	330	µg/Kg-dry	1	05/01/13 14:56
Aroclor 1242	U		35	330	µg/Kg-dry	1	05/01/13 14:56
Aroclor 1248	U		35	330	µg/Kg-dry	1	05/01/13 14:56
Aroclor 1254	U		11	330	µg/Kg-dry	1	05/01/13 14:56
Aroclor 1260	U		11	330	µg/Kg-dry	1	05/01/13 14:56
Surr: Decachlorobiphenyl	82.1			40-140	%REC	1	05/01/13 14:56
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119733</u>							
Moisture	5.1		0.025	0.050	% of sample	1	04/26/13 15:30

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-040
Collection Date: 04/23/13 02:30 PM

Work Order: 13041049
Lab ID: 13041049-40
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		37	340	µg/Kg-dry	1	05/01/13 15:16
Aroclor 1221	U		37	340	µg/Kg-dry	1	05/01/13 15:16
Aroclor 1232	U		37	340	µg/Kg-dry	1	05/01/13 15:16
Aroclor 1242	U		37	340	µg/Kg-dry	1	05/01/13 15:16
Aroclor 1248	U		37	340	µg/Kg-dry	1	05/01/13 15:16
Aroclor 1254	U		12	340	µg/Kg-dry	1	05/01/13 15:16
Aroclor 1260	210	J	12	340	µg/Kg-dry	1	05/01/13 15:16
Surr: Decachlorobiphenyl	81.1			40-140	%REC	1	05/01/13 15:16
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119733</u>							
Moisture	3.7		0.025	0.050	% of sample	1	04/26/13 15:30

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-041
Collection Date: 04/23/13 03:10 PM

Work Order: 13041049
Lab ID: 13041049-41
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		35	330	µg/Kg-dry	1	05/01/13 15:35
Aroclor 1221	U		35	330	µg/Kg-dry	1	05/01/13 15:35
Aroclor 1232	U		35	330	µg/Kg-dry	1	05/01/13 15:35
Aroclor 1242	U		35	330	µg/Kg-dry	1	05/01/13 15:35
Aroclor 1248	U		35	330	µg/Kg-dry	1	05/01/13 15:35
Aroclor 1254	U		11	330	µg/Kg-dry	1	05/01/13 15:35
Aroclor 1260	940		11	330	µg/Kg-dry	1	05/01/13 15:35
Surr: Decachlorobiphenyl	84.1			40-140	%REC	1	05/01/13 15:35
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119733</u>							
Moisture	3.5		0.025	0.050	% of sample	1	04/26/13 15:30

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-042
Collection Date: 04/23/13 03:15 PM

Work Order: 13041049
Lab ID: 13041049-42
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		37	340	µg/Kg-dry	1	05/01/13 16:35
Aroclor 1221	U		37	340	µg/Kg-dry	1	05/01/13 16:35
Aroclor 1232	U		37	340	µg/Kg-dry	1	05/01/13 16:35
Aroclor 1242	U		37	340	µg/Kg-dry	1	05/01/13 16:35
Aroclor 1248	U		37	340	µg/Kg-dry	1	05/01/13 16:35
Aroclor 1254	U		11	340	µg/Kg-dry	1	05/01/13 16:35
Aroclor 1260	U		11	340	µg/Kg-dry	1	05/01/13 16:35
Surr: Decachlorobiphenyl	86.1			40-140	%REC	1	05/01/13 16:35
MOISTURE							
			A2540 G				Analyst: DC
<u>BatchID: R119733</u>							
Moisture	4.6		0.025	0.050	% of sample	1	04/26/13 15:30

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-043
Collection Date: 04/23/13 03:50 PM

Work Order: 13041049
Lab ID: 13041049-43
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep: SW3541 / 4/26/13		Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	U		100	850	µg/Kg-dry	10	04/29/13 14:10
Acenaphthene	860		96	320	µg/Kg-dry	10	04/29/13 14:10
Acenaphthylene	U		100	320	µg/Kg-dry	10	04/29/13 14:10
Anthracene	1,900		110	320	µg/Kg-dry	10	04/29/13 14:10
Benzo(a)anthracene	4,000		130	320	µg/Kg-dry	10	04/29/13 14:10
Benzo(a)pyrene	4,400		160	320	µg/Kg-dry	10	04/29/13 14:10
Benzo(b)fluoranthene	5,000		170	320	µg/Kg-dry	10	04/29/13 14:10
Benzo(g,h,i)perylene	2,000		250	320	µg/Kg-dry	10	04/29/13 14:10
Benzo(k)fluoranthene	2,700		140	320	µg/Kg-dry	10	04/29/13 14:10
Chrysene	4,600		120	320	µg/Kg-dry	10	04/29/13 14:10
Dibenzo(a,h)anthracene	U		180	320	µg/Kg-dry	10	04/29/13 14:10
Fluoranthene	11,000		130	320	µg/Kg-dry	10	04/29/13 14:10
Fluorene	750		92	320	µg/Kg-dry	10	04/29/13 14:10
Indeno(1,2,3-cd)pyrene	1,800		200	320	µg/Kg-dry	10	04/29/13 14:10
Naphthalene	240	J	90	320	µg/Kg-dry	10	04/29/13 14:10
Phenanthrene	7,600		320	320	µg/Kg-dry	10	04/29/13 14:10
Pyrene	10,000		130	320	µg/Kg-dry	10	04/29/13 14:10
Surr: 2-Fluorobiphenyl	64.4			12-100	%REC	10	04/29/13 14:10
Surr: 4-Terphenyl-d14	89.4			25-137	%REC	10	04/29/13 14:10
Surr: Nitrobenzene-d5	60.0			37-107	%REC	10	04/29/13 14:10
MOISTURE			A2540 G				Analyst: DC
<u>BatchID: R119733</u>							
Moisture	7.2		0.025	0.050	% of sample	1	04/26/13 15:30

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042313-DR-044
Collection Date: 04/23/13 04:00 PM

Work Order: 13041049
Lab ID: 13041049-44
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
SEMI-VOLATILE ORGANIC COMPOUNDS			SW8270		Prep: SW3541 / 4/26/13	Analyst: HL	
<u>BatchID: 47970</u>							
2-Methylnaphthalene	U		10	82	µg/Kg-dry	1	04/29/13 20:06
Acenaphthene	U		9.4	31	µg/Kg-dry	1	04/29/13 20:06
Acenaphthylene	U		9.7	31	µg/Kg-dry	1	04/29/13 20:06
Anthracene	U		10	31	µg/Kg-dry	1	04/29/13 20:06
Benzo(a)anthracene	U		12	31	µg/Kg-dry	1	04/29/13 20:06
Benzo(a)pyrene	U		16	31	µg/Kg-dry	1	04/29/13 20:06
Benzo(b)fluoranthene	U		17	31	µg/Kg-dry	1	04/29/13 20:06
Benzo(g,h,i)perylene	U		24	31	µg/Kg-dry	1	04/29/13 20:06
Benzo(k)fluoranthene	U		14	31	µg/Kg-dry	1	04/29/13 20:06
Chrysene	U		12	31	µg/Kg-dry	1	04/29/13 20:06
Dibenzo(a,h)anthracene	U		18	31	µg/Kg-dry	1	04/29/13 20:06
Fluoranthene	U		12	31	µg/Kg-dry	1	04/29/13 20:06
Fluorene	U		9.0	31	µg/Kg-dry	1	04/29/13 20:06
Indeno(1,2,3-cd)pyrene	U		19	31	µg/Kg-dry	1	04/29/13 20:06
Naphthalene	U		8.8	31	µg/Kg-dry	1	04/29/13 20:06
Phenanthrene	U		31	31	µg/Kg-dry	1	04/29/13 20:06
Pyrene	U		13	31	µg/Kg-dry	1	04/29/13 20:06
Surr: 2-Fluorobiphenyl	79.1			12-100	%REC	1	04/29/13 20:06
Surr: 4-Terphenyl-d14	117			25-137	%REC	1	04/29/13 20:06
Surr: Nitrobenzene-d5	64.7			37-107	%REC	1	04/29/13 20:06
MOISTURE			A2540 G			Analyst: DC	
<u>BatchID: R119864</u>							
Moisture	4.0		0.025	0.050	% of sample	1	04/29/13 13:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-057
Collection Date: 04/24/13 11:00 AM

Work Order: 13041049
Lab ID: 13041049-45
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		39	360	µg/Kg-dry	1	05/01/13 16:55
Aroclor 1221	U		39	360	µg/Kg-dry	1	05/01/13 16:55
Aroclor 1232	U		39	360	µg/Kg-dry	1	05/01/13 16:55
Aroclor 1242	U		39	360	µg/Kg-dry	1	05/01/13 16:55
Aroclor 1248	U		39	360	µg/Kg-dry	1	05/01/13 16:55
Aroclor 1254	U		12	360	µg/Kg-dry	1	05/01/13 16:55
Aroclor 1260	79	J	12	360	µg/Kg-dry	1	05/01/13 16:55
Surr: Decachlorobiphenyl	58.1			40-140	%REC	1	05/01/13 16:55
MERCURY BY CVAA							
			SW7471		Prep: SW7471 / 4/30/13		Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.023	J	0.00079	0.039	mg/Kg-dry	1	04/30/13 12:34
METALS BY ICP-MS							
			SW6020A		Prep: SW3050B / 4/30/13		Analyst: ML
<u>BatchID: 48042</u>							
Antimony	0.69		0.0017	0.43	mg/Kg-dry	1	05/01/13 16:14
Arsenic	1.4		0.059	0.43	mg/Kg-dry	1	05/01/13 16:14
Barium	110		0.012	0.43	mg/Kg-dry	1	05/01/13 16:14
Beryllium	0.11	J	0.0035	0.17	mg/Kg-dry	1	05/02/13 11:03
Cadmium	0.29		0.0017	0.17	mg/Kg-dry	1	05/01/13 16:14
Chromium	12		0.071	0.43	mg/Kg-dry	1	05/02/13 11:03
Cobalt	2.4		0.0017	0.43	mg/Kg-dry	1	05/02/13 11:03
Copper	12		0.085	0.43	mg/Kg-dry	1	05/02/13 11:03
Iron	4,900		1.4	7.0	mg/Kg-dry	1	05/01/13 16:14
Lead	150		0.0017	0.43	mg/Kg-dry	1	05/01/13 16:14
Manganese	140		0.038	0.43	mg/Kg-dry	1	05/01/13 16:14
Molybdenum	1.6		0.019	0.43	mg/Kg-dry	1	05/01/13 16:14
Nickel	8.7		0.043	0.43	mg/Kg-dry	1	05/02/13 11:03
Selenium	0.25	J	0.056	0.43	mg/Kg-dry	1	05/01/13 16:14
Silver	0.061	J	0.0017	0.43	mg/Kg-dry	1	05/01/13 16:14
Thallium	U		0.010	0.43	mg/Kg-dry	1	05/01/13 16:14
Vanadium	8.7		0.026	0.43	mg/Kg-dry	1	05/02/13 11:03
Zinc	42		0.036	0.87	mg/Kg-dry	1	05/01/13 16:14
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270		Prep: SW3541 / 4/26/13		Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	380	J	110	890	µg/Kg-dry	10	04/29/13 14:42
Acenaphthene	530		100	330	µg/Kg-dry	10	04/29/13 14:42
Acenaphthylene	U		110	330	µg/Kg-dry	10	04/29/13 14:42

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-057
Collection Date: 04/24/13 11:00 AM

Work Order: 13041049
Lab ID: 13041049-45
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	880		110	330	µg/Kg-dry	10	04/29/13 14:42
Benzo(a)anthracene	2,100		140	330	µg/Kg-dry	10	04/29/13 14:42
Benzo(a)pyrene	1,600		170	330	µg/Kg-dry	10	04/29/13 14:42
Benzo(b)fluoranthene	2,400		180	330	µg/Kg-dry	10	04/29/13 14:42
Benzo(g,h,i)perylene	640		260	330	µg/Kg-dry	10	04/29/13 14:42
Benzo(k)fluoranthene	1,100		150	330	µg/Kg-dry	10	04/29/13 14:42
Chrysene	2,200		130	330	µg/Kg-dry	10	04/29/13 14:42
Dibenzo(a,h)anthracene	210	J	190	330	µg/Kg-dry	10	04/29/13 14:42
Fluoranthene	5,300		130	330	µg/Kg-dry	10	04/29/13 14:42
Fluorene	280	J	97	330	µg/Kg-dry	10	04/29/13 14:42
Indeno(1,2,3-cd)pyrene	620		210	330	µg/Kg-dry	10	04/29/13 14:42
Naphthalene	U		95	330	µg/Kg-dry	10	04/29/13 14:42
Phenanthrene	4,900		330	330	µg/Kg-dry	10	04/29/13 14:42
Pyrene	4,700		140	330	µg/Kg-dry	10	04/29/13 14:42
Surr: 2-Fluorobiphenyl	61.2			12-100	%REC	10	04/29/13 14:42
Surr: 4-Terphenyl-d14	83.0			25-137	%REC	10	04/29/13 14:42
Surr: Nitrobenzene-d5	54.2			37-107	%REC	10	04/29/13 14:42

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: AK

BatchID: 47967

1,1,1-Trichloroethane	U	13	33	µg/Kg-dry	1	04/30/13 01:53
1,1,2,2-Tetrachloroethane	U	15	33	µg/Kg-dry	1	04/30/13 01:53
1,1,2-Trichloroethane	U	12	33	µg/Kg-dry	1	04/30/13 01:53
1,1,2-Trichlorotrifluoroethane	U	12	33	µg/Kg-dry	1	04/30/13 01:53
1,1-Dichloroethane	U	12	33	µg/Kg-dry	1	04/30/13 01:53
1,1-Dichloroethene	U	14	33	µg/Kg-dry	1	04/30/13 01:53
1,2,4-Trichlorobenzene	U	17	33	µg/Kg-dry	1	04/30/13 01:53
1,2-Dibromo-3-chloropropane	U	16	33	µg/Kg-dry	1	04/30/13 01:53
1,2-Dibromoethane	U	13	33	µg/Kg-dry	1	04/30/13 01:53
1,2-Dichlorobenzene	U	13	33	µg/Kg-dry	1	04/30/13 01:53
1,2-Dichloroethane	U	16	33	µg/Kg-dry	1	04/30/13 01:53
1,2-Dichloropropane	U	11	33	µg/Kg-dry	1	04/30/13 01:53
1,3-Dichlorobenzene	U	13	33	µg/Kg-dry	1	04/30/13 01:53
1,4-Dichlorobenzene	U	13	33	µg/Kg-dry	1	04/30/13 01:53
2-Butanone	U	82	220	µg/Kg-dry	1	04/30/13 01:53
2-Hexanone	U	8.2	33	µg/Kg-dry	1	04/30/13 01:53
4-Methyl-2-pentanone	U	11	33	µg/Kg-dry	1	04/30/13 01:53
Acetone	U	71	110	µg/Kg-dry	1	04/30/13 01:53
Benzene	U	13	33	µg/Kg-dry	1	04/30/13 01:53
Bromodichloromethane	U	7.5	33	µg/Kg-dry	1	04/30/13 01:53

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-057
Collection Date: 04/24/13 11:00 AM

Work Order: 13041049
Lab ID: 13041049-45
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		6.6	33	µg/Kg-dry	1	04/30/13 01:53
Bromomethane	U		13	83	µg/Kg-dry	1	04/30/13 01:53
Carbon disulfide	U		17	33	µg/Kg-dry	1	04/30/13 01:53
Carbon tetrachloride	U		9.5	33	µg/Kg-dry	1	04/30/13 01:53
Chlorobenzene	U		14	33	µg/Kg-dry	1	04/30/13 01:53
Chloroethane	U		71	110	µg/Kg-dry	1	04/30/13 01:53
Chloroform	U		14	33	µg/Kg-dry	1	04/30/13 01:53
Chloromethane	U		19	110	µg/Kg-dry	1	04/30/13 01:53
cis-1,2-Dichloroethene	U		14	33	µg/Kg-dry	1	04/30/13 01:53
cis-1,3-Dichloropropene	U		11	33	µg/Kg-dry	1	04/30/13 01:53
Cyclohexane	U		15	33	µg/Kg-dry	1	04/30/13 01:53
Dibromochloromethane	U		6.2	33	µg/Kg-dry	1	04/30/13 01:53
Dichlorodifluoromethane	U		15	33	µg/Kg-dry	1	04/30/13 01:53
Ethylbenzene	U		12	33	µg/Kg-dry	1	04/30/13 01:53
Isopropylbenzene	U		14	33	µg/Kg-dry	1	04/30/13 01:53
Methyl acetate	U		45	220	µg/Kg-dry	1	04/30/13 01:53
Methyl tert-butyl ether	U		14	33	µg/Kg-dry	1	04/30/13 01:53
Methylcyclohexane	U		15	33	µg/Kg-dry	1	04/30/13 01:53
Methylene chloride	U		13	33	µg/Kg-dry	1	04/30/13 01:53
Styrene	U		12	33	µg/Kg-dry	1	04/30/13 01:53
Tetrachloroethene	U		15	33	µg/Kg-dry	1	04/30/13 01:53
Toluene	U		13	33	µg/Kg-dry	1	04/30/13 01:53
trans-1,2-Dichloroethene	U		10	33	µg/Kg-dry	1	04/30/13 01:53
trans-1,3-Dichloropropene	U		11	33	µg/Kg-dry	1	04/30/13 01:53
Trichloroethene	U		16	33	µg/Kg-dry	1	04/30/13 01:53
Trichlorofluoromethane	U		9.2	33	µg/Kg-dry	1	04/30/13 01:53
Vinyl chloride	U		15	33	µg/Kg-dry	1	04/30/13 01:53
Xylenes, Total	U		39	100	µg/Kg-dry	1	04/30/13 01:53
Surr: 1,2-Dichloroethane-d4	79.6			70-130	%REC	1	04/30/13 01:53
Surr: 4-Bromofluorobenzene	99.6			70-130	%REC	1	04/30/13 01:53
Surr: Dibromofluoromethane	89.1			70-130	%REC	1	04/30/13 01:53
Surr: Toluene-d8	94.4			70-130	%REC	1	04/30/13 01:53

MOISTURE

A2540 G

Analyst: DC

BatchID: R119865

Moisture	10	0.025	0.050	% of sample	1	04/29/13 13:40

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-058
Collection Date: 04/24/13 11:02 AM

Work Order: 13041049
Lab ID: 13041049-46
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		37	340	µg/Kg-dry	1	05/01/13 17:15
Aroclor 1221	U		37	340	µg/Kg-dry	1	05/01/13 17:15
Aroclor 1232	U		37	340	µg/Kg-dry	1	05/01/13 17:15
Aroclor 1242	U		37	340	µg/Kg-dry	1	05/01/13 17:15
Aroclor 1248	U		37	340	µg/Kg-dry	1	05/01/13 17:15
Aroclor 1254	U		11	340	µg/Kg-dry	1	05/01/13 17:15
Aroclor 1260	U		11	340	µg/Kg-dry	1	05/01/13 17:15
Surr: Decachlorobiphenyl	75.1			40-140	%REC	1	05/01/13 17:15
MERCURY BY CVAA							
			SW7471		Prep: SW7471 / 4/30/13		Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.0047	J	0.00073	0.037	mg/Kg-dry	1	04/30/13 12:36
METALS BY ICP-MS							
			SW6020A		Prep: SW3050B / 4/30/13		Analyst: ML
<u>BatchID: 48042</u>							
Antimony	5.9		0.0014	0.36	mg/Kg-dry	1	05/01/13 19:00
Arsenic	3.1		0.049	0.36	mg/Kg-dry	1	05/01/13 19:00
Beryllium	0.085	J	0.0029	0.14	mg/Kg-dry	1	05/01/13 19:00
Cadmium	14		0.0014	0.14	mg/Kg-dry	1	05/01/13 19:00
Cobalt	18		0.0014	0.36	mg/Kg-dry	1	05/01/13 19:00
Copper	120		0.071	0.36	mg/Kg-dry	1	05/01/13 19:00
Selenium	0.17	J	0.046	0.36	mg/Kg-dry	1	05/01/13 19:00
Silver	3.0		0.0014	0.36	mg/Kg-dry	1	05/01/13 19:00
Thallium	U		0.0087	0.36	mg/Kg-dry	1	05/01/13 19:00
Vanadium	U		0.022	0.36	mg/Kg-dry	1	05/01/13 19:00
<u>BatchID: 48042</u>							
Barium	150		1.0	36	mg/Kg-dry	100	05/01/13 18:12
Chromium	200		5.9	36	mg/Kg-dry	100	05/01/13 18:12
Iron	20,000		120	580	mg/Kg-dry	100	05/01/13 18:12
Manganese	2,300		3.2	36	mg/Kg-dry	100	05/01/13 18:12
Molybdenum	520		1.6	36	mg/Kg-dry	100	05/01/13 18:12
Nickel	200		3.6	36	mg/Kg-dry	100	05/01/13 18:12
Zinc	190		3.0	72	mg/Kg-dry	100	05/01/13 18:12
<u>BatchID: 48042</u>							
Lead	440		1.4	360	mg/Kg-dry	1000	05/02/13 11:09
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270		Prep: SW3541 / 4/26/13		Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	20	J	10	84	µg/Kg-dry	1	04/29/13 21:37

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-058
Collection Date: 04/24/13 11:02 AM

Work Order: 13041049
Lab ID: 13041049-46
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthene	U		9.6	32	µg/Kg-dry	1	04/29/13 21:37
Acenaphthylene	U		9.9	32	µg/Kg-dry	1	04/29/13 21:37
Anthracene	20	J	11	32	µg/Kg-dry	1	04/29/13 21:37
Benzo(a)anthracene	90		13	32	µg/Kg-dry	1	04/29/13 21:37
Benzo(a)pyrene	64		16	32	µg/Kg-dry	1	04/29/13 21:37
Benzo(b)fluoranthene	260		17	32	µg/Kg-dry	1	04/29/13 21:37
Benzo(g,h,i)perylene	58		25	32	µg/Kg-dry	1	04/29/13 21:37
Benzo(k)fluoranthene	91		14	32	µg/Kg-dry	1	04/29/13 21:37
Chrysene	200		12	32	µg/Kg-dry	1	04/29/13 21:37
Dibenzo(a,h)anthracene	19	J	18	32	µg/Kg-dry	1	04/29/13 21:37
Fluoranthene	210		12	32	µg/Kg-dry	1	04/29/13 21:37
Fluorene	U		9.2	32	µg/Kg-dry	1	04/29/13 21:37
Indeno(1,2,3-cd)pyrene	37		20	32	µg/Kg-dry	1	04/29/13 21:37
Naphthalene	120		9.0	32	µg/Kg-dry	1	04/29/13 21:37
Phenanthrene	270		32	32	µg/Kg-dry	1	04/29/13 21:37
Pyrene	140		13	32	µg/Kg-dry	1	04/29/13 21:37
Surr: 2-Fluorobiphenyl	67.5			12-100	%REC	1	04/29/13 21:37
Surr: 4-Terphenyl-d14	110			25-137	%REC	1	04/29/13 21:37
Surr: Nitrobenzene-d5	62.2			37-107	%REC	1	04/29/13 21:37
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: AK
BatchID: 47967							
1,1,1-Trichloroethane	U		14	37	µg/Kg-dry	1	04/30/13 02:17
1,1,2,2-Tetrachloroethane	U		16	37	µg/Kg-dry	1	04/30/13 02:17
1,1,2-Trichloroethane	U		13	37	µg/Kg-dry	1	04/30/13 02:17
1,1,2-Trichlorotrifluoroethane	U		14	37	µg/Kg-dry	1	04/30/13 02:17
1,1-Dichloroethane	U		14	37	µg/Kg-dry	1	04/30/13 02:17
1,1-Dichloroethene	U		16	37	µg/Kg-dry	1	04/30/13 02:17
1,2,4-Trichlorobenzene	U		19	37	µg/Kg-dry	1	04/30/13 02:17
1,2-Dibromo-3-chloropropane	U		18	37	µg/Kg-dry	1	04/30/13 02:17
1,2-Dibromoethane	U		15	37	µg/Kg-dry	1	04/30/13 02:17
1,2-Dichlorobenzene	U		15	37	µg/Kg-dry	1	04/30/13 02:17
1,2-Dichloroethane	U		18	37	µg/Kg-dry	1	04/30/13 02:17
1,2-Dichloropropane	U		12	37	µg/Kg-dry	1	04/30/13 02:17
1,3-Dichlorobenzene	U		15	37	µg/Kg-dry	1	04/30/13 02:17
1,4-Dichlorobenzene	U		14	37	µg/Kg-dry	1	04/30/13 02:17
2-Butanone	U		92	250	µg/Kg-dry	1	04/30/13 02:17
2-Hexanone	U		9.1	37	µg/Kg-dry	1	04/30/13 02:17
4-Methyl-2-pentanone	U		13	37	µg/Kg-dry	1	04/30/13 02:17
Acetone	240		79	120	µg/Kg-dry	1	04/30/13 02:17

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-058
Collection Date: 04/24/13 11:02 AM

Work Order: 13041049
Lab ID: 13041049-46
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		15	37	µg/Kg-dry	1	04/30/13 02:17
Bromodichloromethane	U		8.3	37	µg/Kg-dry	1	04/30/13 02:17
Bromoform	U		7.3	37	µg/Kg-dry	1	04/30/13 02:17
Bromomethane	U		14	93	µg/Kg-dry	1	04/30/13 02:17
Carbon disulfide	U		18	37	µg/Kg-dry	1	04/30/13 02:17
Carbon tetrachloride	U		11	37	µg/Kg-dry	1	04/30/13 02:17
Chlorobenzene	U		15	37	µg/Kg-dry	1	04/30/13 02:17
Chloroethane	U		79	120	µg/Kg-dry	1	04/30/13 02:17
Chloroform	U		15	37	µg/Kg-dry	1	04/30/13 02:17
Chloromethane	U		21	120	µg/Kg-dry	1	04/30/13 02:17
cis-1,2-Dichloroethene	U		15	37	µg/Kg-dry	1	04/30/13 02:17
cis-1,3-Dichloropropene	U		13	37	µg/Kg-dry	1	04/30/13 02:17
Cyclohexane	U		17	37	µg/Kg-dry	1	04/30/13 02:17
Dibromochloromethane	U		6.9	37	µg/Kg-dry	1	04/30/13 02:17
Dichlorodifluoromethane	U		17	37	µg/Kg-dry	1	04/30/13 02:17
Ethylbenzene	U		14	37	µg/Kg-dry	1	04/30/13 02:17
Isopropylbenzene	U		16	37	µg/Kg-dry	1	04/30/13 02:17
Methyl acetate	U		50	250	µg/Kg-dry	1	04/30/13 02:17
Methyl tert-butyl ether	U		16	37	µg/Kg-dry	1	04/30/13 02:17
Methylcyclohexane	U		17	37	µg/Kg-dry	1	04/30/13 02:17
Methylene chloride	U		15	37	µg/Kg-dry	1	04/30/13 02:17
Styrene	U		14	37	µg/Kg-dry	1	04/30/13 02:17
Tetrachloroethene	U		17	37	µg/Kg-dry	1	04/30/13 02:17
Toluene	37		14	37	µg/Kg-dry	1	04/30/13 02:17
trans-1,2-Dichloroethene	U		11	37	µg/Kg-dry	1	04/30/13 02:17
trans-1,3-Dichloropropene	U		12	37	µg/Kg-dry	1	04/30/13 02:17
Trichloroethene	6,100		17	37	µg/Kg-dry	1	04/30/13 02:17
Trichlorofluoromethane	U		10	37	µg/Kg-dry	1	04/30/13 02:17
Vinyl chloride	U		17	37	µg/Kg-dry	1	04/30/13 02:17
Xylenes, Total	46	J	44	110	µg/Kg-dry	1	04/30/13 02:17
Surr: 1,2-Dichloroethane-d4	79.6			70-130	%REC	1	04/30/13 02:17
Surr: 4-Bromofluorobenzene	101			70-130	%REC	1	04/30/13 02:17
Surr: Dibromofluoromethane	87.0			70-130	%REC	1	04/30/13 02:17
Surr: Toluene-d8	95.7			70-130	%REC	1	04/30/13 02:17

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	4.8	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-059
Collection Date: 04/24/13 11:05 AM

Work Order: 13041049
Lab ID: 13041049-47
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 4/30/13	Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		35	330	µg/Kg-dry	1	05/01/13 17:35
Aroclor 1221	U		35	330	µg/Kg-dry	1	05/01/13 17:35
Aroclor 1232	U		35	330	µg/Kg-dry	1	05/01/13 17:35
Aroclor 1242	U		35	330	µg/Kg-dry	1	05/01/13 17:35
Aroclor 1248	U		35	330	µg/Kg-dry	1	05/01/13 17:35
Aroclor 1254	U		11	330	µg/Kg-dry	1	05/01/13 17:35
Aroclor 1260	U		11	330	µg/Kg-dry	1	05/01/13 17:35
Surr: Decachlorobiphenyl	80.1			40-140	%REC	1	05/01/13 17:35
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.0047	J	0.00073	0.036	mg/Kg-dry	1	04/30/13 12:44
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 4/30/13	Analyst: ML
<u>BatchID: 48042</u>							
Antimony	6.3		0.0015	0.39	mg/Kg-dry	1	05/01/13 19:05
Arsenic	2.6		0.052	0.39	mg/Kg-dry	1	05/01/13 19:05
Barium	100		0.011	0.39	mg/Kg-dry	1	05/01/13 19:05
Beryllium	0.056	J	0.0031	0.15	mg/Kg-dry	1	05/01/13 19:05
Cadmium	2.5		0.0015	0.15	mg/Kg-dry	1	05/01/13 19:05
Chromium	130		0.063	0.39	mg/Kg-dry	1	05/01/13 19:05
Cobalt	15		0.0015	0.39	mg/Kg-dry	1	05/01/13 19:05
Copper	130		0.076	0.39	mg/Kg-dry	1	05/01/13 19:05
Molybdenum	64		0.017	0.39	mg/Kg-dry	1	05/01/13 19:05
Selenium	0.13	J	0.049	0.39	mg/Kg-dry	1	05/01/13 19:05
Silver	4.0		0.0015	0.39	mg/Kg-dry	1	05/01/13 19:05
Thallium	0.029	J	0.0093	0.39	mg/Kg-dry	1	05/01/13 19:05
Vanadium	3.1		0.023	0.39	mg/Kg-dry	1	05/01/13 19:05
Zinc	140		0.032	0.77	mg/Kg-dry	1	05/01/13 19:05
<u>BatchID: 48042</u>							
Iron	16,000		13	62	mg/Kg-dry	10	05/01/13 18:18
Lead	660		0.015	3.9	mg/Kg-dry	10	05/01/13 18:18
Manganese	400		0.34	3.9	mg/Kg-dry	10	05/01/13 18:18
Nickel	180		0.39	3.9	mg/Kg-dry	10	05/01/13 18:18
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	35	J	10	83	µg/Kg-dry	1	04/29/13 20:29
Acenaphthene	56		9.5	31	µg/Kg-dry	1	04/29/13 20:29

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-059
Collection Date: 04/24/13 11:05 AM

Work Order: 13041049
Lab ID: 13041049-47
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		9.8	31	µg/Kg-dry	1	04/29/13 20:29
Anthracene	64		11	31	µg/Kg-dry	1	04/29/13 20:29
Benzo(a)anthracene	75		13	31	µg/Kg-dry	1	04/29/13 20:29
Benzo(a)pyrene	81		16	31	µg/Kg-dry	1	04/29/13 20:29
Benzo(b)fluoranthene	130		17	31	µg/Kg-dry	1	04/29/13 20:29
Benzo(g,h,i)perylene	63		24	31	µg/Kg-dry	1	04/29/13 20:29
Benzo(k)fluoranthene	79		14	31	µg/Kg-dry	1	04/29/13 20:29
Chrysene	100		12	31	µg/Kg-dry	1	04/29/13 20:29
Dibenzo(a,h)anthracene	35		18	31	µg/Kg-dry	1	04/29/13 20:29
Fluoranthene	150		12	31	µg/Kg-dry	1	04/29/13 20:29
Fluorene	48		9.1	31	µg/Kg-dry	1	04/29/13 20:29
Indeno(1,2,3-cd)pyrene	60		20	31	µg/Kg-dry	1	04/29/13 20:29
Naphthalene	U		8.8	31	µg/Kg-dry	1	04/29/13 20:29
Phenanthrene	110		31	31	µg/Kg-dry	1	04/29/13 20:29
Pyrene	160		13	31	µg/Kg-dry	1	04/29/13 20:29
Surr: 2-Fluorobiphenyl	75.8			12-100	%REC	1	04/29/13 20:29
Surr: 4-Terphenyl-d14	118			25-137	%REC	1	04/29/13 20:29
Surr: Nitrobenzene-d5	61.3			37-107	%REC	1	04/29/13 20:29
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: AK
BatchID: 47967							
1,1,1-Trichloroethane	U		12	31	µg/Kg-dry	1	04/30/13 02:41
1,1,2,2-Tetrachloroethane	U		14	31	µg/Kg-dry	1	04/30/13 02:41
1,1,2-Trichloroethane	U		11	31	µg/Kg-dry	1	04/30/13 02:41
1,1,2-Trichlorotrifluoroethane	U		12	31	µg/Kg-dry	1	04/30/13 02:41
1,1-Dichloroethane	U		11	31	µg/Kg-dry	1	04/30/13 02:41
1,1-Dichloroethene	U		13	31	µg/Kg-dry	1	04/30/13 02:41
1,2,4-Trichlorobenzene	U		16	31	µg/Kg-dry	1	04/30/13 02:41
1,2-Dibromo-3-chloropropane	U		15	31	µg/Kg-dry	1	04/30/13 02:41
1,2-Dibromoethane	U		12	31	µg/Kg-dry	1	04/30/13 02:41
1,2-Dichlorobenzene	U		13	31	µg/Kg-dry	1	04/30/13 02:41
1,2-Dichloroethane	U		15	31	µg/Kg-dry	1	04/30/13 02:41
1,2-Dichloropropane	U		10	31	µg/Kg-dry	1	04/30/13 02:41
1,3-Dichlorobenzene	U		13	31	µg/Kg-dry	1	04/30/13 02:41
1,4-Dichlorobenzene	U		12	31	µg/Kg-dry	1	04/30/13 02:41
2-Butanone	U		78	210	µg/Kg-dry	1	04/30/13 02:41
2-Hexanone	U		7.7	31	µg/Kg-dry	1	04/30/13 02:41
4-Methyl-2-pentanone	U		11	31	µg/Kg-dry	1	04/30/13 02:41
Acetone	U		67	100	µg/Kg-dry	1	04/30/13 02:41
Benzene	U		13	31	µg/Kg-dry	1	04/30/13 02:41

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-059
Collection Date: 04/24/13 11:05 AM

Work Order: 13041049
Lab ID: 13041049-47
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromodichloromethane	U		7.0	31	µg/Kg-dry	1	04/30/13 02:41
Bromoform	U		6.2	31	µg/Kg-dry	1	04/30/13 02:41
Bromomethane	U		12	79	µg/Kg-dry	1	04/30/13 02:41
Carbon disulfide	U		16	31	µg/Kg-dry	1	04/30/13 02:41
Carbon tetrachloride	U		8.9	31	µg/Kg-dry	1	04/30/13 02:41
Chlorobenzene	U		13	31	µg/Kg-dry	1	04/30/13 02:41
Chloroethane	U		67	100	µg/Kg-dry	1	04/30/13 02:41
Chloroform	U		13	31	µg/Kg-dry	1	04/30/13 02:41
Chloromethane	U		17	100	µg/Kg-dry	1	04/30/13 02:41
cis-1,2-Dichloroethene	U		13	31	µg/Kg-dry	1	04/30/13 02:41
cis-1,3-Dichloropropene	U		11	31	µg/Kg-dry	1	04/30/13 02:41
Cyclohexane	U		14	31	µg/Kg-dry	1	04/30/13 02:41
Dibromochloromethane	U		5.8	31	µg/Kg-dry	1	04/30/13 02:41
Dichlorodifluoromethane	U		14	31	µg/Kg-dry	1	04/30/13 02:41
Ethylbenzene	U		12	31	µg/Kg-dry	1	04/30/13 02:41
Isopropylbenzene	U		14	31	µg/Kg-dry	1	04/30/13 02:41
Methyl acetate	U		42	210	µg/Kg-dry	1	04/30/13 02:41
Methyl tert-butyl ether	U		13	31	µg/Kg-dry	1	04/30/13 02:41
Methylcyclohexane	U		15	31	µg/Kg-dry	1	04/30/13 02:41
Methylene chloride	U		12	31	µg/Kg-dry	1	04/30/13 02:41
Styrene	U		12	31	µg/Kg-dry	1	04/30/13 02:41
Tetrachloroethene	U		14	31	µg/Kg-dry	1	04/30/13 02:41
Toluene	U		12	31	µg/Kg-dry	1	04/30/13 02:41
trans-1,2-Dichloroethene	U		9.7	31	µg/Kg-dry	1	04/30/13 02:41
trans-1,3-Dichloropropene	U		11	31	µg/Kg-dry	1	04/30/13 02:41
Trichloroethene	930		15	31	µg/Kg-dry	1	04/30/13 02:41
Trichlorofluoromethane	U		8.7	31	µg/Kg-dry	1	04/30/13 02:41
Vinyl chloride	U		14	31	µg/Kg-dry	1	04/30/13 02:41
Xylenes, Total	U		37	94	µg/Kg-dry	1	04/30/13 02:41
Surr: 1,2-Dichloroethane-d4	82.8			70-130	%REC	1	04/30/13 02:41
Surr: 4-Bromofluorobenzene	98.8			70-130	%REC	1	04/30/13 02:41
Surr: Dibromofluoromethane	89.0			70-130	%REC	1	04/30/13 02:41
Surr: Toluene-d8	95.2			70-130	%REC	1	04/30/13 02:41

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	4.5	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-060
Collection Date: 04/24/13 11:07 AM

Work Order: 13041049
Lab ID: 13041049-48
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 4/30/13	Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		37	350	µg/Kg-dry	1	05/01/13 18:34
Aroclor 1221	U		37	350	µg/Kg-dry	1	05/01/13 18:34
Aroclor 1232	U		37	350	µg/Kg-dry	1	05/01/13 18:34
Aroclor 1242	U		37	350	µg/Kg-dry	1	05/01/13 18:34
Aroclor 1248	U		37	350	µg/Kg-dry	1	05/01/13 18:34
Aroclor 1254	U		12	350	µg/Kg-dry	1	05/01/13 18:34
Aroclor 1260	U		12	350	µg/Kg-dry	1	05/01/13 18:34
Surr: Decachlorobiphenyl	81.1			40-140	%REC	1	05/01/13 18:34
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.0052	J	0.00080	0.040	mg/Kg-dry	1	04/30/13 12:46
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 4/30/13	Analyst: ML
<u>BatchID: 48042</u>							
Antimony	1.0		0.0016	0.40	mg/Kg-dry	1	05/01/13 18:24
Arsenic	1.0		0.055	0.40	mg/Kg-dry	1	05/01/13 18:24
Barium	14		0.011	0.40	mg/Kg-dry	1	05/01/13 18:24
Beryllium	0.046	J	0.0032	0.16	mg/Kg-dry	1	05/01/13 18:24
Cadmium	1.4		0.0016	0.16	mg/Kg-dry	1	05/01/13 18:24
Chromium	15		0.066	0.40	mg/Kg-dry	1	05/01/13 18:24
Cobalt	1.2		0.0016	0.40	mg/Kg-dry	1	05/01/13 18:24
Copper	8.1		0.079	0.40	mg/Kg-dry	1	05/01/13 18:24
Iron	4,600		1.3	6.4	mg/Kg-dry	1	05/01/13 18:24
Lead	7.9		0.0016	0.40	mg/Kg-dry	1	05/01/13 18:24
Manganese	58		0.035	0.40	mg/Kg-dry	1	05/01/13 18:24
Molybdenum	17		0.018	0.40	mg/Kg-dry	1	05/01/13 18:24
Nickel	15		0.040	0.40	mg/Kg-dry	1	05/01/13 18:24
Selenium	0.086	J	0.052	0.40	mg/Kg-dry	1	05/01/13 18:24
Silver	4.4		0.0016	0.40	mg/Kg-dry	1	05/01/13 18:24
Thallium	0.022	J	0.0097	0.40	mg/Kg-dry	1	05/01/13 18:24
Vanadium	2.0		0.024	0.40	mg/Kg-dry	1	05/01/13 18:24
Zinc	9.7		0.034	0.81	mg/Kg-dry	1	05/01/13 18:24
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	U		10	84	µg/Kg-dry	1	04/29/13 20:33
Acenaphthene	U		9.5	31	µg/Kg-dry	1	04/29/13 20:33
Acenaphthylene	U		9.9	31	µg/Kg-dry	1	04/29/13 20:33

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-060
Collection Date: 04/24/13 11:07 AM

Work Order: 13041049
Lab ID: 13041049-48
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	39		11	31	µg/Kg-dry	1	04/29/13 20:33
Benzo(a)anthracene	180		13	31	µg/Kg-dry	1	04/29/13 20:33
Benzo(a)pyrene	170		16	31	µg/Kg-dry	1	04/29/13 20:33
Benzo(b)fluoranthene	260		17	31	µg/Kg-dry	1	04/29/13 20:33
Benzo(g,h,i)perylene	66		25	31	µg/Kg-dry	1	04/29/13 20:33
Benzo(k)fluoranthene	140		14	31	µg/Kg-dry	1	04/29/13 20:33
Chrysene	220		12	31	µg/Kg-dry	1	04/29/13 20:33
Dibenzo(a,h)anthracene	23	J	18	31	µg/Kg-dry	1	04/29/13 20:33
Fluoranthene	370		12	31	µg/Kg-dry	1	04/29/13 20:33
Fluorene	U		9.1	31	µg/Kg-dry	1	04/29/13 20:33
Indeno(1,2,3-cd)pyrene	55		20	31	µg/Kg-dry	1	04/29/13 20:33
Naphthalene	U		8.9	31	µg/Kg-dry	1	04/29/13 20:33
Phenanthrene	170		31	31	µg/Kg-dry	1	04/29/13 20:33
Pyrene	340		13	31	µg/Kg-dry	1	04/29/13 20:33
Surr: 2-Fluorobiphenyl	68.6			12-100	%REC	1	04/29/13 20:33
Surr: 4-Terphenyl-d14	107			25-137	%REC	1	04/29/13 20:33
Surr: Nitrobenzene-d5	63.4			37-107	%REC	1	04/29/13 20:33

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: AK

BatchID: 47967

1,1,1-Trichloroethane	U	12	32	µg/Kg-dry	1	04/30/13 03:04
1,1,2,2-Tetrachloroethane	U	14	32	µg/Kg-dry	1	04/30/13 03:04
1,1,2-Trichloroethane	U	11	32	µg/Kg-dry	1	04/30/13 03:04
1,1,2-Trichlorotrifluoroethane	U	12	32	µg/Kg-dry	1	04/30/13 03:04
1,1-Dichloroethane	U	12	32	µg/Kg-dry	1	04/30/13 03:04
1,1-Dichloroethene	U	13	32	µg/Kg-dry	1	04/30/13 03:04
1,2,4-Trichlorobenzene	U	17	32	µg/Kg-dry	1	04/30/13 03:04
1,2-Dibromo-3-chloropropane	U	16	32	µg/Kg-dry	1	04/30/13 03:04
1,2-Dibromoethane	U	13	32	µg/Kg-dry	1	04/30/13 03:04
1,2-Dichlorobenzene	U	13	32	µg/Kg-dry	1	04/30/13 03:04
1,2-Dichloroethane	U	15	32	µg/Kg-dry	1	04/30/13 03:04
1,2-Dichloropropane	U	11	32	µg/Kg-dry	1	04/30/13 03:04
1,3-Dichlorobenzene	U	13	32	µg/Kg-dry	1	04/30/13 03:04
1,4-Dichlorobenzene	U	12	32	µg/Kg-dry	1	04/30/13 03:04
2-Butanone	U	79	210	µg/Kg-dry	1	04/30/13 03:04
2-Hexanone	U	7.9	32	µg/Kg-dry	1	04/30/13 03:04
4-Methyl-2-pentanone	U	11	32	µg/Kg-dry	1	04/30/13 03:04
Acetone	U	68	110	µg/Kg-dry	1	04/30/13 03:04
Benzene	U	13	32	µg/Kg-dry	1	04/30/13 03:04
Bromodichloromethane	U	7.2	32	µg/Kg-dry	1	04/30/13 03:04

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-060
Collection Date: 04/24/13 11:07 AM

Work Order: 13041049
Lab ID: 13041049-48
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		6.3	32	µg/Kg-dry	1	04/30/13 03:04
Bromomethane	U		12	80	µg/Kg-dry	1	04/30/13 03:04
Carbon disulfide	U		16	32	µg/Kg-dry	1	04/30/13 03:04
Carbon tetrachloride	U		9.1	32	µg/Kg-dry	1	04/30/13 03:04
Chlorobenzene	U		13	32	µg/Kg-dry	1	04/30/13 03:04
Chloroethane	U		68	110	µg/Kg-dry	1	04/30/13 03:04
Chloroform	U		13	32	µg/Kg-dry	1	04/30/13 03:04
Chloromethane	U		18	110	µg/Kg-dry	1	04/30/13 03:04
cis-1,2-Dichloroethene	U		13	32	µg/Kg-dry	1	04/30/13 03:04
cis-1,3-Dichloropropene	U		11	32	µg/Kg-dry	1	04/30/13 03:04
Cyclohexane	U		14	32	µg/Kg-dry	1	04/30/13 03:04
Dibromochloromethane	U		5.9	32	µg/Kg-dry	1	04/30/13 03:04
Dichlorodifluoromethane	U		15	32	µg/Kg-dry	1	04/30/13 03:04
Ethylbenzene	U		12	32	µg/Kg-dry	1	04/30/13 03:04
Isopropylbenzene	U		14	32	µg/Kg-dry	1	04/30/13 03:04
Methyl acetate	U		43	210	µg/Kg-dry	1	04/30/13 03:04
Methyl tert-butyl ether	U		14	32	µg/Kg-dry	1	04/30/13 03:04
Methylcyclohexane	U		15	32	µg/Kg-dry	1	04/30/13 03:04
Methylene chloride	U		13	32	µg/Kg-dry	1	04/30/13 03:04
Styrene	U		12	32	µg/Kg-dry	1	04/30/13 03:04
Tetrachloroethene	U		14	32	µg/Kg-dry	1	04/30/13 03:04
Toluene	U		12	32	µg/Kg-dry	1	04/30/13 03:04
trans-1,2-Dichloroethene	U		9.9	32	µg/Kg-dry	1	04/30/13 03:04
trans-1,3-Dichloropropene	U		11	32	µg/Kg-dry	1	04/30/13 03:04
Trichloroethene	U		15	32	µg/Kg-dry	1	04/30/13 03:04
Trichlorofluoromethane	U		8.8	32	µg/Kg-dry	1	04/30/13 03:04
Vinyl chloride	U		14	32	µg/Kg-dry	1	04/30/13 03:04
Xylenes, Total	U		38	96	µg/Kg-dry	1	04/30/13 03:04
Surr: 1,2-Dichloroethane-d4	80.8			70-130	%REC	1	04/30/13 03:04
Surr: 4-Bromofluorobenzene	99.6			70-130	%REC	1	04/30/13 03:04
Surr: Dibromofluoromethane	88.0			70-130	%REC	1	04/30/13 03:04
Surr: Toluene-d8	95.6			70-130	%REC	1	04/30/13 03:04

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	5.8	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-061
Collection Date: 04/24/13 11:10 AM

Work Order: 13041049
Lab ID: 13041049-49
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 4/30/13	Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		36	330	µg/Kg-dry	1	05/01/13 18:54
Aroclor 1221	U		36	330	µg/Kg-dry	1	05/01/13 18:54
Aroclor 1232	U		36	330	µg/Kg-dry	1	05/01/13 18:54
Aroclor 1242	U		36	330	µg/Kg-dry	1	05/01/13 18:54
Aroclor 1248	U		36	330	µg/Kg-dry	1	05/01/13 18:54
Aroclor 1254	U		11	330	µg/Kg-dry	1	05/01/13 18:54
Aroclor 1260	U		11	330	µg/Kg-dry	1	05/01/13 18:54
Surr: Decachlorobiphenyl	85.1			40-140	%REC	1	05/01/13 18:54
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.0082	J	0.00076	0.038	mg/Kg-dry	1	04/30/13 12:48
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 4/30/13	Analyst: ML
<u>BatchID: 48042</u>							
Antimony	0.44		0.0016	0.40	mg/Kg-dry	1	05/01/13 18:30
Arsenic	1.7		0.054	0.40	mg/Kg-dry	1	05/01/13 18:30
Barium	26		0.011	0.40	mg/Kg-dry	1	05/01/13 18:30
Beryllium	0.092	J	0.0032	0.16	mg/Kg-dry	1	05/01/13 18:30
Cadmium	0.75		0.0016	0.16	mg/Kg-dry	1	05/01/13 18:30
Chromium	12		0.065	0.40	mg/Kg-dry	1	05/01/13 18:30
Cobalt	1.3		0.0016	0.40	mg/Kg-dry	1	05/01/13 18:30
Copper	6.5		0.078	0.40	mg/Kg-dry	1	05/01/13 18:30
Iron	3,800		1.3	6.3	mg/Kg-dry	1	05/01/13 18:30
Lead	8.7		0.0016	0.40	mg/Kg-dry	1	05/01/13 18:30
Manganese	61		0.035	0.40	mg/Kg-dry	1	05/01/13 18:30
Molybdenum	11		0.017	0.40	mg/Kg-dry	1	05/01/13 18:30
Nickel	9.4		0.040	0.40	mg/Kg-dry	1	05/01/13 18:30
Selenium	0.18	J	0.051	0.40	mg/Kg-dry	1	05/01/13 18:30
Silver	1.6		0.0016	0.40	mg/Kg-dry	1	05/01/13 18:30
Thallium	0.030	J	0.0095	0.40	mg/Kg-dry	1	05/01/13 18:30
Vanadium	2.5		0.024	0.40	mg/Kg-dry	1	05/01/13 18:30
Zinc	9.7		0.033	0.79	mg/Kg-dry	1	05/01/13 18:30
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	36	J	10	84	µg/Kg-dry	1	04/29/13 20:51
Acenaphthene	46		9.6	31	µg/Kg-dry	1	04/29/13 20:51
Acenaphthylene	U		9.9	31	µg/Kg-dry	1	04/29/13 20:51

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-061
Collection Date: 04/24/13 11:10 AM

Work Order: 13041049
Lab ID: 13041049-49
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	60		11	31	µg/Kg-dry	1	04/29/13 20:51
Benzo(a)anthracene	89		13	31	µg/Kg-dry	1	04/29/13 20:51
Benzo(a)pyrene	110		16	31	µg/Kg-dry	1	04/29/13 20:51
Benzo(b)fluoranthene	140		17	31	µg/Kg-dry	1	04/29/13 20:51
Benzo(g,h,i)perylene	72		25	31	µg/Kg-dry	1	04/29/13 20:51
Benzo(k)fluoranthene	86		14	31	µg/Kg-dry	1	04/29/13 20:51
Chrysene	100		12	31	µg/Kg-dry	1	04/29/13 20:51
Dibenzo(a,h)anthracene	34		18	31	µg/Kg-dry	1	04/29/13 20:51
Fluoranthene	140		12	31	µg/Kg-dry	1	04/29/13 20:51
Fluorene	44		9.2	31	µg/Kg-dry	1	04/29/13 20:51
Indeno(1,2,3-cd)pyrene	81		20	31	µg/Kg-dry	1	04/29/13 20:51
Naphthalene	U		8.9	31	µg/Kg-dry	1	04/29/13 20:51
Phenanthrene	70		31	31	µg/Kg-dry	1	04/29/13 20:51
Pyrene	170		13	31	µg/Kg-dry	1	04/29/13 20:51
Surr: 2-Fluorobiphenyl	73.9			12-100	%REC	1	04/29/13 20:51
Surr: 4-Terphenyl-d14	116			25-137	%REC	1	04/29/13 20:51
Surr: Nitrobenzene-d5	60.1			37-107	%REC	1	04/29/13 20:51

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: AK

BatchID: 47967

1,1,1-Trichloroethane	U	15	40	µg/Kg-dry	1	04/30/13 03:28
1,1,2,2-Tetrachloroethane	U	18	40	µg/Kg-dry	1	04/30/13 03:28
1,1,2-Trichloroethane	U	14	40	µg/Kg-dry	1	04/30/13 03:28
1,1,2-Trichlorotrifluoroethane	U	15	40	µg/Kg-dry	1	04/30/13 03:28
1,1-Dichloroethane	U	15	40	µg/Kg-dry	1	04/30/13 03:28
1,1-Dichloroethene	U	17	40	µg/Kg-dry	1	04/30/13 03:28
1,2,4-Trichlorobenzene	U	21	40	µg/Kg-dry	1	04/30/13 03:28
1,2-Dibromo-3-chloropropane	U	20	40	µg/Kg-dry	1	04/30/13 03:28
1,2-Dibromoethane	U	16	40	µg/Kg-dry	1	04/30/13 03:28
1,2-Dichlorobenzene	U	16	40	µg/Kg-dry	1	04/30/13 03:28
1,2-Dichloroethane	U	19	40	µg/Kg-dry	1	04/30/13 03:28
1,2-Dichloropropane	U	13	40	µg/Kg-dry	1	04/30/13 03:28
1,3-Dichlorobenzene	U	16	40	µg/Kg-dry	1	04/30/13 03:28
1,4-Dichlorobenzene	U	15	40	µg/Kg-dry	1	04/30/13 03:28
2-Butanone	U	99	270	µg/Kg-dry	1	04/30/13 03:28
2-Hexanone	U	9.9	40	µg/Kg-dry	1	04/30/13 03:28
4-Methyl-2-pentanone	U	14	40	µg/Kg-dry	1	04/30/13 03:28
Acetone	U	85	130	µg/Kg-dry	1	04/30/13 03:28
Benzene	U	16	40	µg/Kg-dry	1	04/30/13 03:28
Bromodichloromethane	U	9.0	40	µg/Kg-dry	1	04/30/13 03:28

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-061
Collection Date: 04/24/13 11:10 AM

Work Order: 13041049
Lab ID: 13041049-49
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		7.9	40	µg/Kg-dry	1	04/30/13 03:28
Bromomethane	U		15	100	µg/Kg-dry	1	04/30/13 03:28
Carbon disulfide	U		20	40	µg/Kg-dry	1	04/30/13 03:28
Carbon tetrachloride	U		11	40	µg/Kg-dry	1	04/30/13 03:28
Chlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 03:28
Chloroethane	U		85	130	µg/Kg-dry	1	04/30/13 03:28
Chloroform	U		17	40	µg/Kg-dry	1	04/30/13 03:28
Chloromethane	U		22	130	µg/Kg-dry	1	04/30/13 03:28
cis-1,2-Dichloroethene	U		16	40	µg/Kg-dry	1	04/30/13 03:28
cis-1,3-Dichloropropene	U		14	40	µg/Kg-dry	1	04/30/13 03:28
Cyclohexane	U		18	40	µg/Kg-dry	1	04/30/13 03:28
Dibromochloromethane	U		7.4	40	µg/Kg-dry	1	04/30/13 03:28
Dichlorodifluoromethane	U		18	40	µg/Kg-dry	1	04/30/13 03:28
Ethylbenzene	U		15	40	µg/Kg-dry	1	04/30/13 03:28
Isopropylbenzene	U		17	40	µg/Kg-dry	1	04/30/13 03:28
Methyl acetate	U		54	270	µg/Kg-dry	1	04/30/13 03:28
Methyl tert-butyl ether	U		17	40	µg/Kg-dry	1	04/30/13 03:28
Methylcyclohexane	U		19	40	µg/Kg-dry	1	04/30/13 03:28
Methylene chloride	U		16	40	µg/Kg-dry	1	04/30/13 03:28
Styrene	U		15	40	µg/Kg-dry	1	04/30/13 03:28
Tetrachloroethene	U		18	40	µg/Kg-dry	1	04/30/13 03:28
Toluene	U		15	40	µg/Kg-dry	1	04/30/13 03:28
trans-1,2-Dichloroethene	U		12	40	µg/Kg-dry	1	04/30/13 03:28
trans-1,3-Dichloropropene	U		13	40	µg/Kg-dry	1	04/30/13 03:28
Trichloroethene	1,300		19	40	µg/Kg-dry	1	04/30/13 03:28
Trichlorofluoromethane	U		11	40	µg/Kg-dry	1	04/30/13 03:28
Vinyl chloride	U		18	40	µg/Kg-dry	1	04/30/13 03:28
Xylenes, Total	U		47	120	µg/Kg-dry	1	04/30/13 03:28
Surr: 1,2-Dichloroethane-d4	81.3			70-130	%REC	1	04/30/13 03:28
Surr: 4-Bromofluorobenzene	98.1			70-130	%REC	1	04/30/13 03:28
Surr: Dibromofluoromethane	87.6			70-130	%REC	1	04/30/13 03:28
Surr: Toluene-d8	95.5			70-130	%REC	1	04/30/13 03:28

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	6.5	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-062
Collection Date: 04/24/13 11:30 AM

Work Order: 13041049
Lab ID: 13041049-50
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 4/30/13	Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		38	350	µg/Kg-dry	1	05/01/13 19:14
Aroclor 1221	U		38	350	µg/Kg-dry	1	05/01/13 19:14
Aroclor 1232	U		38	350	µg/Kg-dry	1	05/01/13 19:14
Aroclor 1242	U		38	350	µg/Kg-dry	1	05/01/13 19:14
Aroclor 1248	U		38	350	µg/Kg-dry	1	05/01/13 19:14
Aroclor 1254	U		12	350	µg/Kg-dry	1	05/01/13 19:14
Aroclor 1260	U		12	350	µg/Kg-dry	1	05/01/13 19:14
Surr: Decachlorobiphenyl	60.1			40-140	%REC	1	05/01/13 19:14
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.018	J	0.00084	0.042	mg/Kg-dry	1	04/30/13 12:50
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 4/30/13	Analyst: ML
<u>BatchID: 48042</u>							
Antimony	0.64		0.0017	0.43	mg/Kg-dry	1	05/01/13 19:29
Arsenic	2.1		0.059	0.43	mg/Kg-dry	1	05/01/13 19:29
Barium	52		0.012	0.43	mg/Kg-dry	1	05/02/13 11:19
Beryllium	0.17	J	0.0035	0.17	mg/Kg-dry	1	05/01/13 19:29
Cadmium	0.24		0.0017	0.17	mg/Kg-dry	1	05/02/13 11:19
Chromium	17		0.071	0.43	mg/Kg-dry	1	05/01/13 19:29
Cobalt	2.7		0.0017	0.43	mg/Kg-dry	1	05/01/13 19:29
Copper	15		0.085	0.43	mg/Kg-dry	1	05/01/13 19:29
Iron	6,200		1.4	6.9	mg/Kg-dry	1	05/01/13 19:29
Manganese	150		0.038	0.43	mg/Kg-dry	1	05/01/13 19:29
Molybdenum	2.4		0.019	0.43	mg/Kg-dry	1	05/01/13 19:29
Nickel	13		0.043	0.43	mg/Kg-dry	1	05/01/13 19:29
Selenium	0.32	J	0.056	0.43	mg/Kg-dry	1	05/01/13 19:29
Silver	0.14	J	0.0017	0.43	mg/Kg-dry	1	05/01/13 19:29
Thallium	U		0.010	0.43	mg/Kg-dry	1	05/02/13 11:19
Vanadium	11		0.026	0.43	mg/Kg-dry	1	05/01/13 19:29
Zinc	29		0.036	0.87	mg/Kg-dry	1	05/01/13 19:29
<u>BatchID: 48042</u>							
Lead	210		0.017	4.3	mg/Kg-dry	10	05/01/13 18:36
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	470	J	110	880	µg/Kg-dry	10	04/29/13 15:14
Acenaphthene	430		100	330	µg/Kg-dry	10	04/29/13 15:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-062
Collection Date: 04/24/13 11:30 AM

Work Order: 13041049
Lab ID: 13041049-50
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		100	330	µg/Kg-dry	10	04/29/13 15:14
Anthracene	760		110	330	µg/Kg-dry	10	04/29/13 15:14
Benzo(a)anthracene	1,200		130	330	µg/Kg-dry	10	04/29/13 15:14
Benzo(a)pyrene	1,100		170	330	µg/Kg-dry	10	04/29/13 15:14
Benzo(b)fluoranthene	1,600		180	330	µg/Kg-dry	10	04/29/13 15:14
Benzo(g,h,i)perylene	490		260	330	µg/Kg-dry	10	04/29/13 15:14
Benzo(k)fluoranthene	720		150	330	µg/Kg-dry	10	04/29/13 15:14
Chrysene	1,600		120	330	µg/Kg-dry	10	04/29/13 15:14
Dibenzo(a,h)anthracene	U		190	330	µg/Kg-dry	10	04/29/13 15:14
Fluoranthene	3,300		130	330	µg/Kg-dry	10	04/29/13 15:14
Fluorene	350		96	330	µg/Kg-dry	10	04/29/13 15:14
Indeno(1,2,3-cd)pyrene	400		210	330	µg/Kg-dry	10	04/29/13 15:14
Naphthalene	190	J	94	330	µg/Kg-dry	10	04/29/13 15:14
Phenanthrene	3,300		330	330	µg/Kg-dry	10	04/29/13 15:14
Pyrene	3,000		140	330	µg/Kg-dry	10	04/29/13 15:14
Surr: 2-Fluorobiphenyl	62.0			12-100	%REC	10	04/29/13 15:14
Surr: 4-Terphenyl-d14	88.0			25-137	%REC	10	04/29/13 15:14
Surr: Nitrobenzene-d5	55.4			37-107	%REC	10	04/29/13 15:14

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: AK

BatchID: 47967

1,1,1-Trichloroethane	U		15	40	µg/Kg-dry	1	04/30/13 03:52
1,1,2,2-Tetrachloroethane	U		18	40	µg/Kg-dry	1	04/30/13 03:52
1,1,2-Trichloroethane	U		14	40	µg/Kg-dry	1	04/30/13 03:52
1,1,2-Trichlorotrifluoroethane	U		15	40	µg/Kg-dry	1	04/30/13 03:52
1,1-Dichloroethane	U		15	40	µg/Kg-dry	1	04/30/13 03:52
1,1-Dichloroethene	U		17	40	µg/Kg-dry	1	04/30/13 03:52
1,2,4-Trichlorobenzene	U		21	40	µg/Kg-dry	1	04/30/13 03:52
1,2-Dibromo-3-chloropropane	U		20	40	µg/Kg-dry	1	04/30/13 03:52
1,2-Dibromoethane	U		16	40	µg/Kg-dry	1	04/30/13 03:52
1,2-Dichlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 03:52
1,2-Dichloroethane	U		19	40	µg/Kg-dry	1	04/30/13 03:52
1,2-Dichloropropane	U		13	40	µg/Kg-dry	1	04/30/13 03:52
1,3-Dichlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 03:52
1,4-Dichlorobenzene	U		15	40	µg/Kg-dry	1	04/30/13 03:52
2-Butanone	U		100	270	µg/Kg-dry	1	04/30/13 03:52
2-Hexanone	U		9.9	40	µg/Kg-dry	1	04/30/13 03:52
4-Methyl-2-pentanone	U		14	40	µg/Kg-dry	1	04/30/13 03:52
Acetone	U		85	130	µg/Kg-dry	1	04/30/13 03:52
Benzene	U		16	40	µg/Kg-dry	1	04/30/13 03:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-062
Collection Date: 04/24/13 11:30 AM

Work Order: 13041049
Lab ID: 13041049-50
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromodichloromethane	U		9.1	40	µg/Kg-dry	1	04/30/13 03:52
Bromoform	U		7.9	40	µg/Kg-dry	1	04/30/13 03:52
Bromomethane	U		15	100	µg/Kg-dry	1	04/30/13 03:52
Carbon disulfide	U		20	40	µg/Kg-dry	1	04/30/13 03:52
Carbon tetrachloride	U		11	40	µg/Kg-dry	1	04/30/13 03:52
Chlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 03:52
Chloroethane	U		86	130	µg/Kg-dry	1	04/30/13 03:52
Chloroform	U		17	40	µg/Kg-dry	1	04/30/13 03:52
Chloromethane	U		22	130	µg/Kg-dry	1	04/30/13 03:52
cis-1,2-Dichloroethene	U		16	40	µg/Kg-dry	1	04/30/13 03:52
cis-1,3-Dichloropropene	U		14	40	µg/Kg-dry	1	04/30/13 03:52
Cyclohexane	U		18	40	µg/Kg-dry	1	04/30/13 03:52
Dibromochloromethane	U		7.5	40	µg/Kg-dry	1	04/30/13 03:52
Dichlorodifluoromethane	U		18	40	µg/Kg-dry	1	04/30/13 03:52
Ethylbenzene	U		15	40	µg/Kg-dry	1	04/30/13 03:52
Isopropylbenzene	U		17	40	µg/Kg-dry	1	04/30/13 03:52
Methyl acetate	U		54	270	µg/Kg-dry	1	04/30/13 03:52
Methyl tert-butyl ether	U		17	40	µg/Kg-dry	1	04/30/13 03:52
Methylcyclohexane	U		19	40	µg/Kg-dry	1	04/30/13 03:52
Methylene chloride	U		16	40	µg/Kg-dry	1	04/30/13 03:52
Styrene	U		15	40	µg/Kg-dry	1	04/30/13 03:52
Tetrachloroethene	U		18	40	µg/Kg-dry	1	04/30/13 03:52
Toluene	22	J	15	40	µg/Kg-dry	1	04/30/13 03:52
trans-1,2-Dichloroethene	U		12	40	µg/Kg-dry	1	04/30/13 03:52
trans-1,3-Dichloropropene	U		14	40	µg/Kg-dry	1	04/30/13 03:52
Trichloroethene	3,100		19	40	µg/Kg-dry	1	04/30/13 03:52
Trichlorofluoromethane	U		11	40	µg/Kg-dry	1	04/30/13 03:52
Vinyl chloride	U		18	40	µg/Kg-dry	1	04/30/13 03:52
Xylenes, Total	U		48	120	µg/Kg-dry	1	04/30/13 03:52
Surr: 1,2-Dichloroethane-d4	79.6			70-130	%REC	1	04/30/13 03:52
Surr: 4-Bromofluorobenzene	98.2			70-130	%REC	1	04/30/13 03:52
Surr: Dibromofluoromethane	86.2			70-130	%REC	1	04/30/13 03:52
Surr: Toluene-d8	94.6			70-130	%REC	1	04/30/13 03:52

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	11	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-063
Collection Date: 04/24/13 11:32 AM

Work Order: 13041049
Lab ID: 13041049-51
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 4/30/13	Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		40	370	µg/Kg-dry	1	05/01/13 19:34
Aroclor 1221	U		40	370	µg/Kg-dry	1	05/01/13 19:34
Aroclor 1232	U		40	370	µg/Kg-dry	1	05/01/13 19:34
Aroclor 1242	U		40	370	µg/Kg-dry	1	05/01/13 19:34
Aroclor 1248	U		40	370	µg/Kg-dry	1	05/01/13 19:34
Aroclor 1254	U		13	370	µg/Kg-dry	1	05/01/13 19:34
Aroclor 1260	U		13	370	µg/Kg-dry	1	05/01/13 19:34
Surr: Decachlorobiphenyl	60.1			40-140	%REC	1	05/01/13 19:34
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.023	J	0.00087	0.043	mg/Kg-dry	1	04/30/13 12:52
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 4/30/13	Analyst: ML
<u>BatchID: 48042</u>							
Antimony	31		0.0019	0.47	mg/Kg-dry	1	05/01/13 19:35
Arsenic	18		0.063	0.47	mg/Kg-dry	1	05/01/13 19:35
Beryllium	0.34		0.0037	0.19	mg/Kg-dry	1	05/01/13 19:35
Cobalt	120		0.0019	0.47	mg/Kg-dry	1	05/01/13 19:35
Selenium	0.40	J	0.060	0.47	mg/Kg-dry	1	05/01/13 19:35
Silver	21		0.0019	0.47	mg/Kg-dry	1	05/01/13 19:35
Thallium	U		0.011	0.47	mg/Kg-dry	1	05/02/13 11:24
Vanadium	U		0.028	0.47	mg/Kg-dry	1	05/01/13 19:35
<u>BatchID: 48042</u>							
Barium	560		1.3	47	mg/Kg-dry	100	05/01/13 18:42
Cadmium	44		0.19	19	mg/Kg-dry	100	05/01/13 18:42
Chromium	1,200		7.6	47	mg/Kg-dry	100	05/01/13 18:42
Copper	1,200		9.1	47	mg/Kg-dry	100	05/01/13 18:42
Iron	160,000		160	750	mg/Kg-dry	100	05/01/13 18:42
Lead	1,900		0.19	47	mg/Kg-dry	100	05/01/13 18:42
Manganese	3,900		4.1	47	mg/Kg-dry	100	05/01/13 18:42
Molybdenum	670		2.1	47	mg/Kg-dry	100	05/01/13 18:42
Nickel	1,100		4.7	47	mg/Kg-dry	100	05/01/13 18:42
Zinc	1,400		3.9	93	mg/Kg-dry	100	05/01/13 18:42
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	U		120	950	µg/Kg-dry	10	04/29/13 15:46
Acenaphthene	U		110	350	µg/Kg-dry	10	04/29/13 15:46

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-063
Collection Date: 04/24/13 11:32 AM

Work Order: 13041049
Lab ID: 13041049-51
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		110	350	µg/Kg-dry	10	04/29/13 15:46
Anthracene	U		120	350	µg/Kg-dry	10	04/29/13 15:46
Benzo(a)anthracene	1,500		140	350	µg/Kg-dry	10	04/29/13 15:46
Benzo(a)pyrene	930		180	350	µg/Kg-dry	10	04/29/13 15:46
Benzo(b)fluoranthene	5,400		190	350	µg/Kg-dry	10	04/29/13 15:46
Benzo(g,h,i)perylene	940		280	350	µg/Kg-dry	10	04/29/13 15:46
Benzo(k)fluoranthene	1,400		160	350	µg/Kg-dry	10	04/29/13 15:46
Chrysene	4,100		130	350	µg/Kg-dry	10	04/29/13 15:46
Dibenzo(a,h)anthracene	460		200	350	µg/Kg-dry	10	04/29/13 15:46
Fluoranthene	2,300		140	350	µg/Kg-dry	10	04/29/13 15:46
Fluorene	U		100	350	µg/Kg-dry	10	04/29/13 15:46
Indeno(1,2,3-cd)pyrene	820		220	350	µg/Kg-dry	10	04/29/13 15:46
Naphthalene	U		100	350	µg/Kg-dry	10	04/29/13 15:46
Phenanthrene	930		350	350	µg/Kg-dry	10	04/29/13 15:46
Pyrene	1,700		150	350	µg/Kg-dry	10	04/29/13 15:46
Surr: 2-Fluorobiphenyl	57.6			12-100	%REC	10	04/29/13 15:46
Surr: 4-Terphenyl-d14	81.2			25-137	%REC	10	04/29/13 15:46
Surr: Nitrobenzene-d5	49.6			37-107	%REC	10	04/29/13 15:46
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: AK
BatchID: 47967							
1,1,1-Trichloroethane	U		16	42	µg/Kg-dry	1	04/30/13 04:16
1,1,2,2-Tetrachloroethane	U		19	42	µg/Kg-dry	1	04/30/13 04:16
1,1,2-Trichloroethane	U		15	42	µg/Kg-dry	1	04/30/13 04:16
1,1,2-Trichlorotrifluoroethane	U		16	42	µg/Kg-dry	1	04/30/13 04:16
1,1-Dichloroethane	U		15	42	µg/Kg-dry	1	04/30/13 04:16
1,1-Dichloroethene	U		18	42	µg/Kg-dry	1	04/30/13 04:16
1,2,4-Trichlorobenzene	U		22	42	µg/Kg-dry	1	04/30/13 04:16
1,2-Dibromo-3-chloropropane	U		21	42	µg/Kg-dry	1	04/30/13 04:16
1,2-Dibromoethane	U		17	42	µg/Kg-dry	1	04/30/13 04:16
1,2-Dichlorobenzene	U		17	42	µg/Kg-dry	1	04/30/13 04:16
1,2-Dichloroethane	U		20	42	µg/Kg-dry	1	04/30/13 04:16
1,2-Dichloropropane	U		14	42	µg/Kg-dry	1	04/30/13 04:16
1,3-Dichlorobenzene	U		17	42	µg/Kg-dry	1	04/30/13 04:16
1,4-Dichlorobenzene	U		16	42	µg/Kg-dry	1	04/30/13 04:16
2-Butanone	U		100	280	µg/Kg-dry	1	04/30/13 04:16
2-Hexanone	U		10	42	µg/Kg-dry	1	04/30/13 04:16
4-Methyl-2-pentanone	U		14	42	µg/Kg-dry	1	04/30/13 04:16
Acetone	U		89	140	µg/Kg-dry	1	04/30/13 04:16
Benzene	U		17	42	µg/Kg-dry	1	04/30/13 04:16

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-063
Collection Date: 04/24/13 11:32 AM

Work Order: 13041049
Lab ID: 13041049-51
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromodichloromethane	U		9.5	42	µg/Kg-dry	1	04/30/13 04:16
Bromoform	U		8.3	42	µg/Kg-dry	1	04/30/13 04:16
Bromomethane	U		16	110	µg/Kg-dry	1	04/30/13 04:16
Carbon disulfide	U		21	42	µg/Kg-dry	1	04/30/13 04:16
Carbon tetrachloride	U		12	42	µg/Kg-dry	1	04/30/13 04:16
Chlorobenzene	U		17	42	µg/Kg-dry	1	04/30/13 04:16
Chloroethane	U		90	140	µg/Kg-dry	1	04/30/13 04:16
Chloroform	U		17	42	µg/Kg-dry	1	04/30/13 04:16
Chloromethane	U		24	140	µg/Kg-dry	1	04/30/13 04:16
cis-1,2-Dichloroethene	U		17	42	µg/Kg-dry	1	04/30/13 04:16
cis-1,3-Dichloropropene	U		14	42	µg/Kg-dry	1	04/30/13 04:16
Cyclohexane	U		19	42	µg/Kg-dry	1	04/30/13 04:16
Dibromochloromethane	U		7.8	42	µg/Kg-dry	1	04/30/13 04:16
Dichlorodifluoromethane	U		19	42	µg/Kg-dry	1	04/30/13 04:16
Ethylbenzene	U		16	42	µg/Kg-dry	1	04/30/13 04:16
Isopropylbenzene	U		18	42	µg/Kg-dry	1	04/30/13 04:16
Methyl acetate	U		57	280	µg/Kg-dry	1	04/30/13 04:16
Methyl tert-butyl ether	U		18	42	µg/Kg-dry	1	04/30/13 04:16
Methylcyclohexane	U		20	42	µg/Kg-dry	1	04/30/13 04:16
Methylene chloride	U		17	42	µg/Kg-dry	1	04/30/13 04:16
Styrene	U		16	42	µg/Kg-dry	1	04/30/13 04:16
Tetrachloroethene	U		19	42	µg/Kg-dry	1	04/30/13 04:16
Toluene	U		16	42	µg/Kg-dry	1	04/30/13 04:16
trans-1,2-Dichloroethene	U		13	42	µg/Kg-dry	1	04/30/13 04:16
trans-1,3-Dichloropropene	U		14	42	µg/Kg-dry	1	04/30/13 04:16
Trichlorofluoromethane	U		12	42	µg/Kg-dry	1	04/30/13 04:16
Vinyl chloride	U		19	42	µg/Kg-dry	1	04/30/13 04:16
Xylenes, Total	U		50	130	µg/Kg-dry	1	04/30/13 04:16
Surr: 1,2-Dichloroethane-d4	82.9			70-130	%REC	1	04/30/13 04:16
Surr: 4-Bromofluorobenzene	101			70-130	%REC	1	04/30/13 04:16
Surr: Dibromofluoromethane	90.2			70-130	%REC	1	04/30/13 04:16
Surr: Toluene-d8	97.4			70-130	%REC	1	04/30/13 04:16
BatchID: 47967							
Trichloroethene	8,600		39	85	µg/Kg-dry	2	04/30/13 16:49
Surr: 1,2-Dichloroethane-d4	99.2			70-130	%REC	2	04/30/13 16:49
Surr: 4-Bromofluorobenzene	101			70-130	%REC	2	04/30/13 16:49
Surr: Dibromofluoromethane	90.3			70-130	%REC	2	04/30/13 16:49
Surr: Toluene-d8	98.4			70-130	%REC	2	04/30/13 16:49

MOISTURE

A2540 G

Analyst: DC

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-063
Collection Date: 04/24/13 11:32 AM

Work Order: 13041049
Lab ID: 13041049-51
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
BatchID: R119875							
Moisture	16		0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-064
Collection Date: 04/24/13 11:35 AM

Work Order: 13041049
Lab ID: 13041049-52
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		40	380	µg/Kg-dry	1	05/01/13 19:54
Aroclor 1221	U		40	380	µg/Kg-dry	1	05/01/13 19:54
Aroclor 1232	U		40	380	µg/Kg-dry	1	05/01/13 19:54
Aroclor 1242	U		40	380	µg/Kg-dry	1	05/01/13 19:54
Aroclor 1248	U		40	380	µg/Kg-dry	1	05/01/13 19:54
Aroclor 1254	U		13	380	µg/Kg-dry	1	05/01/13 19:54
Aroclor 1260	U		13	380	µg/Kg-dry	1	05/01/13 19:54
Surr: Decachlorobiphenyl	62.1			40-140	%REC	1	05/01/13 19:54
MERCURY BY CVAA							
			SW7471		Prep: SW7471 / 4/30/13		Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.018	J	0.00090	0.045	mg/Kg-dry	1	04/30/13 12:54
METALS BY ICP-MS							
			SW6020A		Prep: SW3050B / 4/30/13		Analyst: ML
<u>BatchID: 48042</u>							
Antimony	21		0.0017	0.43	mg/Kg-dry	1	05/01/13 19:40
Arsenic	13		0.059	0.43	mg/Kg-dry	1	05/01/13 19:40
Beryllium	0.47		0.0034	0.17	mg/Kg-dry	1	05/01/13 19:40
Cobalt	86		0.0017	0.43	mg/Kg-dry	1	05/01/13 19:40
Selenium	0.56		0.055	0.43	mg/Kg-dry	1	05/01/13 19:40
Silver	19		0.0017	0.43	mg/Kg-dry	1	05/01/13 19:40
Vanadium	U		0.026	0.43	mg/Kg-dry	1	05/01/13 19:40
<u>BatchID: 48042</u>							
Thallium	0.27	J	0.052	2.2	mg/Kg-dry	5	05/02/13 18:06
<u>BatchID: 48042</u>							
Barium	400		1.2	43	mg/Kg-dry	100	05/01/13 18:48
Cadmium	25		0.17	17	mg/Kg-dry	100	05/01/13 18:48
Chromium	1,800		7.1	43	mg/Kg-dry	100	05/01/13 18:48
Copper	840		8.4	43	mg/Kg-dry	100	05/01/13 18:48
Iron	130,000		140	690	mg/Kg-dry	100	05/01/13 18:48
Lead	1,000		0.17	43	mg/Kg-dry	100	05/01/13 18:48
Manganese	7,300		3.8	43	mg/Kg-dry	100	05/01/13 18:48
Molybdenum	560		1.9	43	mg/Kg-dry	100	05/01/13 18:48
Nickel	1,200		4.3	43	mg/Kg-dry	100	05/01/13 18:48
Zinc	850		3.6	86	mg/Kg-dry	100	05/01/13 18:48
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270		Prep: SW3541 / 4/26/13		Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	U		110	910	µg/Kg-dry	10	04/29/13 16:18

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-064
Collection Date: 04/24/13 11:35 AM

Work Order: 13041049
Lab ID: 13041049-52
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthene	U		100	340	µg/Kg-dry	10	04/29/13 16:18
Acenaphthylene	U		110	340	µg/Kg-dry	10	04/29/13 16:18
Anthracene	U		120	340	µg/Kg-dry	10	04/29/13 16:18
Benzo(a)anthracene	1,400		140	340	µg/Kg-dry	10	04/29/13 16:18
Benzo(a)pyrene	1,200		180	340	µg/Kg-dry	10	04/29/13 16:18
Benzo(b)fluoranthene	4,500		180	340	µg/Kg-dry	10	04/29/13 16:18
Benzo(g,h,i)perylene	1,000		270	340	µg/Kg-dry	10	04/29/13 16:18
Benzo(k)fluoranthene	1,600		150	340	µg/Kg-dry	10	04/29/13 16:18
Chrysene	3,400		130	340	µg/Kg-dry	10	04/29/13 16:18
Dibenzo(a,h)anthracene	400		190	340	µg/Kg-dry	10	04/29/13 16:18
Fluoranthene	2,000		130	340	µg/Kg-dry	10	04/29/13 16:18
Fluorene	U		99	340	µg/Kg-dry	10	04/29/13 16:18
Indeno(1,2,3-cd)pyrene	900		210	340	µg/Kg-dry	10	04/29/13 16:18
Naphthalene	U		97	340	µg/Kg-dry	10	04/29/13 16:18
Phenanthrene	860		340	340	µg/Kg-dry	10	04/29/13 16:18
Pyrene	1,600		140	340	µg/Kg-dry	10	04/29/13 16:18
Surr: 2-Fluorobiphenyl	57.2			12-100	%REC	10	04/29/13 16:18
Surr: 4-Terphenyl-d14	83.8			25-137	%REC	10	04/29/13 16:18
Surr: Nitrobenzene-d5	52.2			37-107	%REC	10	04/29/13 16:18

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: AK

BatchID: 47967

1,1,1-Trichloroethane	U		16	43	µg/Kg-dry	1	04/30/13 04:39
1,1,2,2-Tetrachloroethane	U		19	43	µg/Kg-dry	1	04/30/13 04:39
1,1,2-Trichloroethane	U		15	43	µg/Kg-dry	1	04/30/13 04:39
1,1,2-Trichlorotrifluoroethane	U		16	43	µg/Kg-dry	1	04/30/13 04:39
1,1-Dichloroethane	U		16	43	µg/Kg-dry	1	04/30/13 04:39
1,1-Dichloroethene	U		18	43	µg/Kg-dry	1	04/30/13 04:39
1,2,4-Trichlorobenzene	U		22	43	µg/Kg-dry	1	04/30/13 04:39
1,2-Dibromo-3-chloropropane	U		21	43	µg/Kg-dry	1	04/30/13 04:39
1,2-Dibromoethane	U		17	43	µg/Kg-dry	1	04/30/13 04:39
1,2-Dichlorobenzene	U		17	43	µg/Kg-dry	1	04/30/13 04:39
1,2-Dichloroethane	U		20	43	µg/Kg-dry	1	04/30/13 04:39
1,2-Dichloropropane	U		14	43	µg/Kg-dry	1	04/30/13 04:39
1,3-Dichlorobenzene	U		17	43	µg/Kg-dry	1	04/30/13 04:39
1,4-Dichlorobenzene	U		16	43	µg/Kg-dry	1	04/30/13 04:39
2-Butanone	U		110	290	µg/Kg-dry	1	04/30/13 04:39
2-Hexanone	U		11	43	µg/Kg-dry	1	04/30/13 04:39
4-Methyl-2-pentanone	U		15	43	µg/Kg-dry	1	04/30/13 04:39
Acetone	U		91	140	µg/Kg-dry	1	04/30/13 04:39

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-064
Collection Date: 04/24/13 11:35 AM

Work Order: 13041049
Lab ID: 13041049-52
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		17	43	µg/Kg-dry	1	04/30/13 04:39
Bromodichloromethane	U		9.7	43	µg/Kg-dry	1	04/30/13 04:39
Bromoform	U		8.5	43	µg/Kg-dry	1	04/30/13 04:39
Bromomethane	U		16	110	µg/Kg-dry	1	04/30/13 04:39
Carbon disulfide	U		21	43	µg/Kg-dry	1	04/30/13 04:39
Carbon tetrachloride	U		12	43	µg/Kg-dry	1	04/30/13 04:39
Chlorobenzene	U		18	43	µg/Kg-dry	1	04/30/13 04:39
Chloroethane	U		91	140	µg/Kg-dry	1	04/30/13 04:39
Chloroform	U		18	43	µg/Kg-dry	1	04/30/13 04:39
Chloromethane	U		24	140	µg/Kg-dry	1	04/30/13 04:39
cis-1,2-Dichloroethene	U		17	43	µg/Kg-dry	1	04/30/13 04:39
cis-1,3-Dichloropropene	U		15	43	µg/Kg-dry	1	04/30/13 04:39
Cyclohexane	U		19	43	µg/Kg-dry	1	04/30/13 04:39
Dibromochloromethane	U		8.0	43	µg/Kg-dry	1	04/30/13 04:39
Dichlorodifluoromethane	U		19	43	µg/Kg-dry	1	04/30/13 04:39
Ethylbenzene	U		16	43	µg/Kg-dry	1	04/30/13 04:39
Isopropylbenzene	U		19	43	µg/Kg-dry	1	04/30/13 04:39
Methyl acetate	U		58	290	µg/Kg-dry	1	04/30/13 04:39
Methyl tert-butyl ether	U		18	43	µg/Kg-dry	1	04/30/13 04:39
Methylcyclohexane	U		20	43	µg/Kg-dry	1	04/30/13 04:39
Methylene chloride	U		17	43	µg/Kg-dry	1	04/30/13 04:39
Styrene	U		16	43	µg/Kg-dry	1	04/30/13 04:39
Tetrachloroethene	U		19	43	µg/Kg-dry	1	04/30/13 04:39
Toluene	U		16	43	µg/Kg-dry	1	04/30/13 04:39
trans-1,2-Dichloroethene	U		13	43	µg/Kg-dry	1	04/30/13 04:39
trans-1,3-Dichloropropene	U		14	43	µg/Kg-dry	1	04/30/13 04:39
Trichlorofluoromethane	U		12	43	µg/Kg-dry	1	04/30/13 04:39
Vinyl chloride	U		19	43	µg/Kg-dry	1	04/30/13 04:39
Xylenes, Total	U		51	130	µg/Kg-dry	1	04/30/13 04:39
Surr: 1,2-Dichloroethane-d4	81.5			70-130	%REC	1	04/30/13 04:39
Surr: 4-Bromofluorobenzene	102			70-130	%REC	1	04/30/13 04:39
Surr: Dibromofluoromethane	90.6			70-130	%REC	1	04/30/13 04:39
Surr: Toluene-d8	98.2			70-130	%REC	1	04/30/13 04:39
BatchID: 47967							
Trichloroethene	8,000		40	86	µg/Kg-dry	2	05/02/13 08:42
Surr: 1,2-Dichloroethane-d4	113			70-130	%REC	2	05/02/13 08:42
Surr: 4-Bromofluorobenzene	95.7			70-130	%REC	2	05/02/13 08:42
Surr: Dibromofluoromethane	99.5			70-130	%REC	2	05/02/13 08:42
Surr: Toluene-d8	108			70-130	%REC	2	05/02/13 08:42

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-064
Collection Date: 04/24/13 11:35 AM

Work Order: 13041049
Lab ID: 13041049-52
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MOISTURE			A2540 G				Analyst: DC
BatchID: <u>R119875</u>							
Moisture	13		0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-065
Collection Date: 04/24/13 11:37 AM

Work Order: 13041049
Lab ID: 13041049-53
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		38	350	µg/Kg-dry	1	05/01/13 20:13
Aroclor 1221	U		38	350	µg/Kg-dry	1	05/01/13 20:13
Aroclor 1232	U		38	350	µg/Kg-dry	1	05/01/13 20:13
Aroclor 1242	U		38	350	µg/Kg-dry	1	05/01/13 20:13
Aroclor 1248	U		38	350	µg/Kg-dry	1	05/01/13 20:13
Aroclor 1254	U		12	350	µg/Kg-dry	1	05/01/13 20:13
Aroclor 1260	U		12	350	µg/Kg-dry	1	05/01/13 20:13
Surr: Decachlorobiphenyl	44.0			40-140	%REC	1	05/01/13 20:13
MERCURY BY CVAA							
			SW7471		Prep: SW7471 / 4/30/13		Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.054		0.00094	0.047	mg/Kg-dry	1	04/30/13 12:56
METALS BY ICP-MS							
			SW6020A		Prep: SW3050B / 4/30/13		Analyst: ML
<u>BatchID: 48042</u>							
Antimony	38		0.0016	0.41	mg/Kg-dry	1	05/01/13 19:45
Arsenic	9.9		0.055	0.41	mg/Kg-dry	1	05/01/13 19:45
Beryllium	0.14	J	0.0033	0.16	mg/Kg-dry	1	05/01/13 19:45
Cobalt	41		0.0016	0.41	mg/Kg-dry	1	05/01/13 19:45
Selenium	0.48		0.052	0.41	mg/Kg-dry	1	05/01/13 19:45
Silver	4.5		0.0016	0.41	mg/Kg-dry	1	05/01/13 19:45
Vanadium	U		0.024	0.41	mg/Kg-dry	1	05/01/13 19:45
<u>BatchID: 48042</u>							
Cadmium	15		0.0082	0.82	mg/Kg-dry	5	05/02/13 18:12
Thallium	0.14	J	0.049	2.0	mg/Kg-dry	5	05/02/13 18:12
<u>BatchID: 48042</u>							
Barium	340		1.1	41	mg/Kg-dry	100	05/01/13 18:54
Chromium	1,400		6.7	41	mg/Kg-dry	100	05/01/13 18:54
Copper	510		8.0	41	mg/Kg-dry	100	05/01/13 18:54
Iron	72,000		140	650	mg/Kg-dry	100	05/01/13 18:54
Lead	1,400		0.16	41	mg/Kg-dry	100	05/01/13 18:54
Manganese	3,800		3.6	41	mg/Kg-dry	100	05/01/13 18:54
Molybdenum	440		1.8	41	mg/Kg-dry	100	05/01/13 18:54
Nickel	1,000		4.1	41	mg/Kg-dry	100	05/01/13 18:54
Zinc	770		3.4	82	mg/Kg-dry	100	05/01/13 18:54
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270		Prep: SW3541 / 4/26/13		Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	830	J	220	1,800	µg/Kg-dry	20	04/30/13 15:17

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-065
Collection Date: 04/24/13 11:37 AM

Work Order: 13041049
Lab ID: 13041049-53
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthene	1,100		200	660	µg/Kg-dry	20	04/30/13 15:17
Acenaphthylene	1,100		210	660	µg/Kg-dry	20	04/30/13 15:17
Anthracene	2,900		220	660	µg/Kg-dry	20	04/30/13 15:17
Benzo(a)anthracene	21,000		270	660	µg/Kg-dry	20	04/30/13 15:17
Benzo(a)pyrene	25,000		340	660	µg/Kg-dry	20	04/30/13 15:17
Benzo(b)fluoranthene	32,000		360	660	µg/Kg-dry	20	04/30/13 15:17
Benzo(g,h,i)perylene	18,000		520	660	µg/Kg-dry	20	04/30/13 15:17
Benzo(k)fluoranthene	9,800		300	660	µg/Kg-dry	20	04/30/13 15:17
Chrysene	21,000		250	660	µg/Kg-dry	20	04/30/13 15:17
Dibenzo(a,h)anthracene	5,400		380	660	µg/Kg-dry	20	04/30/13 15:17
Fluoranthene	24,000		260	660	µg/Kg-dry	20	04/30/13 15:17
Fluorene	1,100		190	660	µg/Kg-dry	20	04/30/13 15:17
Indeno(1,2,3-cd)pyrene	21,000		420	660	µg/Kg-dry	20	04/30/13 15:17
Naphthalene	U		190	660	µg/Kg-dry	20	04/30/13 15:17
Phenanthrene	9,000		660	660	µg/Kg-dry	20	04/30/13 15:17
Pyrene	26,000		280	660	µg/Kg-dry	20	04/30/13 15:17
Surr: 2-Fluorobiphenyl	54.8			12-100	%REC	20	04/30/13 15:17
Surr: 4-Terphenyl-d14	80.4			25-137	%REC	20	04/30/13 15:17
Surr: Nitrobenzene-d5	77.2			37-107	%REC	20	04/30/13 15:17
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: AK
BatchID: 47967							
1,1,1-Trichloroethane	U		18	47	µg/Kg-dry	1	04/30/13 05:03
1,1,2,2-Tetrachloroethane	U		21	47	µg/Kg-dry	1	04/30/13 05:03
1,1,2-Trichloroethane	U		17	47	µg/Kg-dry	1	04/30/13 05:03
1,1,2-Trichlorotrifluoroethane	U		17	47	µg/Kg-dry	1	04/30/13 05:03
1,1-Dichloroethane	U		17	47	µg/Kg-dry	1	04/30/13 05:03
1,1-Dichloroethene	U		20	47	µg/Kg-dry	1	04/30/13 05:03
1,2,4-Trichlorobenzene	U		24	47	µg/Kg-dry	1	04/30/13 05:03
1,2-Dibromo-3-chloropropane	U		23	47	µg/Kg-dry	1	04/30/13 05:03
1,2-Dibromoethane	U		19	47	µg/Kg-dry	1	04/30/13 05:03
1,2-Dichlorobenzene	U		19	47	µg/Kg-dry	1	04/30/13 05:03
1,2-Dichloroethane	U		22	47	µg/Kg-dry	1	04/30/13 05:03
1,2-Dichloropropane	U		16	47	µg/Kg-dry	1	04/30/13 05:03
1,3-Dichlorobenzene	U		19	47	µg/Kg-dry	1	04/30/13 05:03
1,4-Dichlorobenzene	U		18	47	µg/Kg-dry	1	04/30/13 05:03
2-Butanone	U		120	310	µg/Kg-dry	1	04/30/13 05:03
2-Hexanone	U		12	47	µg/Kg-dry	1	04/30/13 05:03
4-Methyl-2-pentanone	U		16	47	µg/Kg-dry	1	04/30/13 05:03
Acetone	400		100	160	µg/Kg-dry	1	04/30/13 05:03

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-065
Collection Date: 04/24/13 11:37 AM

Work Order: 13041049
Lab ID: 13041049-53
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		19	47	µg/Kg-dry	1	04/30/13 05:03
Bromodichloromethane	U		11	47	µg/Kg-dry	1	04/30/13 05:03
Bromoform	U		9.3	47	µg/Kg-dry	1	04/30/13 05:03
Bromomethane	U		18	120	µg/Kg-dry	1	04/30/13 05:03
Carbon disulfide	U		23	47	µg/Kg-dry	1	04/30/13 05:03
Carbon tetrachloride	U		13	47	µg/Kg-dry	1	04/30/13 05:03
Chlorobenzene	U		19	47	µg/Kg-dry	1	04/30/13 05:03
Chloroethane	U		100	160	µg/Kg-dry	1	04/30/13 05:03
Chloroform	U		19	47	µg/Kg-dry	1	05/02/13 10:23
Chloromethane	U		26	160	µg/Kg-dry	1	04/30/13 05:03
cis-1,2-Dichloroethene	170		19	47	µg/Kg-dry	1	04/30/13 05:03
cis-1,3-Dichloropropene	U		16	47	µg/Kg-dry	1	04/30/13 05:03
Cyclohexane	U		21	47	µg/Kg-dry	1	04/30/13 05:03
Dibromochloromethane	U		8.7	47	µg/Kg-dry	1	04/30/13 05:03
Dichlorodifluoromethane	U		21	47	µg/Kg-dry	1	04/30/13 05:03
Ethylbenzene	U		18	47	µg/Kg-dry	1	04/30/13 05:03
Isopropylbenzene	U		20	47	µg/Kg-dry	1	04/30/13 05:03
Methyl acetate	U		63	310	µg/Kg-dry	1	04/30/13 05:03
Methyl tert-butyl ether	U		20	47	µg/Kg-dry	1	04/30/13 05:03
Methylcyclohexane	U		22	47	µg/Kg-dry	1	04/30/13 05:03
Methylene chloride	U		19	47	µg/Kg-dry	1	04/30/13 05:03
Styrene	U		18	47	µg/Kg-dry	1	04/30/13 05:03
Tetrachloroethene	U		21	47	µg/Kg-dry	1	04/30/13 05:03
Toluene	31	J	18	47	µg/Kg-dry	1	04/30/13 05:03
trans-1,2-Dichloroethene	77		15	47	µg/Kg-dry	1	04/30/13 05:03
trans-1,3-Dichloropropene	U		16	47	µg/Kg-dry	1	04/30/13 05:03
Trichlorofluoromethane	U		13	47	µg/Kg-dry	1	04/30/13 05:03
Vinyl chloride	U		21	47	µg/Kg-dry	1	04/30/13 05:03
Xylenes, Total	U		56	140	µg/Kg-dry	1	04/30/13 05:03
Surr: 1,2-Dichloroethane-d4	78.8			70-130	%REC	1	04/30/13 05:03
Surr: 1,2-Dichloroethane-d4	91.6			70-130	%REC	1	05/02/13 10:23
Surr: 4-Bromofluorobenzene	100			70-130	%REC	1	04/30/13 05:03
Surr: 4-Bromofluorobenzene	98.4			70-130	%REC	1	05/02/13 10:23
Surr: Dibromofluoromethane	86.8			70-130	%REC	1	04/30/13 05:03
Surr: Dibromofluoromethane	98.4			70-130	%REC	1	05/02/13 10:23
Surr: Toluene-d8	95.6			70-130	%REC	1	04/30/13 05:03
Surr: Toluene-d8	101			70-130	%REC	1	05/02/13 10:23
BatchID: 47967							
Trichloroethene	17,000		220	470	µg/Kg-dry	10	05/02/13 09:07
Surr: 1,2-Dichloroethane-d4	112			70-130	%REC	10	05/02/13 09:07

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-065
Collection Date: 04/24/13 11:37 AM

Work Order: 13041049
Lab ID: 13041049-53
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	96.5			70-130	%REC	10	05/02/13 09:07
Surr: Dibromofluoromethane	97.4			70-130	%REC	10	05/02/13 09:07
Surr: Toluene-d8	110			70-130	%REC	10	05/02/13 09:07
MOISTURE			A2540 G				Analyst: DC
BatchID: <u>R119875</u>							
Moisture	11		0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-066
Collection Date: 04/24/13 11:40 AM

Work Order: 13041049
Lab ID: 13041049-54
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 4/30/13		Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		41	380	µg/Kg-dry	1	05/01/13 20:33
Aroclor 1221	U		41	380	µg/Kg-dry	1	05/01/13 20:33
Aroclor 1232	U		41	380	µg/Kg-dry	1	05/01/13 20:33
Aroclor 1242	U		41	380	µg/Kg-dry	1	05/01/13 20:33
Aroclor 1248	U		41	380	µg/Kg-dry	1	05/01/13 20:33
Aroclor 1254	U		13	380	µg/Kg-dry	1	05/01/13 20:33
Aroclor 1260	U		13	380	µg/Kg-dry	1	05/01/13 20:33
Surr: Decachlorobiphenyl	55.1			40-140	%REC	1	05/01/13 20:33
MERCURY BY CVAA							
			SW7471		Prep: SW7471 / 4/30/13		Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.023	J	0.00092	0.046	mg/Kg-dry	1	04/30/13 13:00
METALS BY ICP-MS							
			SW6020A		Prep: SW3050B / 5/1/13		Analyst: ML
<u>BatchID: 48082</u>							
Antimony	78		0.0018	0.44	mg/Kg-dry	1	05/02/13 04:24
Arsenic	14		0.060	0.44	mg/Kg-dry	1	05/02/13 04:24
Beryllium	0.11	J	0.0035	0.18	mg/Kg-dry	1	05/02/13 04:24
Cadmium	26		0.0018	0.18	mg/Kg-dry	1	05/02/13 04:24
Cobalt	120		0.0018	0.44	mg/Kg-dry	1	05/02/13 04:24
Selenium	0.46		0.056	0.44	mg/Kg-dry	1	05/02/13 04:24
Silver	10		0.0018	0.44	mg/Kg-dry	1	05/02/13 04:24
Vanadium	U		0.026	0.44	mg/Kg-dry	1	05/02/13 04:24
<u>BatchID: 48082</u>							
Barium	660		1.2	44	mg/Kg-dry	100	05/02/13 18:17
Chromium	1,300		7.2	44	mg/Kg-dry	100	05/02/13 18:17
Copper	2,700		8.6	44	mg/Kg-dry	100	05/02/13 18:17
Iron	140,000		150	700	mg/Kg-dry	100	05/02/13 18:17
Lead	3,300		0.18	44	mg/Kg-dry	100	05/02/13 18:17
Manganese	6,300		3.9	44	mg/Kg-dry	100	05/02/13 18:17
Molybdenum	760		1.9	44	mg/Kg-dry	100	05/02/13 18:17
Nickel	1,500		4.4	44	mg/Kg-dry	100	05/02/13 18:17
Thallium	U		1.1	44	mg/Kg-dry	100	05/02/13 18:17
Zinc	4,600		3.7	88	mg/Kg-dry	100	05/02/13 18:17
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270		Prep: SW3541 / 4/26/13		Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	U		110	920	µg/Kg-dry	10	04/29/13 17:22
Acenaphthene	U		100	350	µg/Kg-dry	10	04/29/13 17:22

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-066
Collection Date: 04/24/13 11:40 AM

Work Order: 13041049
Lab ID: 13041049-54
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U	J	110	350	µg/Kg-dry	10	04/29/13 17:22
Anthracene	200		120	350	µg/Kg-dry	10	04/29/13 17:22
Benzo(a)anthracene	1,600		140	350	µg/Kg-dry	10	04/29/13 17:22
Benzo(a)pyrene	1,400		180	350	µg/Kg-dry	10	04/29/13 17:22
Benzo(b)fluoranthene	4,100		190	350	µg/Kg-dry	10	04/29/13 17:22
Benzo(g,h,i)perylene	990		270	350	µg/Kg-dry	10	04/29/13 17:22
Benzo(k)fluoranthene	1,200		160	350	µg/Kg-dry	10	04/29/13 17:22
Chrysene	2,900		130	350	µg/Kg-dry	10	04/29/13 17:22
Dibenzo(a,h)anthracene	350		200	350	µg/Kg-dry	10	04/29/13 17:22
Fluoranthene	2,600		140	350	µg/Kg-dry	10	04/29/13 17:22
Fluorene	U		100	350	µg/Kg-dry	10	04/29/13 17:22
Indeno(1,2,3-cd)pyrene	840		220	350	µg/Kg-dry	10	04/29/13 17:22
Naphthalene	U		98	350	µg/Kg-dry	10	04/29/13 17:22
Phenanthrene	1,800		350	350	µg/Kg-dry	10	04/29/13 17:22
Pyrene	2,000	140	350	µg/Kg-dry	10	04/29/13 17:22	
Surr: 2-Fluorobiphenyl	56.6			12-100	%REC	10	04/29/13 17:22
Surr: 4-Terphenyl-d14	89.2			25-137	%REC	10	04/29/13 17:22
Surr: Nitrobenzene-d5	51.4			37-107	%REC	10	04/29/13 17:22
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: AK
BatchID: 47967							
1,1,1-Trichloroethane	U		15	40	µg/Kg-dry	1	04/30/13 05:27
1,1,2,2-Tetrachloroethane	U		18	40	µg/Kg-dry	1	04/30/13 05:27
1,1,2-Trichloroethane	U		14	40	µg/Kg-dry	1	04/30/13 05:27
1,1,2-Trichlorotrifluoroethane	U		15	40	µg/Kg-dry	1	04/30/13 05:27
1,1-Dichloroethane	U		15	40	µg/Kg-dry	1	04/30/13 05:27
1,1-Dichloroethene	U		17	40	µg/Kg-dry	1	04/30/13 05:27
1,2,4-Trichlorobenzene	U		21	40	µg/Kg-dry	1	04/30/13 05:27
1,2-Dibromo-3-chloropropane	U		20	40	µg/Kg-dry	1	04/30/13 05:27
1,2-Dibromoethane	U		16	40	µg/Kg-dry	1	04/30/13 05:27
1,2-Dichlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 05:27
1,2-Dichloroethane	U		19	40	µg/Kg-dry	1	04/30/13 05:27
1,2-Dichloropropane	U		13	40	µg/Kg-dry	1	04/30/13 05:27
1,3-Dichlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 05:27
1,4-Dichlorobenzene	U		15	40	µg/Kg-dry	1	04/30/13 05:27
2-Butanone	U		100	270	µg/Kg-dry	1	04/30/13 05:27
2-Hexanone	U		9.9	40	µg/Kg-dry	1	04/30/13 05:27
4-Methyl-2-pentanone	U		14	40	µg/Kg-dry	1	04/30/13 05:27
Acetone	U		86	130	µg/Kg-dry	1	04/30/13 05:27
Benzene	U		16	40	µg/Kg-dry	1	04/30/13 05:27

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-066
Collection Date: 04/24/13 11:40 AM

Work Order: 13041049
Lab ID: 13041049-54
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromodichloromethane	U		9.1	40	µg/Kg-dry	1	04/30/13 05:27
Bromoform	U		8.0	40	µg/Kg-dry	1	04/30/13 05:27
Bromomethane	U		16	100	µg/Kg-dry	1	04/30/13 05:27
Carbon disulfide	U		20	40	µg/Kg-dry	1	04/30/13 05:27
Carbon tetrachloride	U		12	40	µg/Kg-dry	1	04/30/13 05:27
Chlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 05:27
Chloroethane	U		86	130	µg/Kg-dry	1	04/30/13 05:27
Chloroform	U		17	40	µg/Kg-dry	1	04/30/13 05:27
Chloromethane	U		23	130	µg/Kg-dry	1	04/30/13 05:27
cis-1,2-Dichloroethene	U		16	40	µg/Kg-dry	1	04/30/13 05:27
cis-1,3-Dichloropropene	U		14	40	µg/Kg-dry	1	04/30/13 05:27
Cyclohexane	U		18	40	µg/Kg-dry	1	04/30/13 05:27
Dibromochloromethane	U		7.5	40	µg/Kg-dry	1	04/30/13 05:27
Dichlorodifluoromethane	U		18	40	µg/Kg-dry	1	04/30/13 05:27
Ethylbenzene	U		15	40	µg/Kg-dry	1	04/30/13 05:27
Isopropylbenzene	U		17	40	µg/Kg-dry	1	04/30/13 05:27
Methyl acetate	U		54	270	µg/Kg-dry	1	04/30/13 05:27
Methyl tert-butyl ether	U		17	40	µg/Kg-dry	1	04/30/13 05:27
Methylcyclohexane	U		19	40	µg/Kg-dry	1	04/30/13 05:27
Methylene chloride	U		16	40	µg/Kg-dry	1	04/30/13 05:27
Styrene	U		15	40	µg/Kg-dry	1	04/30/13 05:27
Tetrachloroethene	U		18	40	µg/Kg-dry	1	04/30/13 05:27
Toluene	U		15	40	µg/Kg-dry	1	04/30/13 05:27
trans-1,2-Dichloroethene	U		12	40	µg/Kg-dry	1	04/30/13 05:27
trans-1,3-Dichloropropene	U		14	40	µg/Kg-dry	1	04/30/13 05:27
Trichlorofluoromethane	U		11	40	µg/Kg-dry	1	04/30/13 05:27
Vinyl chloride	U		18	40	µg/Kg-dry	1	04/30/13 05:27
Xylenes, Total	U		48	120	µg/Kg-dry	1	04/30/13 05:27
Surr: 1,2-Dichloroethane-d4	79.2			70-130	%REC	1	04/30/13 05:27
Surr: 4-Bromofluorobenzene	99.6			70-130	%REC	1	04/30/13 05:27
Surr: Dibromofluoromethane	87.3			70-130	%REC	1	04/30/13 05:27
Surr: Toluene-d8	95.7			70-130	%REC	1	04/30/13 05:27
BatchID: 47967							
Trichloroethene	6,100		38	81	µg/Kg-dry	2	05/02/13 05:39
Surr: 1,2-Dichloroethane-d4	94.2			70-130	%REC	2	05/02/13 05:39
Surr: 4-Bromofluorobenzene	95.1			70-130	%REC	2	05/02/13 05:39
Surr: Dibromofluoromethane	99.6			70-130	%REC	2	05/02/13 05:39
Surr: Toluene-d8	104			70-130	%REC	2	05/02/13 05:39

MOISTURE

A2540 G

Analyst: DC

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-066
Collection Date: 04/24/13 11:40 AM

Work Order: 13041049
Lab ID: 13041049-54
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
BatchID: R119875							
Moisture	15		0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-067
Collection Date: 04/24/13 11:45 AM

Work Order: 13041049
Lab ID: 13041049-55
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 4/30/13	Analyst: JD
<u>BatchID: 48039</u>							
Aroclor 1016	U		39	370	µg/Kg-dry	1	05/01/13 20:53
Aroclor 1221	U		39	370	µg/Kg-dry	1	05/01/13 20:53
Aroclor 1232	U		39	370	µg/Kg-dry	1	05/01/13 20:53
Aroclor 1242	U		39	370	µg/Kg-dry	1	05/01/13 20:53
Aroclor 1248	U		39	370	µg/Kg-dry	1	05/01/13 20:53
Aroclor 1254	U		12	370	µg/Kg-dry	1	05/01/13 20:53
Aroclor 1260	U		12	370	µg/Kg-dry	1	05/01/13 20:53
Surr: Decachlorobiphenyl	66.1			40-140	%REC	1	05/01/13 20:53
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.0088	J	0.00084	0.042	mg/Kg-dry	1	04/30/13 13:02
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 5/1/13	Analyst: ML
<u>BatchID: 48082</u>							
Antimony	0.23	J	0.0016	0.39	mg/Kg-dry	1	05/02/13 04:30
Arsenic	1.1		0.053	0.39	mg/Kg-dry	1	05/02/13 04:30
Barium	37		0.011	0.39	mg/Kg-dry	1	05/02/13 04:30
Beryllium	0.13	J	0.0031	0.16	mg/Kg-dry	1	05/02/13 04:30
Cadmium	0.18		0.0016	0.16	mg/Kg-dry	1	05/02/13 04:30
Chromium	7.0		0.064	0.39	mg/Kg-dry	1	05/02/13 04:30
Cobalt	2.1		0.0016	0.39	mg/Kg-dry	1	05/02/13 04:30
Copper	4.9		0.076	0.39	mg/Kg-dry	1	05/02/13 04:30
Lead	11		0.0016	0.39	mg/Kg-dry	1	05/02/13 04:30
Molybdenum	2.7		0.017	0.39	mg/Kg-dry	1	05/02/13 04:30
Nickel	7.8		0.039	0.39	mg/Kg-dry	1	05/02/13 04:30
Selenium	0.19	J	0.050	0.39	mg/Kg-dry	1	05/02/13 04:30
Silver	0.031	J	0.0016	0.39	mg/Kg-dry	1	05/02/13 04:30
Thallium	0.063	J	0.0094	0.39	mg/Kg-dry	1	05/02/13 04:30
Vanadium	6.7		0.023	0.39	mg/Kg-dry	1	05/02/13 04:30
Zinc	75		0.033	0.78	mg/Kg-dry	1	05/02/13 04:30
<u>BatchID: 48082</u>							
Iron	5,200		13	62	mg/Kg-dry	10	05/02/13 18:23
Manganese	330		0.34	3.9	mg/Kg-dry	10	05/02/13 18:23
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	34	J	11	89	µg/Kg-dry	1	04/29/13 21:14
Acenaphthene	U		10	34	µg/Kg-dry	1	04/29/13 21:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-067
Collection Date: 04/24/13 11:45 AM

Work Order: 13041049
Lab ID: 13041049-55
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		11	34	µg/Kg-dry	1	04/29/13 21:14
Anthracene	57		11	34	µg/Kg-dry	1	04/29/13 21:14
Benzo(a)anthracene	40		14	34	µg/Kg-dry	1	04/29/13 21:14
Benzo(a)pyrene	64		17	34	µg/Kg-dry	1	04/29/13 21:14
Benzo(b)fluoranthene	72		18	34	µg/Kg-dry	1	04/29/13 21:14
Benzo(g,h,i)perylene	44		26	34	µg/Kg-dry	1	04/29/13 21:14
Benzo(k)fluoranthene	71		15	34	µg/Kg-dry	1	04/29/13 21:14
Chrysene	67		13	34	µg/Kg-dry	1	04/29/13 21:14
Dibenzo(a,h)anthracene	32	J	19	34	µg/Kg-dry	1	04/29/13 21:14
Fluoranthene	71		13	34	µg/Kg-dry	1	04/29/13 21:14
Fluorene	45		9.8	34	µg/Kg-dry	1	04/29/13 21:14
Indeno(1,2,3-cd)pyrene	41		21	34	µg/Kg-dry	1	04/29/13 21:14
Naphthalene	U		9.5	34	µg/Kg-dry	1	04/29/13 21:14
Phenanthrene	U		34	34	µg/Kg-dry	1	04/29/13 21:14
Pyrene	48		14	34	µg/Kg-dry	1	04/29/13 21:14
Surr: 2-Fluorobiphenyl	69.3			12-100	%REC	1	04/29/13 21:14
Surr: 4-Terphenyl-d14	114			25-137	%REC	1	04/29/13 21:14
Surr: Nitrobenzene-d5	56.9			37-107	%REC	1	04/29/13 21:14
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: AK
<u>BatchID: 47967</u>							
1,1,1-Trichloroethane	U		13	34	µg/Kg-dry	1	04/30/13 05:51
1,1,2,2-Tetrachloroethane	U		15	34	µg/Kg-dry	1	04/30/13 05:51
1,1,2-Trichloroethane	U		12	34	µg/Kg-dry	1	04/30/13 05:51
1,1,2-Trichlorotrifluoroethane	U		13	34	µg/Kg-dry	1	04/30/13 05:51
1,1-Dichloroethane	U		12	34	µg/Kg-dry	1	04/30/13 05:51
1,1-Dichloroethene	U		14	34	µg/Kg-dry	1	04/30/13 05:51
1,2,4-Trichlorobenzene	U		18	34	µg/Kg-dry	1	04/30/13 05:51
1,2-Dibromo-3-chloropropane	U		17	34	µg/Kg-dry	1	04/30/13 05:51
1,2-Dibromoethane	U		13	34	µg/Kg-dry	1	04/30/13 05:51
1,2-Dichlorobenzene	U		14	34	µg/Kg-dry	1	04/30/13 05:51
1,2-Dichloroethane	U		16	34	µg/Kg-dry	1	04/30/13 05:51
1,2-Dichloropropane	U		11	34	µg/Kg-dry	1	04/30/13 05:51
1,3-Dichlorobenzene	U		14	34	µg/Kg-dry	1	04/30/13 05:51
1,4-Dichlorobenzene	U		13	34	µg/Kg-dry	1	04/30/13 05:51
2-Butanone	U		84	230	µg/Kg-dry	1	04/30/13 05:51
2-Hexanone	U		8.4	34	µg/Kg-dry	1	04/30/13 05:51
4-Methyl-2-pentanone	U		12	34	µg/Kg-dry	1	04/30/13 05:51
Acetone	U		72	110	µg/Kg-dry	1	04/30/13 05:51
Benzene	U		14	34	µg/Kg-dry	1	04/30/13 05:51

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-067
Collection Date: 04/24/13 11:45 AM

Work Order: 13041049
Lab ID: 13041049-55
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromodichloromethane	U		7.7	34	µg/Kg-dry	1	04/30/13 05:51
Bromoform	U		6.7	34	µg/Kg-dry	1	04/30/13 05:51
Bromomethane	U		13	85	µg/Kg-dry	1	04/30/13 05:51
Carbon disulfide	U		17	34	µg/Kg-dry	1	04/30/13 05:51
Carbon tetrachloride	U		9.7	34	µg/Kg-dry	1	04/30/13 05:51
Chlorobenzene	U		14	34	µg/Kg-dry	1	04/30/13 05:51
Chloroethane	U		72	110	µg/Kg-dry	1	04/30/13 05:51
Chloroform	U		14	34	µg/Kg-dry	1	04/30/13 05:51
Chloromethane	U		19	110	µg/Kg-dry	1	04/30/13 05:51
cis-1,2-Dichloroethene	U		14	34	µg/Kg-dry	1	04/30/13 05:51
cis-1,3-Dichloropropene	U		12	34	µg/Kg-dry	1	04/30/13 05:51
Cyclohexane	U		15	34	µg/Kg-dry	1	04/30/13 05:51
Dibromochloromethane	U		6.3	34	µg/Kg-dry	1	04/30/13 05:51
Dichlorodifluoromethane	U		15	34	µg/Kg-dry	1	04/30/13 05:51
Ethylbenzene	U		13	34	µg/Kg-dry	1	04/30/13 05:51
Isopropylbenzene	U		15	34	µg/Kg-dry	1	04/30/13 05:51
Methyl acetate	U		46	230	µg/Kg-dry	1	04/30/13 05:51
Methyl tert-butyl ether	U		14	34	µg/Kg-dry	1	04/30/13 05:51
Methylcyclohexane	U		16	34	µg/Kg-dry	1	04/30/13 05:51
Methylene chloride	U		13	34	µg/Kg-dry	1	04/30/13 05:51
Styrene	U		13	34	µg/Kg-dry	1	04/30/13 05:51
Tetrachloroethene	U		15	34	µg/Kg-dry	1	04/30/13 05:51
Toluene	U		13	34	µg/Kg-dry	1	04/30/13 05:51
trans-1,2-Dichloroethene	U		11	34	µg/Kg-dry	1	04/30/13 05:51
trans-1,3-Dichloropropene	U		11	34	µg/Kg-dry	1	04/30/13 05:51
Trichloroethene	550		16	34	µg/Kg-dry	1	04/30/13 05:51
Trichlorofluoromethane	U		9.4	34	µg/Kg-dry	1	04/30/13 05:51
Vinyl chloride	U		15	34	µg/Kg-dry	1	04/30/13 05:51
Xylenes, Total	U		40	100	µg/Kg-dry	1	04/30/13 05:51
Surr: 1,2-Dichloroethane-d4	79.5			70-130	%REC	1	04/30/13 05:51
Surr: 4-Bromofluorobenzene	98.9			70-130	%REC	1	04/30/13 05:51
Surr: Dibromofluoromethane	88.6			70-130	%REC	1	04/30/13 05:51
Surr: Toluene-d8	96.0			70-130	%REC	1	04/30/13 05:51

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	12	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-068
Collection Date: 04/24/13 12:05 PM

Work Order: 13041049
Lab ID: 13041049-56
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 5/1/13	Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		38	350	µg/Kg-dry	1	05/02/13 09:10
Aroclor 1221	U		38	350	µg/Kg-dry	1	05/02/13 09:10
Aroclor 1232	U		38	350	µg/Kg-dry	1	05/02/13 09:10
Aroclor 1242	U		38	350	µg/Kg-dry	1	05/02/13 09:10
Aroclor 1248	U		38	350	µg/Kg-dry	1	05/02/13 09:10
Aroclor 1254	U		12	350	µg/Kg-dry	1	05/02/13 09:10
Aroclor 1260	U		12	350	µg/Kg-dry	1	05/02/13 09:10
Surr: Decachlorobiphenyl	63.1			40-140	%REC	1	05/02/13 09:10
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.035	J	0.00082	0.041	mg/Kg-dry	1	04/30/13 13:04
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 5/1/13	Analyst: ML
<u>BatchID: 48082</u>							
Antimony	0.68		0.0016	0.40	mg/Kg-dry	1	05/02/13 04:36
Arsenic	26		0.054	0.40	mg/Kg-dry	1	05/02/13 04:36
Barium	71		0.011	0.40	mg/Kg-dry	1	05/02/13 04:36
Beryllium	0.35		0.0032	0.16	mg/Kg-dry	1	05/02/13 04:36
Cadmium	0.17		0.0016	0.16	mg/Kg-dry	1	05/02/13 04:36
Chromium	10		0.065	0.40	mg/Kg-dry	1	05/02/13 04:36
Cobalt	2.4		0.0016	0.40	mg/Kg-dry	1	05/02/13 04:36
Copper	17		0.078	0.40	mg/Kg-dry	1	05/02/13 04:36
Iron	5,900		1.3	16	mg/Kg-dry	1	05/02/13 04:36
Lead	64		0.0016	0.40	mg/Kg-dry	1	05/02/13 04:36
Manganese	120		0.035	0.40	mg/Kg-dry	1	05/02/13 04:36
Molybdenum	2.2		0.017	0.40	mg/Kg-dry	1	05/02/13 04:36
Nickel	6.8		0.040	0.40	mg/Kg-dry	1	05/02/13 04:36
Selenium	1.3		0.051	0.40	mg/Kg-dry	1	05/02/13 04:36
Silver	0.085	J	0.0016	0.40	mg/Kg-dry	1	05/02/13 04:36
Thallium	1.0		0.0095	0.40	mg/Kg-dry	1	05/02/13 04:36
Vanadium	9.9		0.024	0.40	mg/Kg-dry	1	05/02/13 04:36
Zinc	22		0.033	0.79	mg/Kg-dry	1	05/02/13 04:36
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	240	J	110	870	µg/Kg-dry	10	04/29/13 17:53
Acenaphthene	410		99	330	µg/Kg-dry	10	04/29/13 17:53
Acenaphthylene	U		100	330	µg/Kg-dry	10	04/29/13 17:53

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-068
Collection Date: 04/24/13 12:05 PM

Work Order: 13041049
Lab ID: 13041049-56
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	600		110	330	µg/Kg-dry	10	04/29/13 17:53
Benzo(a)anthracene	1,300		130	330	µg/Kg-dry	10	04/29/13 17:53
Benzo(a)pyrene	1,000		170	330	µg/Kg-dry	10	04/29/13 17:53
Benzo(b)fluoranthene	1,600		180	330	µg/Kg-dry	10	04/29/13 17:53
Benzo(g,h,i)perylene	340		260	330	µg/Kg-dry	10	04/29/13 17:53
Benzo(k)fluoranthene	780		150	330	µg/Kg-dry	10	04/29/13 17:53
Chrysene	1,400		120	330	µg/Kg-dry	10	04/29/13 17:53
Dibenzo(a,h)anthracene	U		190	330	µg/Kg-dry	10	04/29/13 17:53
Fluoranthene	3,700		130	330	µg/Kg-dry	10	04/29/13 17:53
Fluorene	220	J	95	330	µg/Kg-dry	10	04/29/13 17:53
Indeno(1,2,3-cd)pyrene	290	J	210	330	µg/Kg-dry	10	04/29/13 17:53
Naphthalene	U		93	330	µg/Kg-dry	10	04/29/13 17:53
Phenanthrene	3,400		330	330	µg/Kg-dry	10	04/29/13 17:53
Pyrene	3,300		140	330	µg/Kg-dry	10	04/29/13 17:53
Surr: 2-Fluorobiphenyl	60.8			12-100	%REC	10	04/29/13 17:53
Surr: 4-Terphenyl-d14	87.2			25-137	%REC	10	04/29/13 17:53
Surr: Nitrobenzene-d5	56.0			37-107	%REC	10	04/29/13 17:53

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: AK

BatchID: 47967

1,1,1-Trichloroethane	U	14	36	µg/Kg-dry	1	04/30/13 06:15
1,1,2,2-Tetrachloroethane	U	16	36	µg/Kg-dry	1	04/30/13 06:15
1,1,2-Trichloroethane	U	13	36	µg/Kg-dry	1	04/30/13 06:15
1,1,2-Trichlorotrifluoroethane	U	13	36	µg/Kg-dry	1	04/30/13 06:15
1,1-Dichloroethane	U	13	36	µg/Kg-dry	1	04/30/13 06:15
1,1-Dichloroethene	U	15	36	µg/Kg-dry	1	04/30/13 06:15
1,2,4-Trichlorobenzene	U	19	36	µg/Kg-dry	1	04/30/13 06:15
1,2-Dibromo-3-chloropropane	U	18	36	µg/Kg-dry	1	04/30/13 06:15
1,2-Dibromoethane	U	14	36	µg/Kg-dry	1	04/30/13 06:15
1,2-Dichlorobenzene	U	14	36	µg/Kg-dry	1	04/30/13 06:15
1,2-Dichloroethane	U	17	36	µg/Kg-dry	1	04/30/13 06:15
1,2-Dichloropropane	U	12	36	µg/Kg-dry	1	04/30/13 06:15
1,3-Dichlorobenzene	U	14	36	µg/Kg-dry	1	04/30/13 06:15
1,4-Dichlorobenzene	U	14	36	µg/Kg-dry	1	04/30/13 06:15
2-Butanone	U	89	240	µg/Kg-dry	1	04/30/13 06:15
2-Hexanone	U	8.8	36	µg/Kg-dry	1	04/30/13 06:15
4-Methyl-2-pentanone	U	12	36	µg/Kg-dry	1	04/30/13 06:15
Acetone	U	76	120	µg/Kg-dry	1	04/30/13 06:15
Benzene	U	14	36	µg/Kg-dry	1	04/30/13 06:15
Bromodichloromethane	U	8.1	36	µg/Kg-dry	1	04/30/13 06:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-068
Collection Date: 04/24/13 12:05 PM

Work Order: 13041049
Lab ID: 13041049-56
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		7.1	36	µg/Kg-dry	1	04/30/13 06:15
Bromomethane	U		14	90	µg/Kg-dry	1	04/30/13 06:15
Carbon disulfide	U		18	36	µg/Kg-dry	1	04/30/13 06:15
Carbon tetrachloride	U		10	36	µg/Kg-dry	1	04/30/13 06:15
Chlorobenzene	U		15	36	µg/Kg-dry	1	04/30/13 06:15
Chloroethane	U		76	120	µg/Kg-dry	1	04/30/13 06:15
Chloroform	U		15	36	µg/Kg-dry	1	04/30/13 06:15
Chloromethane	U		20	120	µg/Kg-dry	1	04/30/13 06:15
cis-1,2-Dichloroethene	U		15	36	µg/Kg-dry	1	04/30/13 06:15
cis-1,3-Dichloropropene	U		12	36	µg/Kg-dry	1	04/30/13 06:15
Cyclohexane	U		16	36	µg/Kg-dry	1	04/30/13 06:15
Dibromochloromethane	U		6.7	36	µg/Kg-dry	1	04/30/13 06:15
Dichlorodifluoromethane	U		16	36	µg/Kg-dry	1	04/30/13 06:15
Ethylbenzene	U		13	36	µg/Kg-dry	1	04/30/13 06:15
Isopropylbenzene	U		16	36	µg/Kg-dry	1	04/30/13 06:15
Methyl acetate	U		48	240	µg/Kg-dry	1	04/30/13 06:15
Methyl tert-butyl ether	U		15	36	µg/Kg-dry	1	04/30/13 06:15
Methylcyclohexane	U		17	36	µg/Kg-dry	1	04/30/13 06:15
Methylene chloride	U		14	36	µg/Kg-dry	1	04/30/13 06:15
Styrene	U		13	36	µg/Kg-dry	1	04/30/13 06:15
Tetrachloroethene	U		16	36	µg/Kg-dry	1	04/30/13 06:15
Toluene	U		14	36	µg/Kg-dry	1	04/30/13 06:15
trans-1,2-Dichloroethene	U		11	36	µg/Kg-dry	1	04/30/13 06:15
trans-1,3-Dichloropropene	U		12	36	µg/Kg-dry	1	04/30/13 06:15
Trichloroethene	350		17	36	µg/Kg-dry	1	04/30/13 06:15
Trichlorofluoromethane	U		9.9	36	µg/Kg-dry	1	04/30/13 06:15
Vinyl chloride	U		16	36	µg/Kg-dry	1	04/30/13 06:15
Xylenes, Total	U		43	110	µg/Kg-dry	1	04/30/13 06:15
Surr: 1,2-Dichloroethane-d4	80.1			70-130	%REC	1	04/30/13 06:15
Surr: 4-Bromofluorobenzene	99.1			70-130	%REC	1	04/30/13 06:15
Surr: Dibromofluoromethane	87.7			70-130	%REC	1	04/30/13 06:15
Surr: Toluene-d8	96.2			70-130	%REC	1	04/30/13 06:15

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	9.5	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-069
Collection Date: 04/24/13 12:07 PM

Work Order: 13041049
Lab ID: 13041049-57
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 5/1/13		Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		38	350	µg/Kg-dry	1	05/02/13 09:30
Aroclor 1221	U		38	350	µg/Kg-dry	1	05/02/13 09:30
Aroclor 1232	U		38	350	µg/Kg-dry	1	05/02/13 09:30
Aroclor 1242	U		38	350	µg/Kg-dry	1	05/02/13 09:30
Aroclor 1248	U		38	350	µg/Kg-dry	1	05/02/13 09:30
Aroclor 1254	U		12	350	µg/Kg-dry	1	05/02/13 09:30
Aroclor 1260	U		12	350	µg/Kg-dry	1	05/02/13 09:30
Surr: Decachlorobiphenyl	67.1			40-140	%REC	1	05/02/13 09:30
MERCURY BY CVAA							
			SW7471		Prep: SW7471 / 4/30/13		Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.013	J	0.00079	0.039	mg/Kg-dry	1	04/30/13 13:13
METALS BY ICP-MS							
			SW6020A		Prep: SW3050B / 5/1/13		Analyst: ML
<u>BatchID: 48082</u>							
Antimony	0.56	J	0.0078	1.9	mg/Kg-dry	5	05/02/13 21:02
Arsenic	3.1		0.26	1.9	mg/Kg-dry	5	05/02/13 21:02
Barium	44		0.054	1.9	mg/Kg-dry	5	05/02/13 21:02
Beryllium	0.24	J	0.016	0.78	mg/Kg-dry	5	05/02/13 21:02
Cadmium	0.24	J	0.0078	0.78	mg/Kg-dry	5	05/02/13 21:02
Chromium	8.3		0.32	1.9	mg/Kg-dry	5	05/02/13 21:02
Cobalt	3.0		0.0078	1.9	mg/Kg-dry	5	05/02/13 21:02
Copper	17		0.38	1.9	mg/Kg-dry	5	05/02/13 21:02
Iron	7,100		6.4	31	mg/Kg-dry	5	05/02/13 21:02
Lead	25		0.0078	1.9	mg/Kg-dry	5	05/02/13 21:02
Manganese	150		0.17	1.9	mg/Kg-dry	5	05/02/13 21:02
Molybdenum	0.74	J	0.085	1.9	mg/Kg-dry	5	05/02/13 21:02
Nickel	9.2		0.19	1.9	mg/Kg-dry	5	05/02/13 21:02
Selenium	0.44	J	0.25	1.9	mg/Kg-dry	5	05/02/13 21:02
Silver	0.0092	J	0.0078	1.9	mg/Kg-dry	5	05/02/13 21:02
Thallium	0.049	J	0.047	1.9	mg/Kg-dry	5	05/02/13 21:02
Vanadium	11		0.12	1.9	mg/Kg-dry	5	05/02/13 21:02
Zinc	31		0.16	3.9	mg/Kg-dry	5	05/02/13 21:02
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270		Prep: SW3541 / 4/26/13		Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	U		110	880	µg/Kg-dry	10	04/29/13 18:25
Acenaphthene	U		100	330	µg/Kg-dry	10	04/29/13 18:25
Acenaphthylene	U		100	330	µg/Kg-dry	10	04/29/13 18:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-069
Collection Date: 04/24/13 12:07 PM

Work Order: 13041049
Lab ID: 13041049-57
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	240	J	110	330	µg/Kg-dry	10	04/29/13 18:25
Benzo(a)anthracene	760		130	330	µg/Kg-dry	10	04/29/13 18:25
Benzo(a)pyrene	690		170	330	µg/Kg-dry	10	04/29/13 18:25
Benzo(b)fluoranthene	1,200		180	330	µg/Kg-dry	10	04/29/13 18:25
Benzo(g,h,i)perylene	280	J	260	330	µg/Kg-dry	10	04/29/13 18:25
Benzo(k)fluoranthene	510		150	330	µg/Kg-dry	10	04/29/13 18:25
Chrysene	990		120	330	µg/Kg-dry	10	04/29/13 18:25
Dibenzo(a,h)anthracene	U		190	330	µg/Kg-dry	10	04/29/13 18:25
Fluoranthene	1,400		130	330	µg/Kg-dry	10	04/29/13 18:25
Fluorene	U		96	330	µg/Kg-dry	10	04/29/13 18:25
Indeno(1,2,3-cd)pyrene	220	J	210	330	µg/Kg-dry	10	04/29/13 18:25
Naphthalene	U		93	330	µg/Kg-dry	10	04/29/13 18:25
Phenanthrene	840		330	330	µg/Kg-dry	10	04/29/13 18:25
Pyrene	1,300		140	330	µg/Kg-dry	10	04/29/13 18:25
Surr: 2-Fluorobiphenyl	50.6			12-100	%REC	10	04/29/13 18:25
Surr: 4-Terphenyl-d14	80.2			25-137	%REC	10	04/29/13 18:25
Surr: Nitrobenzene-d5	48.0			37-107	%REC	10	04/29/13 18:25

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: AK

BatchID: 47967

1,1,1-Trichloroethane	U	13	33	µg/Kg-dry	1	04/30/13 06:39
1,1,2,2-Tetrachloroethane	U	14	33	µg/Kg-dry	1	04/30/13 06:39
1,1,2-Trichloroethane	U	12	33	µg/Kg-dry	1	04/30/13 06:39
1,1,2-Trichlorotrifluoroethane	U	12	33	µg/Kg-dry	1	04/30/13 06:39
1,1-Dichloroethane	U	12	33	µg/Kg-dry	1	04/30/13 06:39
1,1-Dichloroethene	U	14	33	µg/Kg-dry	1	04/30/13 06:39
1,2,4-Trichlorobenzene	U	17	33	µg/Kg-dry	1	04/30/13 06:39
1,2-Dibromo-3-chloropropane	U	16	33	µg/Kg-dry	1	04/30/13 06:39
1,2-Dibromoethane	U	13	33	µg/Kg-dry	1	04/30/13 06:39
1,2-Dichlorobenzene	U	13	33	µg/Kg-dry	1	04/30/13 06:39
1,2-Dichloroethane	U	16	33	µg/Kg-dry	1	04/30/13 06:39
1,2-Dichloropropane	U	11	33	µg/Kg-dry	1	04/30/13 06:39
1,3-Dichlorobenzene	U	13	33	µg/Kg-dry	1	04/30/13 06:39
1,4-Dichlorobenzene	U	13	33	µg/Kg-dry	1	04/30/13 06:39
2-Butanone	U	81	220	µg/Kg-dry	1	04/30/13 06:39
2-Hexanone	U	8.1	33	µg/Kg-dry	1	04/30/13 06:39
4-Methyl-2-pentanone	U	11	33	µg/Kg-dry	1	04/30/13 06:39
Acetone	U	70	110	µg/Kg-dry	1	04/30/13 06:39
Benzene	U	13	33	µg/Kg-dry	1	04/30/13 06:39
Bromodichloromethane	U	7.4	33	µg/Kg-dry	1	04/30/13 06:39

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-069
Collection Date: 04/24/13 12:07 PM

Work Order: 13041049
Lab ID: 13041049-57
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		6.5	33	µg/Kg-dry	1	04/30/13 06:39
Bromomethane	U		13	82	µg/Kg-dry	1	04/30/13 06:39
Carbon disulfide	U		16	33	µg/Kg-dry	1	04/30/13 06:39
Carbon tetrachloride	U		9.4	33	µg/Kg-dry	1	04/30/13 06:39
Chlorobenzene	U		13	33	µg/Kg-dry	1	04/30/13 06:39
Chloroethane	U		70	110	µg/Kg-dry	1	04/30/13 06:39
Chloroform	U		14	33	µg/Kg-dry	1	04/30/13 06:39
Chloromethane	U		18	110	µg/Kg-dry	1	04/30/13 06:39
cis-1,2-Dichloroethene	U		13	33	µg/Kg-dry	1	04/30/13 06:39
cis-1,3-Dichloropropene	U		11	33	µg/Kg-dry	1	04/30/13 06:39
Cyclohexane	U		15	33	µg/Kg-dry	1	04/30/13 06:39
Dibromochloromethane	U		6.1	33	µg/Kg-dry	1	04/30/13 06:39
Dichlorodifluoromethane	U		15	33	µg/Kg-dry	1	04/30/13 06:39
Ethylbenzene	19	J	12	33	µg/Kg-dry	1	04/30/13 06:39
Isopropylbenzene	U		14	33	µg/Kg-dry	1	04/30/13 06:39
Methyl acetate	U		44	220	µg/Kg-dry	1	04/30/13 06:39
Methyl tert-butyl ether	U		14	33	µg/Kg-dry	1	04/30/13 06:39
Methylcyclohexane	U		15	33	µg/Kg-dry	1	04/30/13 06:39
Methylene chloride	U		13	33	µg/Kg-dry	1	04/30/13 06:39
Styrene	U		12	33	µg/Kg-dry	1	04/30/13 06:39
Tetrachloroethene	U		15	33	µg/Kg-dry	1	04/30/13 06:39
Toluene	71		12	33	µg/Kg-dry	1	04/30/13 06:39
trans-1,2-Dichloroethene	U		10	33	µg/Kg-dry	1	04/30/13 06:39
trans-1,3-Dichloropropene	U		11	33	µg/Kg-dry	1	04/30/13 06:39
Trichloroethene	760		15	33	µg/Kg-dry	1	04/30/13 06:39
Trichlorofluoromethane	U		9.1	33	µg/Kg-dry	1	04/30/13 06:39
Vinyl chloride	U		15	33	µg/Kg-dry	1	04/30/13 06:39
Xylenes, Total	99		39	99	µg/Kg-dry	1	04/30/13 06:39
Surr: 1,2-Dichloroethane-d4	79.9			70-130	%REC	1	04/30/13 06:39
Surr: 4-Bromofluorobenzene	98.6			70-130	%REC	1	04/30/13 06:39
Surr: Dibromofluoromethane	88.0			70-130	%REC	1	04/30/13 06:39
Surr: Toluene-d8	97.2			70-130	%REC	1	04/30/13 06:39

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	8.9	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-070
Collection Date: 04/24/13 12:10 PM

Work Order: 13041049
Lab ID: 13041049-58
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 5/1/13	Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		39	360	µg/Kg-dry	1	05/02/13 09:50
Aroclor 1221	U		39	360	µg/Kg-dry	1	05/02/13 09:50
Aroclor 1232	U		39	360	µg/Kg-dry	1	05/02/13 09:50
Aroclor 1242	U		39	360	µg/Kg-dry	1	05/02/13 09:50
Aroclor 1248	U		39	360	µg/Kg-dry	1	05/02/13 09:50
Aroclor 1254	U		12	360	µg/Kg-dry	1	05/02/13 09:50
Aroclor 1260	U		12	360	µg/Kg-dry	1	05/02/13 09:50
Surr: Decachlorobiphenyl	73.1			40-140	%REC	1	05/02/13 09:50
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.011	J	0.00077	0.038	mg/Kg-dry	1	04/30/13 13:15
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 5/1/13	Analyst: ML
<u>BatchID: 48082</u>							
Antimony	0.70	J	0.0084	2.1	mg/Kg-dry	5	05/02/13 21:08
Arsenic	5.2		0.28	2.1	mg/Kg-dry	5	05/02/13 21:08
Barium	49		0.059	2.1	mg/Kg-dry	5	05/02/13 21:08
Beryllium	0.34	J	0.017	0.84	mg/Kg-dry	5	05/02/13 21:08
Cadmium	0.19	J	0.0084	0.84	mg/Kg-dry	5	05/02/13 21:08
Chromium	10		0.34	2.1	mg/Kg-dry	5	05/02/13 21:08
Cobalt	3.0		0.0084	2.1	mg/Kg-dry	5	05/02/13 21:08
Copper	17		0.41	2.1	mg/Kg-dry	5	05/02/13 21:08
Iron	5,200		7.0	33	mg/Kg-dry	5	05/02/13 21:08
Lead	23		0.0084	2.1	mg/Kg-dry	5	05/02/13 21:08
Manganese	110		0.18	2.1	mg/Kg-dry	5	05/02/13 21:08
Molybdenum	1.9	J	0.092	2.1	mg/Kg-dry	5	05/02/13 21:08
Nickel	7.7		0.21	2.1	mg/Kg-dry	5	05/02/13 21:08
Selenium	0.37	J	0.27	2.1	mg/Kg-dry	5	05/02/13 21:08
Silver	0.024	J	0.0084	2.1	mg/Kg-dry	5	05/02/13 21:08
Thallium	0.13	J	0.050	2.1	mg/Kg-dry	5	05/02/13 21:08
Vanadium	9.4		0.13	2.1	mg/Kg-dry	5	05/02/13 21:08
Zinc	24		0.18	4.2	mg/Kg-dry	5	05/02/13 21:08
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	U		110	880	µg/Kg-dry	10	04/29/13 11:31
Acenaphthene	U		100	330	µg/Kg-dry	10	04/29/13 11:31
Acenaphthylene	U		100	330	µg/Kg-dry	10	04/29/13 11:31

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-070
Collection Date: 04/24/13 12:10 PM

Work Order: 13041049
Lab ID: 13041049-58
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	U		110	330	µg/Kg-dry	10	04/29/13 11:31
Benzo(a)anthracene	400		130	330	µg/Kg-dry	10	04/29/13 11:31
Benzo(a)pyrene	330	J	170	330	µg/Kg-dry	10	04/29/13 11:31
Benzo(b)fluoranthene	560		180	330	µg/Kg-dry	10	04/29/13 11:31
Benzo(g,h,i)perylene	310	J	260	330	µg/Kg-dry	10	04/29/13 11:31
Benzo(k)fluoranthene	310	J	150	330	µg/Kg-dry	10	04/29/13 11:31
Chrysene	500		120	330	µg/Kg-dry	10	04/29/13 11:31
Dibenzo(a,h)anthracene	U		190	330	µg/Kg-dry	10	04/29/13 11:31
Fluoranthene	730		130	330	µg/Kg-dry	10	04/29/13 11:31
Fluorene	U		96	330	µg/Kg-dry	10	04/29/13 11:31
Indeno(1,2,3-cd)pyrene	210	J	210	330	µg/Kg-dry	10	04/29/13 11:31
Naphthalene	U		94	330	µg/Kg-dry	10	04/29/13 11:31
Phenanthrene	440		330	330	µg/Kg-dry	10	04/29/13 11:31
Pyrene	680		140	330	µg/Kg-dry	10	04/29/13 11:31
Surr: 2-Fluorobiphenyl	60.6			12-100	%REC	10	04/29/13 11:31
Surr: 4-Terphenyl-d14	92.0			25-137	%REC	10	04/29/13 11:31
Surr: Nitrobenzene-d5	57.8			37-107	%REC	10	04/29/13 11:31

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: AK

BatchID: 47967

1,1,1-Trichloroethane	U		22	57	µg/Kg-dry	1	04/30/13 07:02
1,1,2,2-Tetrachloroethane	U		25	57	µg/Kg-dry	1	04/30/13 07:02
1,1,2-Trichloroethane	U		20	57	µg/Kg-dry	1	04/30/13 07:02
1,1,2-Trichlorotrifluoroethane	U		21	57	µg/Kg-dry	1	04/30/13 07:02
1,1-Dichloroethane	U		21	57	µg/Kg-dry	1	04/30/13 07:02
1,1-Dichloroethene	U		24	57	µg/Kg-dry	1	04/30/13 07:02
1,2,4-Trichlorobenzene	U		30	57	µg/Kg-dry	1	04/30/13 07:02
1,2-Dibromo-3-chloropropane	U		28	57	µg/Kg-dry	1	04/30/13 07:02
1,2-Dibromoethane	U		23	57	µg/Kg-dry	1	04/30/13 07:02
1,2-Dichlorobenzene	U		23	57	µg/Kg-dry	1	04/30/13 07:02
1,2-Dichloroethane	U		27	57	µg/Kg-dry	1	04/30/13 07:02
1,2-Dichloropropane	U		19	57	µg/Kg-dry	1	04/30/13 07:02
1,3-Dichlorobenzene	U		23	57	µg/Kg-dry	1	04/30/13 07:02
1,4-Dichlorobenzene	U		22	57	µg/Kg-dry	1	04/30/13 07:02
2-Butanone	U		140	380	µg/Kg-dry	1	04/30/13 07:02
2-Hexanone	U		14	57	µg/Kg-dry	1	04/30/13 07:02
4-Methyl-2-pentanone	U		19	57	µg/Kg-dry	1	04/30/13 07:02
Acetone	U		120	190	µg/Kg-dry	1	04/30/13 07:02
Benzene	U		23	57	µg/Kg-dry	1	04/30/13 07:02
Bromodichloromethane	U		13	57	µg/Kg-dry	1	04/30/13 07:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-070
Collection Date: 04/24/13 12:10 PM

Work Order: 13041049
Lab ID: 13041049-58
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		11	57	µg/Kg-dry	1	04/30/13 07:02
Bromomethane	U		22	140	µg/Kg-dry	1	04/30/13 07:02
Carbon disulfide	U		28	57	µg/Kg-dry	1	04/30/13 07:02
Carbon tetrachloride	U		16	57	µg/Kg-dry	1	04/30/13 07:02
Chlorobenzene	U		23	57	µg/Kg-dry	1	04/30/13 07:02
Chloroethane	U		120	190	µg/Kg-dry	1	04/30/13 07:02
Chloroform	U		24	57	µg/Kg-dry	1	04/30/13 07:02
Chloromethane	U		32	190	µg/Kg-dry	1	04/30/13 07:02
cis-1,2-Dichloroethene	U		23	57	µg/Kg-dry	1	04/30/13 07:02
cis-1,3-Dichloropropene	U		20	57	µg/Kg-dry	1	04/30/13 07:02
Cyclohexane	U		26	57	µg/Kg-dry	1	04/30/13 07:02
Dibromochloromethane	U		11	57	µg/Kg-dry	1	04/30/13 07:02
Dichlorodifluoromethane	U		26	57	µg/Kg-dry	1	04/30/13 07:02
Ethylbenzene	U		21	57	µg/Kg-dry	1	04/30/13 07:02
Isopropylbenzene	U		25	57	µg/Kg-dry	1	04/30/13 07:02
Methyl acetate	U		77	380	µg/Kg-dry	1	04/30/13 07:02
Methyl tert-butyl ether	U		24	57	µg/Kg-dry	1	04/30/13 07:02
Methylcyclohexane	U		27	57	µg/Kg-dry	1	04/30/13 07:02
Methylene chloride	U		22	57	µg/Kg-dry	1	04/30/13 07:02
Styrene	U		21	57	µg/Kg-dry	1	04/30/13 07:02
Tetrachloroethene	U		25	57	µg/Kg-dry	1	04/30/13 07:02
Toluene	U		21	57	µg/Kg-dry	1	04/30/13 07:02
trans-1,2-Dichloroethene	U		18	57	µg/Kg-dry	1	04/30/13 07:02
trans-1,3-Dichloropropene	U		19	57	µg/Kg-dry	1	04/30/13 07:02
Trichloroethene	350		27	57	µg/Kg-dry	1	04/30/13 07:02
Trichlorofluoromethane	U		16	57	µg/Kg-dry	1	04/30/13 07:02
Vinyl chloride	U		26	57	µg/Kg-dry	1	04/30/13 07:02
Xylenes, Total	U		68	170	µg/Kg-dry	1	04/30/13 07:02
Surr: 1,2-Dichloroethane-d4	80.0			70-130	%REC	1	04/30/13 07:02
Surr: 4-Bromofluorobenzene	102			70-130	%REC	1	04/30/13 07:02
Surr: Dibromofluoromethane	87.3			70-130	%REC	1	04/30/13 07:02
Surr: Toluene-d8	96.2			70-130	%REC	1	04/30/13 07:02

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	9.2	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-071
Collection Date: 04/24/13 12:12 PM

Work Order: 13041049
Lab ID: 13041049-59
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 5/1/13		Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		38	350	µg/Kg-dry	1	05/02/13 10:49
Aroclor 1221	U		38	350	µg/Kg-dry	1	05/02/13 10:49
Aroclor 1232	U		38	350	µg/Kg-dry	1	05/02/13 10:49
Aroclor 1242	U		38	350	µg/Kg-dry	1	05/02/13 10:49
Aroclor 1248	U		38	350	µg/Kg-dry	1	05/02/13 10:49
Aroclor 1254	U		12	350	µg/Kg-dry	1	05/02/13 10:49
Aroclor 1260	U		12	350	µg/Kg-dry	1	05/02/13 10:49
Surr: Decachlorobiphenyl	66.1			40-140	%REC	1	05/02/13 10:49
MERCURY BY CVAA							
			SW7471		Prep: SW7471 / 4/30/13		Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.0070	J	0.00075	0.038	mg/Kg-dry	1	04/30/13 13:21
METALS BY ICP-MS							
			SW6020A		Prep: SW3050B / 5/1/13		Analyst: ML
<u>BatchID: 48082</u>							
Antimony	0.21	J	0.0071	1.8	mg/Kg-dry	5	05/02/13 21:26
Arsenic	3.1		0.24	1.8	mg/Kg-dry	5	05/02/13 21:26
Barium	24		0.050	1.8	mg/Kg-dry	5	05/02/13 21:26
Beryllium	0.13	J	0.014	0.71	mg/Kg-dry	5	05/02/13 21:26
Cadmium	0.067	J	0.0071	0.71	mg/Kg-dry	5	05/02/13 21:26
Chromium	4.9		0.29	1.8	mg/Kg-dry	5	05/02/13 21:26
Cobalt	1.6	J	0.0071	1.8	mg/Kg-dry	5	05/02/13 21:26
Copper	3.9		0.35	1.8	mg/Kg-dry	5	05/02/13 21:26
Iron	4,500		5.9	28	mg/Kg-dry	5	05/02/13 21:26
Lead	2.6		0.0071	1.8	mg/Kg-dry	5	05/02/13 21:26
Manganese	120		0.16	1.8	mg/Kg-dry	5	05/02/13 21:26
Molybdenum	0.54	J	0.078	1.8	mg/Kg-dry	5	05/02/13 21:26
Nickel	3.9		0.18	1.8	mg/Kg-dry	5	05/02/13 21:26
Selenium	0.24	J	0.23	1.8	mg/Kg-dry	5	05/02/13 21:26
Silver	U		0.0071	1.8	mg/Kg-dry	5	05/02/13 21:26
Thallium	0.082	J	0.043	1.8	mg/Kg-dry	5	05/02/13 21:26
Vanadium	7.5		0.11	1.8	mg/Kg-dry	5	05/02/13 21:26
Zinc	10		0.15	3.6	mg/Kg-dry	5	05/02/13 21:26
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270		Prep: SW3541 / 4/26/13		Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	U		100	850	µg/Kg-dry	10	04/29/13 18:57
Acenaphthene	300	J	96	320	µg/Kg-dry	10	04/29/13 18:57
Acenaphthylene	U		100	320	µg/Kg-dry	10	04/29/13 18:57

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-071
Collection Date: 04/24/13 12:12 PM

Work Order: 13041049
Lab ID: 13041049-59
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	960		110	320	µg/Kg-dry	10	04/29/13 18:57
Benzo(a)anthracene	2,900		130	320	µg/Kg-dry	10	04/29/13 18:57
Benzo(a)pyrene	2,300		160	320	µg/Kg-dry	10	04/29/13 18:57
Benzo(b)fluoranthene	3,700		170	320	µg/Kg-dry	10	04/29/13 18:57
Benzo(g,h,i)perylene	630		250	320	µg/Kg-dry	10	04/29/13 18:57
Benzo(k)fluoranthene	1,300		140	320	µg/Kg-dry	10	04/29/13 18:57
Chrysene	3,300		120	320	µg/Kg-dry	10	04/29/13 18:57
Dibenzo(a,h)anthracene	350		180	320	µg/Kg-dry	10	04/29/13 18:57
Fluoranthene	5,800		130	320	µg/Kg-dry	10	04/29/13 18:57
Fluorene	410		92	320	µg/Kg-dry	10	04/29/13 18:57
Indeno(1,2,3-cd)pyrene	620		200	320	µg/Kg-dry	10	04/29/13 18:57
Naphthalene	U		90	320	µg/Kg-dry	10	04/29/13 18:57
Phenanthrene	4,900		320	320	µg/Kg-dry	10	04/29/13 18:57
Pyrene	5,100		130	320	µg/Kg-dry	10	04/29/13 18:57
Surr: 2-Fluorobiphenyl	55.8			12-100	%REC	10	04/29/13 18:57
Surr: 4-Terphenyl-d14	84.4			25-137	%REC	10	04/29/13 18:57
Surr: Nitrobenzene-d5	51.8			37-107	%REC	10	04/29/13 18:57

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: AK

BatchID: 47967

1,1,1-Trichloroethane	U	12	32	µg/Kg-dry	1	04/30/13 07:26
1,1,2,2-Tetrachloroethane	U	14	32	µg/Kg-dry	1	04/30/13 07:26
1,1,2-Trichloroethane	U	11	32	µg/Kg-dry	1	04/30/13 07:26
1,1,2-Trichlorotrifluoroethane	U	12	32	µg/Kg-dry	1	04/30/13 07:26
1,1-Dichloroethane	U	12	32	µg/Kg-dry	1	04/30/13 07:26
1,1-Dichloroethene	U	13	32	µg/Kg-dry	1	04/30/13 07:26
1,2,4-Trichlorobenzene	U	17	32	µg/Kg-dry	1	04/30/13 07:26
1,2-Dibromo-3-chloropropane	U	16	32	µg/Kg-dry	1	04/30/13 07:26
1,2-Dibromoethane	U	13	32	µg/Kg-dry	1	04/30/13 07:26
1,2-Dichlorobenzene	U	13	32	µg/Kg-dry	1	04/30/13 07:26
1,2-Dichloroethane	U	15	32	µg/Kg-dry	1	04/30/13 07:26
1,2-Dichloropropane	U	11	32	µg/Kg-dry	1	04/30/13 07:26
1,3-Dichlorobenzene	U	13	32	µg/Kg-dry	1	04/30/13 07:26
1,4-Dichlorobenzene	U	12	32	µg/Kg-dry	1	04/30/13 07:26
2-Butanone	U	79	210	µg/Kg-dry	1	04/30/13 07:26
2-Hexanone	U	7.8	32	µg/Kg-dry	1	04/30/13 07:26
4-Methyl-2-pentanone	U	11	32	µg/Kg-dry	1	04/30/13 07:26
Acetone	U	68	110	µg/Kg-dry	1	04/30/13 07:26
Benzene	U	13	32	µg/Kg-dry	1	04/30/13 07:26
Bromodichloromethane	U	7.2	32	µg/Kg-dry	1	04/30/13 07:26

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-071
Collection Date: 04/24/13 12:12 PM

Work Order: 13041049
Lab ID: 13041049-59
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		6.3	32	µg/Kg-dry	1	04/30/13 07:26
Bromomethane	U		12	80	µg/Kg-dry	1	04/30/13 07:26
Carbon disulfide	U		16	32	µg/Kg-dry	1	04/30/13 07:26
Carbon tetrachloride	U		9.1	32	µg/Kg-dry	1	04/30/13 07:26
Chlorobenzene	U		13	32	µg/Kg-dry	1	04/30/13 07:26
Chloroethane	U		68	110	µg/Kg-dry	1	04/30/13 07:26
Chloroform	U		13	32	µg/Kg-dry	1	04/30/13 07:26
Chloromethane	U		18	110	µg/Kg-dry	1	04/30/13 07:26
cis-1,2-Dichloroethene	U		13	32	µg/Kg-dry	1	04/30/13 07:26
cis-1,3-Dichloropropene	U		11	32	µg/Kg-dry	1	04/30/13 07:26
Cyclohexane	U		14	32	µg/Kg-dry	1	04/30/13 07:26
Dibromochloromethane	U		5.9	32	µg/Kg-dry	1	04/30/13 07:26
Dichlorodifluoromethane	U		14	32	µg/Kg-dry	1	04/30/13 07:26
Ethylbenzene	U		12	32	µg/Kg-dry	1	04/30/13 07:26
Isopropylbenzene	U		14	32	µg/Kg-dry	1	04/30/13 07:26
Methyl acetate	U		43	210	µg/Kg-dry	1	04/30/13 07:26
Methyl tert-butyl ether	U		14	32	µg/Kg-dry	1	04/30/13 07:26
Methylcyclohexane	U		15	32	µg/Kg-dry	1	04/30/13 07:26
Methylene chloride	U		13	32	µg/Kg-dry	1	04/30/13 07:26
Styrene	U		12	32	µg/Kg-dry	1	04/30/13 07:26
Tetrachloroethene	U		14	32	µg/Kg-dry	1	04/30/13 07:26
Toluene	U		12	32	µg/Kg-dry	1	04/30/13 07:26
trans-1,2-Dichloroethene	U		9.8	32	µg/Kg-dry	1	04/30/13 07:26
trans-1,3-Dichloropropene	U		11	32	µg/Kg-dry	1	04/30/13 07:26
Trichloroethene	U		15	32	µg/Kg-dry	1	04/30/13 07:26
Trichlorofluoromethane	U		8.8	32	µg/Kg-dry	1	04/30/13 07:26
Vinyl chloride	U		14	32	µg/Kg-dry	1	04/30/13 07:26
Xylenes, Total	U		38	96	µg/Kg-dry	1	04/30/13 07:26
Surr: 1,2-Dichloroethane-d4	78.2			70-130	%REC	1	04/30/13 07:26
Surr: 4-Bromofluorobenzene	96.9			70-130	%REC	1	04/30/13 07:26
Surr: Dibromofluoromethane	86.4			70-130	%REC	1	04/30/13 07:26
Surr: Toluene-d8	95.6			70-130	%REC	1	04/30/13 07:26

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	6.0	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-072
Collection Date: 04/24/13 12:15 PM

Work Order: 13041049
Lab ID: 13041049-60
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 5/1/13	Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		38	350	µg/Kg-dry	1	05/02/13 11:09
Aroclor 1221	U		38	350	µg/Kg-dry	1	05/02/13 11:09
Aroclor 1232	U		38	350	µg/Kg-dry	1	05/02/13 11:09
Aroclor 1242	U		38	350	µg/Kg-dry	1	05/02/13 11:09
Aroclor 1248	U		38	350	µg/Kg-dry	1	05/02/13 11:09
Aroclor 1254	U		12	350	µg/Kg-dry	1	05/02/13 11:09
Aroclor 1260	U		12	350	µg/Kg-dry	1	05/02/13 11:09
Surr: Decachlorobiphenyl	51.1			40-140	%REC	1	05/02/13 11:09
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.0082	J	0.00079	0.039	mg/Kg-dry	1	04/30/13 13:23
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 5/1/13	Analyst: ML
<u>BatchID: 48082</u>							
Antimony	0.28	J	0.0073	1.8	mg/Kg-dry	5	05/02/13 21:51
Arsenic	1.3	J	0.25	1.8	mg/Kg-dry	5	05/02/13 21:51
Barium	25		0.051	1.8	mg/Kg-dry	5	05/02/13 21:51
Beryllium	0.12	J	0.015	0.73	mg/Kg-dry	5	05/02/13 21:51
Cadmium	0.059	J	0.0073	0.73	mg/Kg-dry	5	05/02/13 21:51
Chromium	9.5		0.30	1.8	mg/Kg-dry	5	05/02/13 21:51
Cobalt	2.3		0.0073	1.8	mg/Kg-dry	5	05/02/13 21:51
Copper	4.9		0.36	1.8	mg/Kg-dry	5	05/02/13 21:51
Iron	5,900		6.1	29	mg/Kg-dry	5	05/02/13 21:51
Lead	3.1		0.0073	1.8	mg/Kg-dry	5	05/02/13 21:51
Manganese	160		0.16	1.8	mg/Kg-dry	5	05/02/13 21:51
Molybdenum	1.3	J	0.080	1.8	mg/Kg-dry	5	05/02/13 21:51
Nickel	5.6		0.18	1.8	mg/Kg-dry	5	05/02/13 21:51
Selenium	U		0.23	1.8	mg/Kg-dry	5	05/02/13 21:51
Silver	U		0.0073	1.8	mg/Kg-dry	5	05/02/13 21:51
Thallium	U		0.044	1.8	mg/Kg-dry	5	05/02/13 21:51
Vanadium	10		0.11	1.8	mg/Kg-dry	5	05/02/13 21:51
Zinc	12		0.15	3.6	mg/Kg-dry	5	05/02/13 21:51
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	U		110	860	µg/Kg-dry	10	04/29/13 19:29
Acenaphthene	460		98	320	µg/Kg-dry	10	04/29/13 19:29
Acenaphthylene	530		100	320	µg/Kg-dry	10	04/29/13 19:29

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-072
Collection Date: 04/24/13 12:15 PM

Work Order: 13041049
Lab ID: 13041049-60
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	1,500		110	320	µg/Kg-dry	10	04/29/13 19:29
Benzo(a)anthracene	6,200		130	320	µg/Kg-dry	10	04/29/13 19:29
Benzo(a)pyrene	6,000		170	320	µg/Kg-dry	10	04/29/13 19:29
Benzo(b)fluoranthene	8,500		170	320	µg/Kg-dry	10	04/29/13 19:29
Benzo(g,h,i)perylene	1,400		250	320	µg/Kg-dry	10	04/29/13 19:29
Benzo(k)fluoranthene	3,900		150	320	µg/Kg-dry	10	04/29/13 19:29
Chrysene	8,800		120	320	µg/Kg-dry	10	04/29/13 19:29
Dibenzo(a,h)anthracene	190	J	180	320	µg/Kg-dry	10	04/29/13 19:29
Fluoranthene	12,000		130	320	µg/Kg-dry	10	04/29/13 19:29
Fluorene	780		94	320	µg/Kg-dry	10	04/29/13 19:29
Indeno(1,2,3-cd)pyrene	1,500		200	320	µg/Kg-dry	10	04/29/13 19:29
Naphthalene	U		91	320	µg/Kg-dry	10	04/29/13 19:29
Phenanthrene	5,300		320	320	µg/Kg-dry	10	04/29/13 19:29
Pyrene	13,000		130	320	µg/Kg-dry	10	04/29/13 19:29
Surr: 2-Fluorobiphenyl	58.4			12-100	%REC	10	04/29/13 19:29
Surr: 4-Terphenyl-d14	85.0			25-137	%REC	10	04/29/13 19:29
Surr: Nitrobenzene-d5	50.8			37-107	%REC	10	04/29/13 19:29

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: AK

BatchID: 47967

1,1,1-Trichloroethane	U	12	32	µg/Kg-dry	1	04/30/13 07:50
1,1,2,2-Tetrachloroethane	U	14	32	µg/Kg-dry	1	04/30/13 07:50
1,1,2-Trichloroethane	U	11	32	µg/Kg-dry	1	04/30/13 07:50
1,1,2-Trichlorotrifluoroethane	U	12	32	µg/Kg-dry	1	04/30/13 07:50
1,1-Dichloroethane	U	12	32	µg/Kg-dry	1	04/30/13 07:50
1,1-Dichloroethene	U	14	32	µg/Kg-dry	1	04/30/13 07:50
1,2,4-Trichlorobenzene	U	17	32	µg/Kg-dry	1	04/30/13 07:50
1,2-Dibromo-3-chloropropane	U	16	32	µg/Kg-dry	1	04/30/13 07:50
1,2-Dibromoethane	U	13	32	µg/Kg-dry	1	04/30/13 07:50
1,2-Dichlorobenzene	U	13	32	µg/Kg-dry	1	04/30/13 07:50
1,2-Dichloroethane	U	15	32	µg/Kg-dry	1	04/30/13 07:50
1,2-Dichloropropane	U	11	32	µg/Kg-dry	1	04/30/13 07:50
1,3-Dichlorobenzene	U	13	32	µg/Kg-dry	1	04/30/13 07:50
1,4-Dichlorobenzene	U	12	32	µg/Kg-dry	1	04/30/13 07:50
2-Butanone	U	80	220	µg/Kg-dry	1	04/30/13 07:50
2-Hexanone	U	7.9	32	µg/Kg-dry	1	04/30/13 07:50
4-Methyl-2-pentanone	U	11	32	µg/Kg-dry	1	04/30/13 07:50
Acetone	U	69	110	µg/Kg-dry	1	04/30/13 07:50
Benzene	U	13	32	µg/Kg-dry	1	04/30/13 07:50
Bromodichloromethane	U	7.3	32	µg/Kg-dry	1	04/30/13 07:50

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-072
Collection Date: 04/24/13 12:15 PM

Work Order: 13041049
Lab ID: 13041049-60
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		6.4	32	µg/Kg-dry	1	04/30/13 07:50
Bromomethane	U		12	81	µg/Kg-dry	1	04/30/13 07:50
Carbon disulfide	U		16	32	µg/Kg-dry	1	04/30/13 07:50
Carbon tetrachloride	U		9.2	32	µg/Kg-dry	1	04/30/13 07:50
Chlorobenzene	U		13	32	µg/Kg-dry	1	04/30/13 07:50
Chloroethane	U		69	110	µg/Kg-dry	1	04/30/13 07:50
Chloroform	U		13	32	µg/Kg-dry	1	04/30/13 07:50
Chloromethane	U		18	110	µg/Kg-dry	1	04/30/13 07:50
cis-1,2-Dichloroethene	U		13	32	µg/Kg-dry	1	04/30/13 07:50
cis-1,3-Dichloropropene	U		11	32	µg/Kg-dry	1	04/30/13 07:50
Cyclohexane	U		15	32	µg/Kg-dry	1	04/30/13 07:50
Dibromochloromethane	U		6.0	32	µg/Kg-dry	1	04/30/13 07:50
Dichlorodifluoromethane	U		15	32	µg/Kg-dry	1	04/30/13 07:50
Ethylbenzene	U		12	32	µg/Kg-dry	1	04/30/13 07:50
Isopropylbenzene	U		14	32	µg/Kg-dry	1	04/30/13 07:50
Methyl acetate	U		43	220	µg/Kg-dry	1	04/30/13 07:50
Methyl tert-butyl ether	U		14	32	µg/Kg-dry	1	04/30/13 07:50
Methylcyclohexane	U		15	32	µg/Kg-dry	1	04/30/13 07:50
Methylene chloride	U		13	32	µg/Kg-dry	1	04/30/13 07:50
Styrene	U		12	32	µg/Kg-dry	1	04/30/13 07:50
Tetrachloroethene	U		14	32	µg/Kg-dry	1	04/30/13 07:50
Toluene	U		12	32	µg/Kg-dry	1	04/30/13 07:50
trans-1,2-Dichloroethene	U		10	32	µg/Kg-dry	1	04/30/13 07:50
trans-1,3-Dichloropropene	U		11	32	µg/Kg-dry	1	04/30/13 07:50
Trichloroethene	U		15	32	µg/Kg-dry	1	04/30/13 07:50
Trichlorofluoromethane	U		8.9	32	µg/Kg-dry	1	04/30/13 07:50
Vinyl chloride	U		15	32	µg/Kg-dry	1	04/30/13 07:50
Xylenes, Total	U		38	97	µg/Kg-dry	1	04/30/13 07:50
Surr: 1,2-Dichloroethane-d4	80.8			70-130	%REC	1	04/30/13 07:50
Surr: 4-Bromofluorobenzene	101			70-130	%REC	1	04/30/13 07:50
Surr: Dibromofluoromethane	87.8			70-130	%REC	1	04/30/13 07:50
Surr: Toluene-d8	96.2			70-130	%REC	1	04/30/13 07:50

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	7.4	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-073
Collection Date: 04/24/13 12:30 PM

Work Order: 13041049
Lab ID: 13041049-61
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 5/1/13	Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		42	390	µg/Kg-dry	1	05/02/13 11:29
Aroclor 1221	U		42	390	µg/Kg-dry	1	05/02/13 11:29
Aroclor 1232	U		42	390	µg/Kg-dry	1	05/02/13 11:29
Aroclor 1242	U		42	390	µg/Kg-dry	1	05/02/13 11:29
Aroclor 1248	U		42	390	µg/Kg-dry	1	05/02/13 11:29
Aroclor 1254	U		13	390	µg/Kg-dry	1	05/02/13 11:29
Aroclor 1260	U		13	390	µg/Kg-dry	1	05/02/13 11:29
Surr: Decachlorobiphenyl	64.1			40-140	%REC	1	05/02/13 11:29
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48031</u>							
Mercury	0.054		0.00091	0.045	mg/Kg-dry	1	04/30/13 13:25
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 5/1/13	Analyst: ML
<u>BatchID: 48082</u>							
Antimony	6.7		0.0082	2.1	mg/Kg-dry	5	05/02/13 21:58
Arsenic	5.3		0.28	2.1	mg/Kg-dry	5	05/02/13 21:58
Barium	200		0.058	2.1	mg/Kg-dry	5	05/02/13 21:58
Beryllium	0.26	J	0.016	0.82	mg/Kg-dry	5	05/02/13 21:58
Cadmium	5.6		0.0082	0.82	mg/Kg-dry	5	05/02/13 21:58
Chromium	120		0.34	2.1	mg/Kg-dry	5	05/02/13 21:58
Cobalt	16		0.0082	2.1	mg/Kg-dry	5	05/02/13 21:58
Copper	270		0.40	2.1	mg/Kg-dry	5	05/02/13 21:58
Iron	34,000		6.8	33	mg/Kg-dry	5	05/02/13 21:58
Lead	580		0.0082	2.1	mg/Kg-dry	5	05/02/13 21:58
Molybdenum	62		0.091	2.1	mg/Kg-dry	5	05/02/13 21:58
Nickel	170		0.21	2.1	mg/Kg-dry	5	05/02/13 21:58
Selenium	0.54	J	0.26	2.1	mg/Kg-dry	5	05/02/13 21:58
Silver	0.84	J	0.0082	2.1	mg/Kg-dry	5	05/02/13 21:58
Thallium	U		0.049	2.1	mg/Kg-dry	5	05/02/13 21:58
Vanadium	15		0.12	2.1	mg/Kg-dry	5	05/02/13 21:58
Zinc	240		0.17	4.1	mg/Kg-dry	5	05/02/13 21:58
<u>BatchID: 48082</u>							
Manganese	870		0.36	4.1	mg/Kg-dry	10	05/02/13 19:24
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: HL
<u>BatchID: 47970</u>							
2-Methylnaphthalene	250	J	110	940	µg/Kg-dry	10	04/29/13 20:01
Acenaphthene	610		110	350	µg/Kg-dry	10	04/29/13 20:01

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-073
Collection Date: 04/24/13 12:30 PM

Work Order: 13041049
Lab ID: 13041049-61
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		110	350	µg/Kg-dry	10	04/29/13 20:01
Anthracene	1,000		120	350	µg/Kg-dry	10	04/29/13 20:01
Benzo(a)anthracene	2,100		140	350	µg/Kg-dry	10	04/29/13 20:01
Benzo(a)pyrene	1,700		180	350	µg/Kg-dry	10	04/29/13 20:01
Benzo(b)fluoranthene	2,700		190	350	µg/Kg-dry	10	04/29/13 20:01
Benzo(g,h,i)perylene	540		280	350	µg/Kg-dry	10	04/29/13 20:01
Benzo(k)fluoranthene	1,300		160	350	µg/Kg-dry	10	04/29/13 20:01
Chrysene	2,400		130	350	µg/Kg-dry	10	04/29/13 20:01
Dibenzo(a,h)anthracene	230	J	200	350	µg/Kg-dry	10	04/29/13 20:01
Fluoranthene	6,300		140	350	µg/Kg-dry	10	04/29/13 20:01
Fluorene	390		100	350	µg/Kg-dry	10	04/29/13 20:01
Indeno(1,2,3-cd)pyrene	490		220	350	µg/Kg-dry	10	04/29/13 20:01
Naphthalene	U		100	350	µg/Kg-dry	10	04/29/13 20:01
Phenanthrene	5,700		350	350	µg/Kg-dry	10	04/29/13 20:01
Pyrene	5,200		150	350	µg/Kg-dry	10	04/29/13 20:01
Surr: 2-Fluorobiphenyl	54.6			12-100	%REC	10	04/29/13 20:01
Surr: 4-Terphenyl-d14	79.4			25-137	%REC	10	04/29/13 20:01
Surr: Nitrobenzene-d5	44.2			37-107	%REC	10	04/29/13 20:01

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: AK

BatchID: 47967

1,1,1-Trichloroethane	U	18	47	µg/Kg-dry	1	04/30/13 08:14
1,1,1,2-Tetrachloroethane	U	21	47	µg/Kg-dry	1	04/30/13 08:14
1,1,2-Trichloroethane	U	17	47	µg/Kg-dry	1	04/30/13 08:14
1,1,2-Trichlorotrifluoroethane	U	17	47	µg/Kg-dry	1	04/30/13 08:14
1,1-Dichloroethane	U	17	47	µg/Kg-dry	1	04/30/13 08:14
1,1-Dichloroethene	U	20	47	µg/Kg-dry	1	04/30/13 08:14
1,2,4-Trichlorobenzene	U	24	47	µg/Kg-dry	1	04/30/13 08:14
1,2-Dibromo-3-chloropropane	U	23	47	µg/Kg-dry	1	04/30/13 08:14
1,2-Dibromoethane	U	19	47	µg/Kg-dry	1	04/30/13 08:14
1,2-Dichlorobenzene	U	19	47	µg/Kg-dry	1	04/30/13 08:14
1,2-Dichloroethane	U	22	47	µg/Kg-dry	1	04/30/13 08:14
1,2-Dichloropropane	U	16	47	µg/Kg-dry	1	04/30/13 08:14
1,3-Dichlorobenzene	U	19	47	µg/Kg-dry	1	04/30/13 08:14
1,4-Dichlorobenzene	U	18	47	µg/Kg-dry	1	04/30/13 08:14
2-Butanone	U	120	310	µg/Kg-dry	1	04/30/13 08:14
2-Hexanone	U	12	47	µg/Kg-dry	1	04/30/13 08:14
4-Methyl-2-pentanone	U	16	47	µg/Kg-dry	1	04/30/13 08:14
Acetone	U	100	160	µg/Kg-dry	1	04/30/13 08:14
Benzene	U	19	47	µg/Kg-dry	1	04/30/13 08:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-073
Collection Date: 04/24/13 12:30 PM

Work Order: 13041049
Lab ID: 13041049-61
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromodichloromethane	U		11	47	µg/Kg-dry	1	04/30/13 08:14
Bromoform	U		9.3	47	µg/Kg-dry	1	04/30/13 08:14
Bromomethane	U		18	120	µg/Kg-dry	1	04/30/13 08:14
Carbon disulfide	U		23	47	µg/Kg-dry	1	04/30/13 08:14
Carbon tetrachloride	U		13	47	µg/Kg-dry	1	04/30/13 08:14
Chlorobenzene	U		19	47	µg/Kg-dry	1	04/30/13 08:14
Chloroethane	U		100	160	µg/Kg-dry	1	04/30/13 08:14
Chloroform	U		19	47	µg/Kg-dry	1	04/30/13 08:14
Chloromethane	U		26	160	µg/Kg-dry	1	04/30/13 08:14
cis-1,2-Dichloroethene	U		19	47	µg/Kg-dry	1	04/30/13 08:14
cis-1,3-Dichloropropene	U		16	47	µg/Kg-dry	1	04/30/13 08:14
Cyclohexane	U		21	47	µg/Kg-dry	1	04/30/13 08:14
Dibromochloromethane	U		8.7	47	µg/Kg-dry	1	04/30/13 08:14
Dichlorodifluoromethane	U		21	47	µg/Kg-dry	1	04/30/13 08:14
Ethylbenzene	U		17	47	µg/Kg-dry	1	04/30/13 08:14
Isopropylbenzene	U		20	47	µg/Kg-dry	1	04/30/13 08:14
Methyl acetate	U		63	310	µg/Kg-dry	1	04/30/13 08:14
Methyl tert-butyl ether	U		20	47	µg/Kg-dry	1	04/30/13 08:14
Methylcyclohexane	U		22	47	µg/Kg-dry	1	04/30/13 08:14
Methylene chloride	U		18	47	µg/Kg-dry	1	04/30/13 08:14
Styrene	U		18	47	µg/Kg-dry	1	04/30/13 08:14
Tetrachloroethene	U		21	47	µg/Kg-dry	1	04/30/13 08:14
Toluene	U		18	47	µg/Kg-dry	1	04/30/13 08:14
trans-1,2-Dichloroethene	U		14	47	µg/Kg-dry	1	04/30/13 08:14
trans-1,3-Dichloropropene	U		16	47	µg/Kg-dry	1	04/30/13 08:14
Trichloroethene	270		22	47	µg/Kg-dry	1	04/30/13 08:14
Trichlorofluoromethane	U		13	47	µg/Kg-dry	1	04/30/13 08:14
Vinyl chloride	U		21	47	µg/Kg-dry	1	04/30/13 08:14
Xylenes, Total	U		56	140	µg/Kg-dry	1	04/30/13 08:14
Surr: 1,2-Dichloroethane-d4	79.6			70-130	%REC	1	04/30/13 08:14
Surr: 4-Bromofluorobenzene	98.4			70-130	%REC	1	04/30/13 08:14
Surr: Dibromofluoromethane	87.4			70-130	%REC	1	04/30/13 08:14
Surr: Toluene-d8	95.6			70-130	%REC	1	04/30/13 08:14

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	15	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-074
Collection Date: 04/24/13 12:32 PM

Work Order: 13041049
Lab ID: 13041049-62
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 5/1/13	Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		40	370	µg/Kg-dry	1	05/02/13 12:09
Aroclor 1221	U		40	370	µg/Kg-dry	1	05/02/13 12:09
Aroclor 1232	U		40	370	µg/Kg-dry	1	05/02/13 12:09
Aroclor 1242	U		40	370	µg/Kg-dry	1	05/02/13 12:09
Aroclor 1248	U		40	370	µg/Kg-dry	1	05/02/13 12:09
Aroclor 1254	U		13	370	µg/Kg-dry	1	05/02/13 12:09
Aroclor 1260	U		13	370	µg/Kg-dry	1	05/02/13 12:09
Surr: Decachlorobiphenyl	75.1			40-140	%REC	1	05/02/13 12:09
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48032</u>							
Mercury	0.019	J	0.00086	0.043	mg/Kg-dry	1	04/30/13 15:09
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 5/1/13	Analyst: ML
<u>BatchID: 48082</u>							
Antimony	54		0.0082	2.1	mg/Kg-dry	5	05/02/13 22:28
Arsenic	25		0.28	2.1	mg/Kg-dry	5	05/02/13 22:28
Beryllium	0.21	J	0.016	0.82	mg/Kg-dry	5	05/02/13 22:28
Cadmium	38		0.0082	0.82	mg/Kg-dry	5	05/02/13 22:28
Cobalt	190		0.0082	2.1	mg/Kg-dry	5	05/02/13 22:28
Molybdenum	610		0.091	2.1	mg/Kg-dry	5	05/02/13 22:28
Selenium	1.3	J	0.26	2.1	mg/Kg-dry	5	05/02/13 22:28
Silver	16		0.0082	2.1	mg/Kg-dry	5	05/02/13 22:28
Thallium	0.13	J	0.049	2.1	mg/Kg-dry	5	05/02/13 22:28
Vanadium	46		0.12	2.1	mg/Kg-dry	5	05/02/13 22:28
<u>BatchID: 48082</u>							
Barium	1,200		1.2	41	mg/Kg-dry	100	05/02/13 19:30
Chromium	1,300		6.8	41	mg/Kg-dry	100	05/02/13 19:30
Copper	3,300		8.1	41	mg/Kg-dry	100	05/02/13 19:30
Iron	170,000		140	660	mg/Kg-dry	100	05/02/13 19:30
Lead	8,500		0.16	41	mg/Kg-dry	100	05/02/13 19:30
Manganese	6,700		3.6	41	mg/Kg-dry	100	05/02/13 19:30
Nickel	1,700		4.1	41	mg/Kg-dry	100	05/02/13 19:30
Zinc	2,800		3.5	82	mg/Kg-dry	100	05/02/13 19:30
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/26/13	Analyst: RM
<u>BatchID: 47962</u>							
2-Methylnaphthalene	U		12	95	µg/Kg-dry	1	04/29/13 17:06
Acenaphthene	29	J	11	36	µg/Kg-dry	1	04/29/13 17:06

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-074
Collection Date: 04/24/13 12:32 PM

Work Order: 13041049
Lab ID: 13041049-62
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		11	36	µg/Kg-dry	1	04/29/13 17:06
Anthracene	48		12	36	µg/Kg-dry	1	04/29/13 17:06
Benzo(a)anthracene	730		14	36	µg/Kg-dry	1	04/29/13 17:06
Benzo(a)pyrene	590		18	36	µg/Kg-dry	1	04/29/13 17:06
Benzo(b)fluoranthene	2,100		19	36	µg/Kg-dry	1	04/29/13 17:06
Benzo(g,h,i)perylene	1,100		28	36	µg/Kg-dry	1	04/29/13 17:06
Benzo(k)fluoranthene	1,100		16	36	µg/Kg-dry	1	04/29/13 17:06
Chrysene	1,700		13	36	µg/Kg-dry	1	04/29/13 17:06
Dibenzo(a,h)anthracene	350		20	36	µg/Kg-dry	1	04/29/13 17:06
Fluoranthene	1,400		14	36	µg/Kg-dry	1	04/29/13 17:06
Fluorene	U		10	36	µg/Kg-dry	1	04/29/13 17:06
Indeno(1,2,3-cd)pyrene	750		22	36	µg/Kg-dry	1	04/29/13 17:06
Naphthalene	100		10	36	µg/Kg-dry	1	04/29/13 17:06
Phenanthrene	1,100		36	36	µg/Kg-dry	1	04/29/13 17:06
Pyrene	1,800		15	36	µg/Kg-dry	1	04/29/13 17:06
Surr: 2-Fluorobiphenyl	62.6			12-100	%REC	1	04/29/13 17:06
Surr: 4-Terphenyl-d14	118			25-137	%REC	1	04/29/13 17:06
Surr: Nitrobenzene-d5	63.7			37-107	%REC	1	04/29/13 17:06
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: AK
BatchID: 47968							
1,1,1-Trichloroethane	U		15	40	µg/Kg-dry	1	04/30/13 08:38
1,1,2,2-Tetrachloroethane	U		18	40	µg/Kg-dry	1	04/30/13 08:38
1,1,2-Trichloroethane	U		14	40	µg/Kg-dry	1	04/30/13 08:38
1,1,2-Trichlorotrifluoroethane	U		15	40	µg/Kg-dry	1	04/30/13 08:38
1,1-Dichloroethane	U		15	40	µg/Kg-dry	1	04/30/13 08:38
1,1-Dichloroethene	U		17	40	µg/Kg-dry	1	04/30/13 08:38
1,2,4-Trichlorobenzene	U		21	40	µg/Kg-dry	1	04/30/13 08:38
1,2-Dibromo-3-chloropropane	U		20	40	µg/Kg-dry	1	04/30/13 08:38
1,2-Dibromoethane	U		16	40	µg/Kg-dry	1	04/30/13 08:38
1,2-Dichlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 08:38
1,2-Dichloroethane	U		19	40	µg/Kg-dry	1	04/30/13 08:38
1,2-Dichloropropane	U		13	40	µg/Kg-dry	1	04/30/13 08:38
1,3-Dichlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 08:38
1,4-Dichlorobenzene	U		15	40	µg/Kg-dry	1	04/30/13 08:38
2-Butanone	U		100	270	µg/Kg-dry	1	04/30/13 08:38
2-Hexanone	U		9.9	40	µg/Kg-dry	1	04/30/13 08:38
4-Methyl-2-pentanone	U		14	40	µg/Kg-dry	1	04/30/13 08:38
Acetone	U		85	130	µg/Kg-dry	1	04/30/13 08:38
Benzene	U		16	40	µg/Kg-dry	1	04/30/13 08:38

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-074
Collection Date: 04/24/13 12:32 PM

Work Order: 13041049
Lab ID: 13041049-62
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromodichloromethane	U		9.0	40	µg/Kg-dry	1	04/30/13 08:38
Bromoform	U		7.9	40	µg/Kg-dry	1	04/30/13 08:38
Bromomethane	U		15	100	µg/Kg-dry	1	04/30/13 08:38
Carbon disulfide	U		20	40	µg/Kg-dry	1	04/30/13 08:38
Carbon tetrachloride	U		11	40	µg/Kg-dry	1	04/30/13 08:38
Chlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 08:38
Chloroethane	U		85	130	µg/Kg-dry	1	04/30/13 08:38
Chloroform	U		17	40	µg/Kg-dry	1	04/30/13 08:38
Chloromethane	U		22	130	µg/Kg-dry	1	04/30/13 08:38
cis-1,2-Dichloroethene	U		16	40	µg/Kg-dry	1	04/30/13 08:38
cis-1,3-Dichloropropene	U		14	40	µg/Kg-dry	1	04/30/13 08:38
Cyclohexane	U		18	40	µg/Kg-dry	1	04/30/13 08:38
Dibromochloromethane	U		7.4	40	µg/Kg-dry	1	04/30/13 08:38
Dichlorodifluoromethane	U		18	40	µg/Kg-dry	1	04/30/13 08:38
Ethylbenzene	U		15	40	µg/Kg-dry	1	04/30/13 08:38
Isopropylbenzene	U		17	40	µg/Kg-dry	1	04/30/13 08:38
Methyl acetate	U		54	270	µg/Kg-dry	1	04/30/13 08:38
Methyl tert-butyl ether	U		17	40	µg/Kg-dry	1	04/30/13 08:38
Methylcyclohexane	U		19	40	µg/Kg-dry	1	04/30/13 08:38
Methylene chloride	U		16	40	µg/Kg-dry	1	04/30/13 08:38
Styrene	U		15	40	µg/Kg-dry	1	04/30/13 08:38
Tetrachloroethene	U		18	40	µg/Kg-dry	1	04/30/13 08:38
Toluene	U		15	40	µg/Kg-dry	1	04/30/13 08:38
trans-1,2-Dichloroethene	U		12	40	µg/Kg-dry	1	04/30/13 08:38
trans-1,3-Dichloropropene	U		13	40	µg/Kg-dry	1	04/30/13 08:38
Trichlorofluoromethane	U		11	40	µg/Kg-dry	1	04/30/13 08:38
Vinyl chloride	U		18	40	µg/Kg-dry	1	04/30/13 08:38
Xylenes, Total	U		48	120	µg/Kg-dry	1	04/30/13 08:38
Surr: 1,2-Dichloroethane-d4	81.2			70-130	%REC	1	04/30/13 08:38
Surr: 4-Bromofluorobenzene	99.4			70-130	%REC	1	04/30/13 08:38
Surr: Dibromofluoromethane	87.7			70-130	%REC	1	04/30/13 08:38
Surr: Toluene-d8	95.6			70-130	%REC	1	04/30/13 08:38
BatchID: 47968							
Trichloroethene	12,000		75	160	µg/Kg-dry	4	05/02/13 06:03
Surr: 1,2-Dichloroethane-d4	93.0			70-130	%REC	4	05/02/13 06:03
Surr: 4-Bromofluorobenzene	98.5			70-130	%REC	4	05/02/13 06:03
Surr: Dibromofluoromethane	101			70-130	%REC	4	05/02/13 06:03
Surr: Toluene-d8	106			70-130	%REC	4	05/02/13 06:03

MOISTURE

A2540 G

Analyst: DC

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-074
Collection Date: 04/24/13 12:32 PM

Work Order: 13041049
Lab ID: 13041049-62
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
BatchID: R119875							
Moisture	16		0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-075
Collection Date: 04/24/13 12:35 PM

Work Order: 13041049
Lab ID: 13041049-63
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 5/1/13		Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		40	370	µg/Kg-dry	1	05/02/13 12:29
Aroclor 1221	U		40	370	µg/Kg-dry	1	05/02/13 12:29
Aroclor 1232	U		40	370	µg/Kg-dry	1	05/02/13 12:29
Aroclor 1242	U		40	370	µg/Kg-dry	1	05/02/13 12:29
Aroclor 1248	U		40	370	µg/Kg-dry	1	05/02/13 12:29
Aroclor 1254	U		13	370	µg/Kg-dry	1	05/02/13 12:29
Aroclor 1260	U		13	370	µg/Kg-dry	1	05/02/13 12:29
Surr: Decachlorobiphenyl	73.1			40-140	%REC	1	05/02/13 12:29
MERCURY BY CVAA							
			SW7471		Prep: SW7471 / 4/30/13		Analyst: LR
<u>BatchID: 48032</u>							
Mercury	0.013	J	0.00085	0.043	mg/Kg-dry	1	04/30/13 15:11
METALS BY ICP-MS							
			SW6020A		Prep: SW3050B / 5/1/13		Analyst: ML
<u>BatchID: 48082</u>							
Antimony	51		0.0097	2.4	mg/Kg-dry	5	05/02/13 22:34
Arsenic	24		0.33	2.4	mg/Kg-dry	5	05/02/13 22:34
Beryllium	0.22	J	0.019	0.97	mg/Kg-dry	5	05/02/13 22:34
Cadmium	20		0.0097	0.97	mg/Kg-dry	5	05/02/13 22:34
Cobalt	120		0.0097	2.4	mg/Kg-dry	5	05/02/13 22:34
Molybdenum	430		0.11	2.4	mg/Kg-dry	5	05/02/13 22:34
Selenium	0.93	J	0.31	2.4	mg/Kg-dry	5	05/02/13 22:34
Silver	10		0.0097	2.4	mg/Kg-dry	5	05/02/13 22:34
Thallium	0.12	J	0.058	2.4	mg/Kg-dry	5	05/02/13 22:34
Vanadium	34		0.15	2.4	mg/Kg-dry	5	05/02/13 22:34
<u>BatchID: 48082</u>							
Barium	1,200		1.4	49	mg/Kg-dry	100	05/02/13 19:36
Chromium	1,200		8.0	49	mg/Kg-dry	100	05/02/13 19:36
Copper	2,300		9.5	49	mg/Kg-dry	100	05/02/13 19:36
Iron	140,000		160	780	mg/Kg-dry	100	05/02/13 19:36
Lead	4,700		0.19	49	mg/Kg-dry	100	05/02/13 19:36
Manganese	3,500		4.3	49	mg/Kg-dry	100	05/02/13 19:36
Nickel	1,200		4.9	49	mg/Kg-dry	100	05/02/13 19:36
Zinc	2,100		4.1	97	mg/Kg-dry	100	05/02/13 19:36
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270		Prep: SW3541 / 4/29/13		Analyst: RM
<u>BatchID: 48001</u>							
2-Methylnaphthalene	U		11	93	µg/Kg-dry	1	04/30/13 18:51
Acenaphthene	21	J	11	35	µg/Kg-dry	1	04/30/13 18:51

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-075
Collection Date: 04/24/13 12:35 PM

Work Order: 13041049
Lab ID: 13041049-63
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		11	35	µg/Kg-dry	1	04/30/13 18:51
Anthracene	55		12	35	µg/Kg-dry	1	04/30/13 18:51
Benzo(a)anthracene	1,400		14	35	µg/Kg-dry	1	04/30/13 18:51
Benzo(a)pyrene	1,800		18	35	µg/Kg-dry	1	04/30/13 18:51
Benzo(g,h,i)perylene	2,200		27	35	µg/Kg-dry	1	04/30/13 18:51
Benzo(k)fluoranthene	2,000		16	35	µg/Kg-dry	1	04/30/13 18:51
Dibenzo(a,h)anthracene	730		20	35	µg/Kg-dry	1	04/30/13 18:51
Fluoranthene	1,900		14	35	µg/Kg-dry	1	04/30/13 18:51
Fluorene	U		10	35	µg/Kg-dry	1	04/30/13 18:51
Indeno(1,2,3-cd)pyrene	1,700		22	35	µg/Kg-dry	1	04/30/13 18:51
Naphthalene	80		9.9	35	µg/Kg-dry	1	04/30/13 18:51
Phenanthrene	1,100		35	35	µg/Kg-dry	1	04/30/13 18:51
Pyrene	1,900		14	35	µg/Kg-dry	1	04/30/13 18:51
Surr: 2-Fluorobiphenyl	69.8			12-100	%REC	1	04/30/13 18:51
Surr: 4-Terphenyl-d14	93.5			25-137	%REC	1	04/30/13 18:51
Surr: Nitrobenzene-d5	78.3			37-107	%REC	1	04/30/13 18:51
BatchID: 48001							
Benzo(b)fluoranthene	3,000		94	170	µg/Kg-dry	5	05/02/13 13:12
Chrysene	2,600		66	170	µg/Kg-dry	5	05/02/13 13:12
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: BG
BatchID: 47968							
1,1,1-Trichloroethane	U		14	36	µg/Kg-dry	1	04/29/13 23:02
1,1,2,2-Tetrachloroethane	U		16	36	µg/Kg-dry	1	04/29/13 23:02
1,1,2-Trichloroethane	U		13	36	µg/Kg-dry	1	04/29/13 23:02
1,1,2-Trichlorotrifluoroethane	U		13	36	µg/Kg-dry	1	04/29/13 23:02
1,1-Dichloroethane	U		13	36	µg/Kg-dry	1	04/29/13 23:02
1,1-Dichloroethene	U		15	36	µg/Kg-dry	1	04/29/13 23:02
1,2,4-Trichlorobenzene	U		19	36	µg/Kg-dry	1	04/29/13 23:02
1,2-Dibromo-3-chloropropane	U		17	36	µg/Kg-dry	1	04/29/13 23:02
1,2-Dibromoethane	U		14	36	µg/Kg-dry	1	04/29/13 23:02
1,2-Dichlorobenzene	U		14	36	µg/Kg-dry	1	04/29/13 23:02
1,2-Dichloroethane	U		17	36	µg/Kg-dry	1	04/29/13 23:02
1,2-Dichloropropane	U		12	36	µg/Kg-dry	1	04/29/13 23:02
1,3-Dichlorobenzene	U		14	36	µg/Kg-dry	1	04/29/13 23:02
1,4-Dichlorobenzene	U		14	36	µg/Kg-dry	1	04/29/13 23:02
2-Butanone	U		89	240	µg/Kg-dry	1	04/29/13 23:02
2-Hexanone	U		8.8	36	µg/Kg-dry	1	04/29/13 23:02
4-Methyl-2-pentanone	U		12	36	µg/Kg-dry	1	04/29/13 23:02
Acetone	U		76	120	µg/Kg-dry	1	04/29/13 23:02

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-075
Collection Date: 04/24/13 12:35 PM

Work Order: 13041049
Lab ID: 13041049-63
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Benzene	U		14	36	µg/Kg-dry	1	04/29/13 23:02
Bromodichloromethane	U		8.0	36	µg/Kg-dry	1	04/29/13 23:02
Bromoform	U		7.1	36	µg/Kg-dry	1	04/29/13 23:02
Bromomethane	U		14	90	µg/Kg-dry	1	04/29/13 23:02
Carbon disulfide	U		18	36	µg/Kg-dry	1	04/29/13 23:02
Carbon tetrachloride	U		10	36	µg/Kg-dry	1	04/29/13 23:02
Chlorobenzene	U		15	36	µg/Kg-dry	1	04/29/13 23:02
Chloroethane	U		76	120	µg/Kg-dry	1	04/29/13 23:02
Chloroform	U		15	36	µg/Kg-dry	1	04/29/13 23:02
Chloromethane	U		20	120	µg/Kg-dry	1	04/29/13 23:02
cis-1,2-Dichloroethene	U		15	36	µg/Kg-dry	1	04/29/13 23:02
cis-1,3-Dichloropropene	U		12	36	µg/Kg-dry	1	04/29/13 23:02
Cyclohexane	U		16	36	µg/Kg-dry	1	04/29/13 23:02
Dibromochloromethane	U		6.6	36	µg/Kg-dry	1	04/29/13 23:02
Dichlorodifluoromethane	U		16	36	µg/Kg-dry	1	04/29/13 23:02
Ethylbenzene	U		13	36	µg/Kg-dry	1	04/29/13 23:02
Isopropylbenzene	U		15	36	µg/Kg-dry	1	04/29/13 23:02
Methyl acetate	U		48	240	µg/Kg-dry	1	04/29/13 23:02
Methyl tert-butyl ether	U		15	36	µg/Kg-dry	1	04/29/13 23:02
Methylcyclohexane	U		17	36	µg/Kg-dry	1	04/29/13 23:02
Methylene chloride	U		14	36	µg/Kg-dry	1	04/29/13 23:02
Styrene	U		13	36	µg/Kg-dry	1	04/29/13 23:02
Tetrachloroethene	U		16	36	µg/Kg-dry	1	04/29/13 23:02
Toluene	U		13	36	µg/Kg-dry	1	04/29/13 23:02
trans-1,2-Dichloroethene	U		11	36	µg/Kg-dry	1	04/29/13 23:02
trans-1,3-Dichloropropene	U		12	36	µg/Kg-dry	1	04/29/13 23:02
Trichlorofluoromethane	U		9.9	36	µg/Kg-dry	1	04/29/13 23:02
Vinyl chloride	U		16	36	µg/Kg-dry	1	04/29/13 23:02
Xylenes, Total	U		42	110	µg/Kg-dry	1	04/29/13 23:02
Surr: 1,2-Dichloroethane-d4	104			70-130	%REC	1	04/29/13 23:02
Surr: 4-Bromofluorobenzene	99.1			70-130	%REC	1	04/29/13 23:02
Surr: Dibromofluoromethane	94.6			70-130	%REC	1	04/29/13 23:02
Surr: Toluene-d8	104			70-130	%REC	1	04/29/13 23:02
BatchID: 47968							
Trichloroethene	7,500		33	72	µg/Kg-dry	2	05/02/13 06:27
Surr: 1,2-Dichloroethane-d4	92.0			70-130	%REC	2	05/02/13 06:27
Surr: 4-Bromofluorobenzene	93.2			70-130	%REC	2	05/02/13 06:27
Surr: Dibromofluoromethane	98.1			70-130	%REC	2	05/02/13 06:27
Surr: Toluene-d8	100			70-130	%REC	2	05/02/13 06:27

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-075
Collection Date: 04/24/13 12:35 PM

Work Order: 13041049
Lab ID: 13041049-63
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
MOISTURE			A2540 G				Analyst: DC
BatchID: <u>R119875</u>							
Moisture	16		0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-076
Collection Date: 04/24/13 12:45 PM

Work Order: 13041049
Lab ID: 13041049-64
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 5/1/13	Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		39	360	µg/Kg-dry	1	05/02/13 12:48
Aroclor 1221	U		39	360	µg/Kg-dry	1	05/02/13 12:48
Aroclor 1232	U		39	360	µg/Kg-dry	1	05/02/13 12:48
Aroclor 1242	U		39	360	µg/Kg-dry	1	05/02/13 12:48
Aroclor 1248	U		39	360	µg/Kg-dry	1	05/02/13 12:48
Aroclor 1254	U		12	360	µg/Kg-dry	1	05/02/13 12:48
Aroclor 1260	U		12	360	µg/Kg-dry	1	05/02/13 12:48
Surr: Decachlorobiphenyl	80.1			40-140	%REC	1	05/02/13 12:48
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48032</u>							
Mercury	0.0080	J	0.00083	0.042	mg/Kg-dry	1	04/30/13 15:13
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 5/1/13	Analyst: ML
<u>BatchID: 48082</u>							
Antimony	4.6		0.0080	2.0	mg/Kg-dry	5	05/02/13 22:40
Arsenic	3.0		0.27	2.0	mg/Kg-dry	5	05/02/13 22:40
Barium	570		0.056	2.0	mg/Kg-dry	5	05/02/13 22:40
Beryllium	0.19	J	0.016	0.80	mg/Kg-dry	5	05/02/13 22:40
Cadmium	1.8		0.0080	0.80	mg/Kg-dry	5	05/02/13 22:40
Chromium	500		0.33	2.0	mg/Kg-dry	5	05/02/13 22:40
Cobalt	17		0.0080	2.0	mg/Kg-dry	5	05/02/13 22:40
Copper	120		0.39	2.0	mg/Kg-dry	5	05/02/13 22:40
Iron	24,000		6.6	32	mg/Kg-dry	5	05/02/13 22:40
Lead	680		0.0080	2.0	mg/Kg-dry	5	05/02/13 22:40
Molybdenum	72		0.087	2.0	mg/Kg-dry	5	05/02/13 22:40
Nickel	400		0.20	2.0	mg/Kg-dry	5	05/02/13 22:40
Selenium	0.42	J	0.25	2.0	mg/Kg-dry	5	05/02/13 22:40
Silver	0.91	J	0.0080	2.0	mg/Kg-dry	5	05/02/13 22:40
Thallium	0.062	J	0.048	2.0	mg/Kg-dry	5	05/02/13 22:40
Vanadium	9.4		0.12	2.0	mg/Kg-dry	5	05/02/13 22:40
Zinc	180		0.17	4.0	mg/Kg-dry	5	05/02/13 22:40
<u>BatchID: 48082</u>							
Manganese	1,400		3.5	40	mg/Kg-dry	100	05/02/13 19:42
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/29/13	Analyst: RM
<u>BatchID: 48001</u>							
2-Methylnaphthalene	U		11	87	µg/Kg-dry	1	04/30/13 19:12
Acenaphthene	U		10	33	µg/Kg-dry	1	04/30/13 19:12

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-076
Collection Date: 04/24/13 12:45 PM

Work Order: 13041049
Lab ID: 13041049-64
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Acenaphthylene	U		10	33	µg/Kg-dry	1	04/30/13 19:12
Anthracene	U		11	33	µg/Kg-dry	1	04/30/13 19:12
Benzo(a)anthracene	57		13	33	µg/Kg-dry	1	04/30/13 19:12
Benzo(a)pyrene	69		17	33	µg/Kg-dry	1	04/30/13 19:12
Benzo(b)fluoranthene	160		18	33	µg/Kg-dry	1	04/30/13 19:12
Benzo(g,h,i)perylene	170		26	33	µg/Kg-dry	1	04/30/13 19:12
Benzo(k)fluoranthene	85		15	33	µg/Kg-dry	1	04/30/13 19:12
Chrysene	120		12	33	µg/Kg-dry	1	04/30/13 19:12
Dibenzo(a,h)anthracene	51		19	33	µg/Kg-dry	1	04/30/13 19:12
Fluoranthene	96		13	33	µg/Kg-dry	1	04/30/13 19:12
Fluorene	U		9.5	33	µg/Kg-dry	1	04/30/13 19:12
Indeno(1,2,3-cd)pyrene	150		21	33	µg/Kg-dry	1	04/30/13 19:12
Naphthalene	U		9.3	33	µg/Kg-dry	1	04/30/13 19:12
Phenanthrene	59		33	33	µg/Kg-dry	1	04/30/13 19:12
Pyrene	100		14	33	µg/Kg-dry	1	04/30/13 19:12
Surr: 2-Fluorobiphenyl	64.1			12-100	%REC	1	04/30/13 19:12
Surr: 4-Terphenyl-d14	104			25-137	%REC	1	04/30/13 19:12
Surr: Nitrobenzene-d5	95.1			37-107	%REC	1	04/30/13 19:12
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13	Analyst: BG	
<u>BatchID: 47968</u>							
1,1,1-Trichloroethane	U		14	36	µg/Kg-dry	1	04/29/13 23:25
1,1,2,2-Tetrachloroethane	U		16	36	µg/Kg-dry	1	04/29/13 23:25
1,1,2-Trichloroethane	U		13	36	µg/Kg-dry	1	04/29/13 23:25
1,1,2-Trichlorotrifluoroethane	U		13	36	µg/Kg-dry	1	04/29/13 23:25
1,1-Dichloroethane	U		13	36	µg/Kg-dry	1	04/29/13 23:25
1,1-Dichloroethene	U		15	36	µg/Kg-dry	1	04/29/13 23:25
1,2,4-Trichlorobenzene	U		19	36	µg/Kg-dry	1	04/29/13 23:25
1,2-Dibromo-3-chloropropane	U		18	36	µg/Kg-dry	1	04/29/13 23:25
1,2-Dibromoethane	U		14	36	µg/Kg-dry	1	04/29/13 23:25
1,2-Dichlorobenzene	U		15	36	µg/Kg-dry	1	04/29/13 23:25
1,2-Dichloroethane	U		17	36	µg/Kg-dry	1	04/29/13 23:25
1,2-Dichloropropane	U		12	36	µg/Kg-dry	1	04/29/13 23:25
1,3-Dichlorobenzene	U		15	36	µg/Kg-dry	1	04/29/13 23:25
1,4-Dichlorobenzene	U		14	36	µg/Kg-dry	1	04/29/13 23:25
2-Butanone	U		90	240	µg/Kg-dry	1	04/29/13 23:25
2-Hexanone	U		8.9	36	µg/Kg-dry	1	04/29/13 23:25
4-Methyl-2-pentanone	U		12	36	µg/Kg-dry	1	04/29/13 23:25
Acetone	U		77	120	µg/Kg-dry	1	04/29/13 23:25
Benzene	U		15	36	µg/Kg-dry	1	04/29/13 23:25

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-076
Collection Date: 04/24/13 12:45 PM

Work Order: 13041049
Lab ID: 13041049-64
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromodichloromethane	U		8.1	36	µg/Kg-dry	1	04/29/13 23:25
Bromoform	U		7.1	36	µg/Kg-dry	1	04/29/13 23:25
Bromomethane	U		14	91	µg/Kg-dry	1	04/29/13 23:25
Carbon disulfide	U		18	36	µg/Kg-dry	1	04/29/13 23:25
Carbon tetrachloride	U		10	36	µg/Kg-dry	1	04/29/13 23:25
Chlorobenzene	U		15	36	µg/Kg-dry	1	04/29/13 23:25
Chloroethane	U		77	120	µg/Kg-dry	1	04/29/13 23:25
Chloroform	U		15	36	µg/Kg-dry	1	04/29/13 23:25
Chloromethane	U		20	120	µg/Kg-dry	1	04/29/13 23:25
cis-1,2-Dichloroethene	U		15	36	µg/Kg-dry	1	04/29/13 23:25
cis-1,3-Dichloropropene	U		12	36	µg/Kg-dry	1	04/29/13 23:25
Cyclohexane	U		16	36	µg/Kg-dry	1	04/29/13 23:25
Dibromochloromethane	U		6.7	36	µg/Kg-dry	1	04/29/13 23:25
Dichlorodifluoromethane	U		16	36	µg/Kg-dry	1	04/29/13 23:25
Ethylbenzene	U		13	36	µg/Kg-dry	1	04/29/13 23:25
Isopropylbenzene	U		16	36	µg/Kg-dry	1	04/29/13 23:25
Methyl acetate	U		49	240	µg/Kg-dry	1	04/29/13 23:25
Methyl tert-butyl ether	U		15	36	µg/Kg-dry	1	04/29/13 23:25
Methylcyclohexane	U		17	36	µg/Kg-dry	1	04/29/13 23:25
Methylene chloride	U		14	36	µg/Kg-dry	1	04/29/13 23:25
Styrene	U		14	36	µg/Kg-dry	1	04/29/13 23:25
Tetrachloroethene	U		16	36	µg/Kg-dry	1	04/29/13 23:25
Toluene	23	J	14	36	µg/Kg-dry	1	04/29/13 23:25
trans-1,2-Dichloroethene	U		11	36	µg/Kg-dry	1	04/29/13 23:25
trans-1,3-Dichloropropene	U		12	36	µg/Kg-dry	1	04/29/13 23:25
Trichloroethene	1,900		17	36	µg/Kg-dry	1	04/29/13 23:25
Trichlorofluoromethane	U		10	36	µg/Kg-dry	1	04/29/13 23:25
Vinyl chloride	U		16	36	µg/Kg-dry	1	04/29/13 23:25
Xylenes, Total	U		43	110	µg/Kg-dry	1	04/29/13 23:25
Surr: 1,2-Dichloroethane-d4	103			70-130	%REC	1	04/29/13 23:25
Surr: 4-Bromofluorobenzene	99.0			70-130	%REC	1	04/29/13 23:25
Surr: Dibromofluoromethane	97.2			70-130	%REC	1	04/29/13 23:25
Surr: Toluene-d8	103			70-130	%REC	1	04/29/13 23:25

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	9.9	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-077
Collection Date: 04/24/13 12:47 PM

Work Order: 13041049
Lab ID: 13041049-65
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 5/1/13		Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		39	360	µg/Kg-dry	1	05/02/13 13:08
Aroclor 1221	U		39	360	µg/Kg-dry	1	05/02/13 13:08
Aroclor 1232	U		39	360	µg/Kg-dry	1	05/02/13 13:08
Aroclor 1242	U		39	360	µg/Kg-dry	1	05/02/13 13:08
Aroclor 1248	U		39	360	µg/Kg-dry	1	05/02/13 13:08
Aroclor 1254	U		12	360	µg/Kg-dry	1	05/02/13 13:08
Aroclor 1260	U		12	360	µg/Kg-dry	1	05/02/13 13:08
Surr: Decachlorobiphenyl	72.1			40-140	%REC	1	05/02/13 13:08
MERCURY BY CVAA							
			SW7471		Prep: SW7471 / 4/30/13		Analyst: LR
<u>BatchID: 48032</u>							
Mercury	0.012	J	0.00081	0.040	mg/Kg-dry	1	04/30/13 15:15
METALS BY ICP-MS							
			SW6020A		Prep: SW3050B / 5/1/13		Analyst: ML
<u>BatchID: 48082</u>							
Antimony	1.9	J	0.0089	2.2	mg/Kg-dry	5	05/02/13 19:49
Arsenic	3.5		0.30	2.2	mg/Kg-dry	5	05/02/13 19:49
Barium	140		0.062	2.2	mg/Kg-dry	5	05/02/13 19:49
Beryllium	0.38	J	0.018	0.89	mg/Kg-dry	5	05/02/13 19:49
Cadmium	1.2		0.0089	0.89	mg/Kg-dry	5	05/02/13 19:49
Chromium	69		0.37	2.2	mg/Kg-dry	5	05/02/13 19:49
Cobalt	7.9		0.0089	2.2	mg/Kg-dry	5	05/02/13 19:49
Copper	99		0.44	2.2	mg/Kg-dry	5	05/02/13 19:49
Iron	14,000		7.4	36	mg/Kg-dry	5	05/02/13 19:49
Lead	170		0.0089	2.2	mg/Kg-dry	5	05/02/13 19:49
Manganese	500		0.20	2.2	mg/Kg-dry	5	05/02/13 19:49
Molybdenum	26		0.098	2.2	mg/Kg-dry	5	05/02/13 19:49
Nickel	68		0.22	2.2	mg/Kg-dry	5	05/02/13 19:49
Selenium	0.43	J	0.29	2.2	mg/Kg-dry	5	05/02/13 19:49
Silver	0.24	J	0.0089	2.2	mg/Kg-dry	5	05/02/13 19:49
Thallium	0.067	J	0.054	2.2	mg/Kg-dry	5	05/02/13 19:49
Vanadium	16		0.13	2.2	mg/Kg-dry	5	05/02/13 19:49
Zinc	190		0.19	4.5	mg/Kg-dry	5	05/02/13 19:49
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270		Prep: SW3541 / 4/29/13		Analyst: RM
<u>BatchID: 48001</u>							
2-Methylnaphthalene	46	J	11	87	µg/Kg-dry	1	04/30/13 19:32
Acenaphthene	U		9.9	33	µg/Kg-dry	1	04/30/13 19:32
Acenaphthylene	U		10	33	µg/Kg-dry	1	04/30/13 19:32

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-077
Collection Date: 04/24/13 12:47 PM

Work Order: 13041049
Lab ID: 13041049-65
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	150		11	33	µg/Kg-dry	1	04/30/13 19:32
Benzo(a)anthracene	430		13	33	µg/Kg-dry	1	04/30/13 19:32
Benzo(a)pyrene	320		17	33	µg/Kg-dry	1	04/30/13 19:32
Benzo(b)fluoranthene	430		18	33	µg/Kg-dry	1	04/30/13 19:32
Benzo(g,h,i)perylene	270		26	33	µg/Kg-dry	1	04/30/13 19:32
Benzo(k)fluoranthene	360		15	33	µg/Kg-dry	1	04/30/13 19:32
Chrysene	470		12	33	µg/Kg-dry	1	04/30/13 19:32
Dibenzo(a,h)anthracene	80		19	33	µg/Kg-dry	1	04/30/13 19:32
Fluoranthene	1,300		13	33	µg/Kg-dry	1	04/30/13 19:32
Fluorene	95		9.5	33	µg/Kg-dry	1	04/30/13 19:32
Indeno(1,2,3-cd)pyrene	220		21	33	µg/Kg-dry	1	04/30/13 19:32
Naphthalene	58		9.3	33	µg/Kg-dry	1	04/30/13 19:32
Phenanthrene	1,400		33	33	µg/Kg-dry	1	04/30/13 19:32
Pyrene	1,400		14	33	µg/Kg-dry	1	04/30/13 19:32
Surr: 2-Fluorobiphenyl	69.1			12-100	%REC	1	04/30/13 19:32
Surr: 4-Terphenyl-d14	93.2			25-137	%REC	1	04/30/13 19:32
Surr: Nitrobenzene-d5	87.1			37-107	%REC	1	04/30/13 19:32

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: BG

BatchID: 47968

1,1,1-Trichloroethane	U	13	33	µg/Kg-dry	1	04/29/13 23:48
1,1,2,2-Tetrachloroethane	U	15	33	µg/Kg-dry	1	04/29/13 23:48
1,1,2-Trichloroethane	U	12	33	µg/Kg-dry	1	04/29/13 23:48
1,1,2-Trichlorotrifluoroethane	U	12	33	µg/Kg-dry	1	04/29/13 23:48
1,1-Dichloroethane	U	12	33	µg/Kg-dry	1	04/29/13 23:48
1,1-Dichloroethene	U	14	33	µg/Kg-dry	1	04/29/13 23:48
1,2,4-Trichlorobenzene	U	17	33	µg/Kg-dry	1	04/29/13 23:48
1,2-Dibromo-3-chloropropane	U	16	33	µg/Kg-dry	1	04/29/13 23:48
1,2-Dibromoethane	U	13	33	µg/Kg-dry	1	04/29/13 23:48
1,2-Dichlorobenzene	U	13	33	µg/Kg-dry	1	04/29/13 23:48
1,2-Dichloroethane	U	16	33	µg/Kg-dry	1	04/29/13 23:48
1,2-Dichloropropane	U	11	33	µg/Kg-dry	1	04/29/13 23:48
1,3-Dichlorobenzene	U	13	33	µg/Kg-dry	1	04/29/13 23:48
1,4-Dichlorobenzene	U	13	33	µg/Kg-dry	1	04/29/13 23:48
2-Butanone	U	82	220	µg/Kg-dry	1	04/29/13 23:48
2-Hexanone	U	8.2	33	µg/Kg-dry	1	04/29/13 23:48
4-Methyl-2-pentanone	U	11	33	µg/Kg-dry	1	04/29/13 23:48
Acetone	U	71	110	µg/Kg-dry	1	04/29/13 23:48
Benzene	U	13	33	µg/Kg-dry	1	04/29/13 23:48
Bromodichloromethane	U	7.5	33	µg/Kg-dry	1	04/29/13 23:48

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-077
Collection Date: 04/24/13 12:47 PM

Work Order: 13041049
Lab ID: 13041049-65
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		6.6	33	µg/Kg-dry	1	04/29/13 23:48
Bromomethane	U		13	83	µg/Kg-dry	1	04/29/13 23:48
Carbon disulfide	U		17	33	µg/Kg-dry	1	04/29/13 23:48
Carbon tetrachloride	U		9.5	33	µg/Kg-dry	1	04/29/13 23:48
Chlorobenzene	U		14	33	µg/Kg-dry	1	04/29/13 23:48
Chloroethane	U		71	110	µg/Kg-dry	1	04/29/13 23:48
Chloroform	U		14	33	µg/Kg-dry	1	04/29/13 23:48
Chloromethane	U		19	110	µg/Kg-dry	1	04/29/13 23:48
cis-1,2-Dichloroethene	U		14	33	µg/Kg-dry	1	04/29/13 23:48
cis-1,3-Dichloropropene	U		11	33	µg/Kg-dry	1	04/29/13 23:48
Cyclohexane	U		15	33	µg/Kg-dry	1	04/29/13 23:48
Dibromochloromethane	U		6.2	33	µg/Kg-dry	1	04/29/13 23:48
Dichlorodifluoromethane	U		15	33	µg/Kg-dry	1	04/29/13 23:48
Ethylbenzene	U		12	33	µg/Kg-dry	1	04/29/13 23:48
Isopropylbenzene	U		14	33	µg/Kg-dry	1	04/29/13 23:48
Methyl acetate	U		45	220	µg/Kg-dry	1	04/29/13 23:48
Methyl tert-butyl ether	U		14	33	µg/Kg-dry	1	04/29/13 23:48
Methylcyclohexane	69		15	33	µg/Kg-dry	1	04/29/13 23:48
Methylene chloride	U		13	33	µg/Kg-dry	1	04/29/13 23:48
Styrene	U		12	33	µg/Kg-dry	1	04/29/13 23:48
Tetrachloroethene	U		15	33	µg/Kg-dry	1	04/29/13 23:48
Toluene	25	J	13	33	µg/Kg-dry	1	04/29/13 23:48
trans-1,2-Dichloroethene	U		10	33	µg/Kg-dry	1	04/29/13 23:48
trans-1,3-Dichloropropene	U		11	33	µg/Kg-dry	1	04/29/13 23:48
Trichloroethene	2,000		16	33	µg/Kg-dry	1	04/29/13 23:48
Trichlorofluoromethane	U		9.2	33	µg/Kg-dry	1	04/29/13 23:48
Vinyl chloride	U		15	33	µg/Kg-dry	1	04/29/13 23:48
Xylenes, Total	69	J	39	100	µg/Kg-dry	1	04/29/13 23:48
Surr: 1,2-Dichloroethane-d4	108			70-130	%REC	1	04/29/13 23:48
Surr: 4-Bromofluorobenzene	100			70-130	%REC	1	04/29/13 23:48
Surr: Dibromofluoromethane	97.4			70-130	%REC	1	04/29/13 23:48
Surr: Toluene-d8	104			70-130	%REC	1	04/29/13 23:48

MOISTURE

A2540 G

Analyst: DC

BatchID: R119875

Moisture	10	0.025	0.050	% of sample	1	04/29/13 14:10

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-078
Collection Date: 04/24/13 12:50 PM

Work Order: 13041049
Lab ID: 13041049-66
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 5/1/13		Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		39	360	µg/Kg-dry	1	05/02/13 13:28
Aroclor 1221	U		39	360	µg/Kg-dry	1	05/02/13 13:28
Aroclor 1232	U		39	360	µg/Kg-dry	1	05/02/13 13:28
Aroclor 1242	U		39	360	µg/Kg-dry	1	05/02/13 13:28
Aroclor 1248	U		39	360	µg/Kg-dry	1	05/02/13 13:28
Aroclor 1254	U		12	360	µg/Kg-dry	1	05/02/13 13:28
Aroclor 1260	U		12	360	µg/Kg-dry	1	05/02/13 13:28
Surr: Decachlorobiphenyl	84.1			40-140	%REC	1	05/02/13 13:28
MERCURY BY CVAA							
			SW7471		Prep: SW7471 / 4/30/13		Analyst: LR
<u>BatchID: 48032</u>							
Mercury	0.0095	J	0.00087	0.043	mg/Kg-dry	1	04/30/13 15:17
METALS BY ICP-MS							
			SW6020A		Prep: SW3050B / 5/1/13		Analyst: ML
<u>BatchID: 48082</u>							
Antimony	0.14	J	0.0073	1.8	mg/Kg-dry	5	05/02/13 19:55
Arsenic	0.87	J	0.25	1.8	mg/Kg-dry	5	05/02/13 19:55
Barium	14		0.051	1.8	mg/Kg-dry	5	05/02/13 19:55
Beryllium	0.11	J	0.015	0.73	mg/Kg-dry	5	05/02/13 19:55
Cadmium	0.16	J	0.0073	0.73	mg/Kg-dry	5	05/02/13 19:55
Chromium	5.5		0.30	1.8	mg/Kg-dry	5	05/02/13 19:55
Cobalt	1.4	J	0.0073	1.8	mg/Kg-dry	5	05/02/13 19:55
Copper	4.7		0.36	1.8	mg/Kg-dry	5	05/02/13 19:55
Iron	3,000		6.1	29	mg/Kg-dry	5	05/02/13 19:55
Lead	5.7		0.0073	1.8	mg/Kg-dry	5	05/02/13 19:55
Manganese	53		0.16	1.8	mg/Kg-dry	5	05/02/13 19:55
Molybdenum	0.47	J	0.080	1.8	mg/Kg-dry	5	05/02/13 19:55
Nickel	4.3		0.18	1.8	mg/Kg-dry	5	05/02/13 19:55
Selenium	0.92	J	0.23	1.8	mg/Kg-dry	5	05/02/13 19:55
Silver	0.011	J	0.0073	1.8	mg/Kg-dry	5	05/02/13 19:55
Thallium	U		0.044	1.8	mg/Kg-dry	5	05/02/13 19:55
Vanadium	8.0		0.11	1.8	mg/Kg-dry	5	05/02/13 19:55
Zinc	12		0.15	3.7	mg/Kg-dry	5	05/02/13 19:55
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270		Prep: SW3541 / 4/29/13		Analyst: RM
<u>BatchID: 48001</u>							
2-Methylnaphthalene	U		11	91	µg/Kg-dry	1	04/30/13 19:53
Acenaphthene	U		10	34	µg/Kg-dry	1	04/30/13 19:53
Acenaphthylene	U		11	34	µg/Kg-dry	1	04/30/13 19:53

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-078
Collection Date: 04/24/13 12:50 PM

Work Order: 13041049
Lab ID: 13041049-66
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	U		12	34	µg/Kg-dry	1	04/30/13 19:53
Benzo(a)anthracene	U		14	34	µg/Kg-dry	1	04/30/13 19:53
Benzo(a)pyrene	U		18	34	µg/Kg-dry	1	04/30/13 19:53
Benzo(b)fluoranthene	U		18	34	µg/Kg-dry	1	04/30/13 19:53
Benzo(g,h,i)perylene	U		27	34	µg/Kg-dry	1	04/30/13 19:53
Benzo(k)fluoranthene	U		15	34	µg/Kg-dry	1	04/30/13 19:53
Chrysene	U		13	34	µg/Kg-dry	1	04/30/13 19:53
Dibenzo(a,h)anthracene	U		19	34	µg/Kg-dry	1	04/30/13 19:53
Fluoranthene	U		14	34	µg/Kg-dry	1	04/30/13 19:53
Fluorene	U		10	34	µg/Kg-dry	1	04/30/13 19:53
Indeno(1,2,3-cd)pyrene	U		22	34	µg/Kg-dry	1	04/30/13 19:53
Naphthalene	U		9.7	34	µg/Kg-dry	1	04/30/13 19:53
Phenanthrene	U		34	34	µg/Kg-dry	1	04/30/13 19:53
Pyrene	U		14	34	µg/Kg-dry	1	04/30/13 19:53
Surr: 2-Fluorobiphenyl	61.7			12-100	%REC	1	04/30/13 19:53
Surr: 4-Terphenyl-d14	88.4			25-137	%REC	1	04/30/13 19:53
Surr: Nitrobenzene-d5	78.1			37-107	%REC	1	04/30/13 19:53

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: BG

BatchID: 47968

1,1,1-Trichloroethane	U		13	35	µg/Kg-dry	1	04/30/13 12:12
1,1,2,2-Tetrachloroethane	U		15	35	µg/Kg-dry	1	04/30/13 12:12
1,1,2-Trichloroethane	U		12	35	µg/Kg-dry	1	04/30/13 12:12
1,1,2-Trichlorotrifluoroethane	U		13	35	µg/Kg-dry	1	04/30/13 12:12
1,1-Dichloroethane	U		13	35	µg/Kg-dry	1	04/30/13 12:12
1,1-Dichloroethene	U		15	35	µg/Kg-dry	1	04/30/13 12:12
1,2,4-Trichlorobenzene	U		18	35	µg/Kg-dry	1	04/30/13 12:12
1,2-Dibromo-3-chloropropane	U		17	35	µg/Kg-dry	1	04/30/13 12:12
1,2-Dibromoethane	U		14	35	µg/Kg-dry	1	04/30/13 12:12
1,2-Dichlorobenzene	U		14	35	µg/Kg-dry	1	04/30/13 12:12
1,2-Dichloroethane	U		17	35	µg/Kg-dry	1	04/30/13 12:12
1,2-Dichloropropane	U		12	35	µg/Kg-dry	1	04/30/13 12:12
1,3-Dichlorobenzene	U		14	35	µg/Kg-dry	1	04/30/13 12:12
1,4-Dichlorobenzene	U		13	35	µg/Kg-dry	1	04/30/13 12:12
2-Butanone	U		87	230	µg/Kg-dry	1	04/30/13 12:12
2-Hexanone	U		8.6	35	µg/Kg-dry	1	04/30/13 12:12
4-Methyl-2-pentanone	U		12	35	µg/Kg-dry	1	04/30/13 12:12
Acetone	U		74	120	µg/Kg-dry	1	04/30/13 12:12
Benzene	U		14	35	µg/Kg-dry	1	04/30/13 12:12
Bromodichloromethane	U		7.9	35	µg/Kg-dry	1	04/30/13 12:12

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-078
Collection Date: 04/24/13 12:50 PM

Work Order: 13041049
Lab ID: 13041049-66
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		6.9	35	µg/Kg-dry	1	04/30/13 12:12
Bromomethane	U		13	88	µg/Kg-dry	1	04/30/13 12:12
Carbon disulfide	U		17	35	µg/Kg-dry	1	04/30/13 12:12
Carbon tetrachloride	U		10	35	µg/Kg-dry	1	04/30/13 12:12
Chlorobenzene	U		14	35	µg/Kg-dry	1	04/30/13 12:12
Chloroethane	U		74	120	µg/Kg-dry	1	04/30/13 12:12
Chloroform	U		14	35	µg/Kg-dry	1	04/30/13 12:12
Chloromethane	U		20	120	µg/Kg-dry	1	04/30/13 12:12
cis-1,2-Dichloroethene	U		14	35	µg/Kg-dry	1	04/30/13 12:12
cis-1,3-Dichloropropene	U		12	35	µg/Kg-dry	1	04/30/13 12:12
Cyclohexane	U		16	35	µg/Kg-dry	1	04/30/13 12:12
Dibromochloromethane	U		6.5	35	µg/Kg-dry	1	04/30/13 12:12
Dichlorodifluoromethane	U		16	35	µg/Kg-dry	1	04/30/13 12:12
Ethylbenzene	U		13	35	µg/Kg-dry	1	04/30/13 12:12
Isopropylbenzene	U		15	35	µg/Kg-dry	1	04/30/13 12:12
Methyl acetate	U		47	230	µg/Kg-dry	1	04/30/13 12:12
Methyl tert-butyl ether	U		15	35	µg/Kg-dry	1	04/30/13 12:12
Methylcyclohexane	U		16	35	µg/Kg-dry	1	04/30/13 12:12
Methylene chloride	U		14	35	µg/Kg-dry	1	04/30/13 12:12
Styrene	U		13	35	µg/Kg-dry	1	04/30/13 12:12
Tetrachloroethene	U		16	35	µg/Kg-dry	1	04/30/13 12:12
Toluene	32	J	13	35	µg/Kg-dry	1	04/30/13 12:12
trans-1,2-Dichloroethene	U		11	35	µg/Kg-dry	1	04/30/13 12:12
trans-1,3-Dichloropropene	U		12	35	µg/Kg-dry	1	04/30/13 12:12
Trichloroethene	230		16	35	µg/Kg-dry	1	04/30/13 12:12
Trichlorofluoromethane	U		9.6	35	µg/Kg-dry	1	04/30/13 12:12
Vinyl chloride	U		16	35	µg/Kg-dry	1	04/30/13 12:12
Xylenes, Total	U		41	110	µg/Kg-dry	1	04/30/13 12:12
Surr: 1,2-Dichloroethane-d4	106			70-130	%REC	1	04/30/13 12:12
Surr: 4-Bromofluorobenzene	102			70-130	%REC	1	04/30/13 12:12
Surr: Dibromofluoromethane	94.7			70-130	%REC	1	04/30/13 12:12
Surr: Toluene-d8	104			70-130	%REC	1	04/30/13 12:12

MOISTURE

A2540 G

Analyst: DC

BatchID: R119877

Moisture	13	0.025	0.050	% of sample	1	04/29/13 15:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-079
Collection Date: 04/24/13 01:05 PM

Work Order: 13041049
Lab ID: 13041049-67
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 5/1/13	Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		38	350	µg/Kg-dry	1	05/02/13 13:48
Aroclor 1221	U		38	350	µg/Kg-dry	1	05/02/13 13:48
Aroclor 1232	U		38	350	µg/Kg-dry	1	05/02/13 13:48
Aroclor 1242	U		38	350	µg/Kg-dry	1	05/02/13 13:48
Aroclor 1248	U		38	350	µg/Kg-dry	1	05/02/13 13:48
Aroclor 1254	U		12	350	µg/Kg-dry	1	05/02/13 13:48
Aroclor 1260	U		12	350	µg/Kg-dry	1	05/02/13 13:48
Surr: Decachlorobiphenyl	70.1			40-140	%REC	1	05/02/13 13:48
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48032</u>							
Mercury	0.0089	J	0.00073	0.037	mg/Kg-dry	1	04/30/13 15:19
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 5/1/13	Analyst: ML
<u>BatchID: 48082</u>							
Antimony	0.17	J	0.0082	2.0	mg/Kg-dry	5	05/02/13 20:01
Arsenic	1.5	J	0.28	2.0	mg/Kg-dry	5	05/02/13 20:01
Barium	28		0.057	2.0	mg/Kg-dry	5	05/02/13 20:01
Beryllium	0.13	J	0.016	0.82	mg/Kg-dry	5	05/02/13 20:01
Cadmium	0.093	J	0.0082	0.82	mg/Kg-dry	5	05/02/13 20:01
Chromium	8.3		0.34	2.0	mg/Kg-dry	5	05/02/13 20:01
Cobalt	2.3		0.0082	2.0	mg/Kg-dry	5	05/02/13 20:01
Copper	5.1		0.40	2.0	mg/Kg-dry	5	05/02/13 20:01
Iron	6,000		6.8	33	mg/Kg-dry	5	05/02/13 20:01
Lead	7.3		0.0082	2.0	mg/Kg-dry	5	05/02/13 20:01
Manganese	170		0.18	2.0	mg/Kg-dry	5	05/02/13 20:01
Molybdenum	0.42	J	0.090	2.0	mg/Kg-dry	5	05/02/13 20:01
Nickel	5.6		0.20	2.0	mg/Kg-dry	5	05/02/13 20:01
Selenium	0.31	J	0.26	2.0	mg/Kg-dry	5	05/02/13 20:01
Silver	0.054	J	0.0082	2.0	mg/Kg-dry	5	05/02/13 20:01
Thallium	U		0.049	2.0	mg/Kg-dry	5	05/02/13 20:01
Vanadium	10		0.12	2.0	mg/Kg-dry	5	05/02/13 20:01
Zinc	17		0.17	4.1	mg/Kg-dry	5	05/02/13 20:01
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/29/13	Analyst: RM
<u>BatchID: 48001</u>							
2-Methylnaphthalene	U		10	85	µg/Kg-dry	1	04/30/13 20:14
Acenaphthene	U		9.7	32	µg/Kg-dry	1	04/30/13 20:14
Acenaphthylene	U		10	32	µg/Kg-dry	1	04/30/13 20:14

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-079
Collection Date: 04/24/13 01:05 PM

Work Order: 13041049
Lab ID: 13041049-67
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	250		11	32	µg/Kg-dry	1	04/30/13 20:14
Benzo(a)anthracene	1,400		13	32	µg/Kg-dry	1	04/30/13 20:14
Benzo(a)pyrene	1,500		16	32	µg/Kg-dry	1	04/30/13 20:14
Benzo(b)fluoranthene	1,600		17	32	µg/Kg-dry	1	04/30/13 20:14
Benzo(g,h,i)perylene	910		25	32	µg/Kg-dry	1	04/30/13 20:14
Benzo(k)fluoranthene	1,200		14	32	µg/Kg-dry	1	04/30/13 20:14
Chrysene	1,700		12	32	µg/Kg-dry	1	04/30/13 20:14
Dibenzo(a,h)anthracene	290		18	32	µg/Kg-dry	1	04/30/13 20:14
Fluorene	90		9.3	32	µg/Kg-dry	1	04/30/13 20:14
Indeno(1,2,3-cd)pyrene	790		20	32	µg/Kg-dry	1	04/30/13 20:14
Naphthalene	62		9.1	32	µg/Kg-dry	1	04/30/13 20:14
Phenanthrene	1,700		32	32	µg/Kg-dry	1	04/30/13 20:14
Surr: 2-Fluorobiphenyl	77.0			12-100	%REC	1	04/30/13 20:14
Surr: 4-Terphenyl-d14	99.2			25-137	%REC	1	04/30/13 20:14
Surr: Nitrobenzene-d5	99.9			37-107	%REC	1	04/30/13 20:14
BatchID: 48001							
Fluoranthene	2,800		63	160	µg/Kg-dry	5	05/02/13 13:33
Pyrene	3,200		66	160	µg/Kg-dry	5	05/02/13 13:33
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13	Analyst: BG	
BatchID: 47968							
1,1,1-Trichloroethane	U		12	32	µg/Kg-dry	1	04/30/13 12:35
1,1,2,2-Tetrachloroethane	U		14	32	µg/Kg-dry	1	04/30/13 12:35
1,1,2-Trichloroethane	U		11	32	µg/Kg-dry	1	04/30/13 12:35
1,1,2-Trichlorotrifluoroethane	U		12	32	µg/Kg-dry	1	04/30/13 12:35
1,1-Dichloroethane	U		12	32	µg/Kg-dry	1	04/30/13 12:35
1,1-Dichloroethene	U		14	32	µg/Kg-dry	1	04/30/13 12:35
1,2,4-Trichlorobenzene	U		17	32	µg/Kg-dry	1	04/30/13 12:35
1,2-Dibromo-3-chloropropane	U		16	32	µg/Kg-dry	1	04/30/13 12:35
1,2-Dibromoethane	U		13	32	µg/Kg-dry	1	04/30/13 12:35
1,2-Dichlorobenzene	U		13	32	µg/Kg-dry	1	04/30/13 12:35
1,2-Dichloroethane	U		15	32	µg/Kg-dry	1	04/30/13 12:35
1,2-Dichloropropane	U		11	32	µg/Kg-dry	1	04/30/13 12:35
1,3-Dichlorobenzene	U		13	32	µg/Kg-dry	1	04/30/13 12:35
1,4-Dichlorobenzene	U		12	32	µg/Kg-dry	1	04/30/13 12:35
2-Butanone	U		80	220	µg/Kg-dry	1	04/30/13 12:35
2-Hexanone	U		7.9	32	µg/Kg-dry	1	04/30/13 12:35
4-Methyl-2-pentanone	U		11	32	µg/Kg-dry	1	04/30/13 12:35
Acetone	U		68	110	µg/Kg-dry	1	04/30/13 12:35
Benzene	U		13	32	µg/Kg-dry	1	04/30/13 12:35

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-079
Collection Date: 04/24/13 01:05 PM

Work Order: 13041049
Lab ID: 13041049-67
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromodichloromethane	U		7.3	32	µg/Kg-dry	1	04/30/13 12:35
Bromoform	U		6.4	32	µg/Kg-dry	1	04/30/13 12:35
Bromomethane	U		12	81	µg/Kg-dry	1	04/30/13 12:35
Carbon disulfide	U		16	32	µg/Kg-dry	1	04/30/13 12:35
Carbon tetrachloride	U		9.2	32	µg/Kg-dry	1	04/30/13 12:35
Chlorobenzene	U		13	32	µg/Kg-dry	1	04/30/13 12:35
Chloroethane	U		69	110	µg/Kg-dry	1	04/30/13 12:35
Chloroform	U		13	32	µg/Kg-dry	1	04/30/13 12:35
Chloromethane	U		18	110	µg/Kg-dry	1	04/30/13 12:35
cis-1,2-Dichloroethene	U		13	32	µg/Kg-dry	1	04/30/13 12:35
cis-1,3-Dichloropropene	U		11	32	µg/Kg-dry	1	04/30/13 12:35
Cyclohexane	U		15	32	µg/Kg-dry	1	04/30/13 12:35
Dibromochloromethane	U		6.0	32	µg/Kg-dry	1	04/30/13 12:35
Dichlorodifluoromethane	U		15	32	µg/Kg-dry	1	04/30/13 12:35
Ethylbenzene	U		12	32	µg/Kg-dry	1	04/30/13 12:35
Isopropylbenzene	U		14	32	µg/Kg-dry	1	04/30/13 12:35
Methyl acetate	110	J	43	220	µg/Kg-dry	1	04/30/13 12:35
Methyl tert-butyl ether	U		14	32	µg/Kg-dry	1	04/30/13 12:35
Methylcyclohexane	U		15	32	µg/Kg-dry	1	04/30/13 12:35
Methylene chloride	U		13	32	µg/Kg-dry	1	04/30/13 12:35
Styrene	U		12	32	µg/Kg-dry	1	04/30/13 12:35
Tetrachloroethene	U		14	32	µg/Kg-dry	1	04/30/13 12:35
Toluene	56		12	32	µg/Kg-dry	1	04/30/13 12:35
trans-1,2-Dichloroethene	U		10	32	µg/Kg-dry	1	04/30/13 12:35
trans-1,3-Dichloropropene	U		11	32	µg/Kg-dry	1	04/30/13 12:35
Trichloroethene	U		15	32	µg/Kg-dry	1	04/30/13 12:35
Trichlorofluoromethane	U		8.9	32	µg/Kg-dry	1	04/30/13 12:35
Vinyl chloride	U		15	32	µg/Kg-dry	1	04/30/13 12:35
Xylenes, Total	U		38	97	µg/Kg-dry	1	04/30/13 12:35
Surr: 1,2-Dichloroethane-d4	103			70-130	%REC	1	04/30/13 12:35
Surr: 4-Bromofluorobenzene	100			70-130	%REC	1	04/30/13 12:35
Surr: Dibromofluoromethane	95.8			70-130	%REC	1	04/30/13 12:35
Surr: Toluene-d8	104			70-130	%REC	1	04/30/13 12:35

MOISTURE

A2540 G

Analyst: DC

BatchID: R119877

Moisture	7.3	0.025	0.050	% of sample	1	04/29/13 15:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-080
Collection Date: 04/24/13 01:07 PM

Work Order: 13041049
Lab ID: 13041049-68
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 5/1/13	Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		38	350	µg/Kg-dry	1	05/02/13 14:08
Aroclor 1221	U		38	350	µg/Kg-dry	1	05/02/13 14:08
Aroclor 1232	U		38	350	µg/Kg-dry	1	05/02/13 14:08
Aroclor 1242	U		38	350	µg/Kg-dry	1	05/02/13 14:08
Aroclor 1248	U		38	350	µg/Kg-dry	1	05/02/13 14:08
Aroclor 1254	U		12	350	µg/Kg-dry	1	05/02/13 14:08
Aroclor 1260	U		12	350	µg/Kg-dry	1	05/02/13 14:08
Surr: Decachlorobiphenyl	44.0			40-140	%REC	1	05/02/13 14:08
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48032</u>							
Mercury	0.023	J	0.00080	0.040	mg/Kg-dry	1	04/30/13 15:25
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 5/1/13	Analyst: ML
<u>BatchID: 48082</u>							
Antimony	0.66	J	0.0078	2.0	mg/Kg-dry	5	05/02/13 20:07
Arsenic	3.2		0.27	2.0	mg/Kg-dry	5	05/02/13 20:07
Barium	46		0.055	2.0	mg/Kg-dry	5	05/02/13 20:07
Beryllium	0.48	J	0.016	0.78	mg/Kg-dry	5	05/02/13 20:07
Cadmium	0.22	J	0.0078	0.78	mg/Kg-dry	5	05/02/13 20:07
Chromium	7.9		0.32	2.0	mg/Kg-dry	5	05/02/13 20:07
Cobalt	3.2		0.0078	2.0	mg/Kg-dry	5	05/02/13 20:07
Copper	15		0.38	2.0	mg/Kg-dry	5	05/02/13 20:07
Iron	9,000		6.5	31	mg/Kg-dry	5	05/02/13 20:07
Lead	22		0.0078	2.0	mg/Kg-dry	5	05/02/13 20:07
Manganese	150		0.17	2.0	mg/Kg-dry	5	05/02/13 20:07
Molybdenum	1.0	J	0.086	2.0	mg/Kg-dry	5	05/02/13 20:07
Nickel	7.8		0.20	2.0	mg/Kg-dry	5	05/02/13 20:07
Selenium	0.55	J	0.25	2.0	mg/Kg-dry	5	05/02/13 20:07
Silver	0.013	J	0.0078	2.0	mg/Kg-dry	5	05/02/13 20:07
Thallium	0.080	J	0.047	2.0	mg/Kg-dry	5	05/02/13 20:07
Vanadium	12		0.12	2.0	mg/Kg-dry	5	05/02/13 20:07
Zinc	29		0.16	3.9	mg/Kg-dry	5	05/02/13 20:07
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/29/13	Analyst: RM
<u>BatchID: 48001</u>							
2-Methylnaphthalene	7,100	J	1,100	8,600	µg/Kg-dry	100	05/02/13 14:15
Acenaphthene	2,000	J	980	3,200	µg/Kg-dry	100	05/02/13 14:15
Acenaphthylene	U		1,000	3,200	µg/Kg-dry	100	05/02/13 14:15

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-080
Collection Date: 04/24/13 01:07 PM

Work Order: 13041049
Lab ID: 13041049-68
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	44,000		1,100	3,200	µg/Kg-dry	100	05/02/13 14:15
Benzo(a)anthracene	69,000		1,300	3,200	µg/Kg-dry	100	05/02/13 14:15
Benzo(a)pyrene	61,000		1,700	3,200	µg/Kg-dry	100	05/02/13 14:15
Benzo(b)fluoranthene	53,000		1,700	3,200	µg/Kg-dry	100	05/02/13 14:15
Benzo(g,h,i)perylene	27,000		2,500	3,200	µg/Kg-dry	100	05/02/13 14:15
Benzo(k)fluoranthene	51,000		1,500	3,200	µg/Kg-dry	100	05/02/13 14:15
Chrysene	66,000		1,200	3,200	µg/Kg-dry	100	05/02/13 14:15
Dibenzo(a,h)anthracene	10,000		1,800	3,200	µg/Kg-dry	100	05/02/13 14:15
Fluoranthene	130,000		1,300	3,200	µg/Kg-dry	100	05/02/13 14:15
Fluorene	25,000		940	3,200	µg/Kg-dry	100	05/02/13 14:15
Indeno(1,2,3-cd)pyrene	27,000		2,000	3,200	µg/Kg-dry	100	05/02/13 14:15
Naphthalene	29,000		910	3,200	µg/Kg-dry	100	05/02/13 14:15
Phenanthrene	130,000		3,200	3,200	µg/Kg-dry	100	05/02/13 14:15
Pyrene	140,000		1,300	3,200	µg/Kg-dry	100	05/02/13 14:15
Surr: 2-Fluorobiphenyl	62.0			12-100	%REC	100	05/02/13 14:15
Surr: 4-Terphenyl-d14	90.0			25-137	%REC	100	05/02/13 14:15
Surr: Nitrobenzene-d5	0	S		37-107	%REC	100	05/02/13 14:15

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: BG

BatchID: 47968

1,1,1-Trichloroethane	U	16	42	µg/Kg-dry	1	04/30/13 12:59
1,1,2,2-Tetrachloroethane	U	19	42	µg/Kg-dry	1	04/30/13 12:59
1,1,2-Trichloroethane	U	15	42	µg/Kg-dry	1	04/30/13 12:59
1,1,2-Trichlorotrifluoroethane	U	16	42	µg/Kg-dry	1	04/30/13 12:59
1,1-Dichloroethane	U	15	42	µg/Kg-dry	1	04/30/13 12:59
1,1-Dichloroethene	U	18	42	µg/Kg-dry	1	04/30/13 12:59
1,2,4-Trichlorobenzene	U	22	42	µg/Kg-dry	1	04/30/13 12:59
1,2-Dibromo-3-chloropropane	U	21	42	µg/Kg-dry	1	04/30/13 12:59
1,2-Dibromoethane	U	17	42	µg/Kg-dry	1	04/30/13 12:59
1,2-Dichlorobenzene	U	17	42	µg/Kg-dry	1	04/30/13 12:59
1,2-Dichloroethane	U	20	42	µg/Kg-dry	1	04/30/13 12:59
1,2-Dichloropropane	U	14	42	µg/Kg-dry	1	04/30/13 12:59
1,3-Dichlorobenzene	U	17	42	µg/Kg-dry	1	04/30/13 12:59
1,4-Dichlorobenzene	U	16	42	µg/Kg-dry	1	04/30/13 12:59
2-Butanone	U	100	280	µg/Kg-dry	1	04/30/13 12:59
2-Hexanone	U	10	42	µg/Kg-dry	1	04/30/13 12:59
4-Methyl-2-pentanone	U	14	42	µg/Kg-dry	1	04/30/13 12:59
Acetone	U	89	140	µg/Kg-dry	1	05/02/13 06:50
Benzene	84	17	42	µg/Kg-dry	1	04/30/13 12:59
Bromodichloromethane	U	9.5	42	µg/Kg-dry	1	04/30/13 12:59

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-080
Collection Date: 04/24/13 01:07 PM

Work Order: 13041049
Lab ID: 13041049-68
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		8.3	42	µg/Kg-dry	1	04/30/13 12:59
Bromomethane	U		16	110	µg/Kg-dry	1	04/30/13 12:59
Carbon disulfide	U		21	42	µg/Kg-dry	1	04/30/13 12:59
Carbon tetrachloride	U		12	42	µg/Kg-dry	1	04/30/13 12:59
Chlorobenzene	U		17	42	µg/Kg-dry	1	04/30/13 12:59
Chloroethane	U		89	140	µg/Kg-dry	1	04/30/13 12:59
Chloroform	U		17	42	µg/Kg-dry	1	04/30/13 12:59
Chloromethane	U		23	140	µg/Kg-dry	1	04/30/13 12:59
cis-1,2-Dichloroethene	U		17	42	µg/Kg-dry	1	04/30/13 12:59
cis-1,3-Dichloropropene	U		14	42	µg/Kg-dry	1	04/30/13 12:59
Cyclohexane	440		19	42	µg/Kg-dry	1	04/30/13 12:59
Dibromochloromethane	U		7.8	42	µg/Kg-dry	1	04/30/13 12:59
Dichlorodifluoromethane	U		19	42	µg/Kg-dry	1	04/30/13 12:59
Ethylbenzene	230		16	42	µg/Kg-dry	1	04/30/13 12:59
Isopropylbenzene	230		18	42	µg/Kg-dry	1	04/30/13 12:59
Methyl acetate	140	J	57	280	µg/Kg-dry	1	04/30/13 12:59
Methyl tert-butyl ether	U		18	42	µg/Kg-dry	1	04/30/13 12:59
Methylcyclohexane	1,500		20	42	µg/Kg-dry	1	04/30/13 12:59
Methylene chloride	U		17	42	µg/Kg-dry	1	04/30/13 12:59
Styrene	U		16	42	µg/Kg-dry	1	04/30/13 12:59
Tetrachloroethene	U		19	42	µg/Kg-dry	1	04/30/13 12:59
Toluene	650		16	42	µg/Kg-dry	1	04/30/13 12:59
trans-1,2-Dichloroethene	U		13	42	µg/Kg-dry	1	04/30/13 12:59
trans-1,3-Dichloropropene	U		14	42	µg/Kg-dry	1	04/30/13 12:59
Trichloroethene	2,900		20	42	µg/Kg-dry	1	04/30/13 12:59
Trichlorofluoromethane	U		12	42	µg/Kg-dry	1	04/30/13 12:59
Vinyl chloride	U		19	42	µg/Kg-dry	1	04/30/13 12:59
Xylenes, Total	1,700		50	130	µg/Kg-dry	1	04/30/13 12:59
Surr: 1,2-Dichloroethane-d4	107			70-130	%REC	1	04/30/13 12:59
Surr: 1,2-Dichloroethane-d4	91.0			70-130	%REC	1	05/02/13 06:50
Surr: 4-Bromofluorobenzene	102			70-130	%REC	1	04/30/13 12:59
Surr: 4-Bromofluorobenzene	93.1			70-130	%REC	1	05/02/13 06:50
Surr: Dibromofluoromethane	92.1			70-130	%REC	1	04/30/13 12:59
Surr: Dibromofluoromethane	95.4			70-130	%REC	1	05/02/13 06:50
Surr: Toluene-d8	106			70-130	%REC	1	04/30/13 12:59
Surr: Toluene-d8	98.5			70-130	%REC	1	05/02/13 06:50

MOISTURE

A2540 G

Analyst: DC

BatchID: R119877

Moisture	7.7	0.025	0.050	% of sample	1	04/29/13 15:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-081
Collection Date: 04/24/13 01:10 PM

Work Order: 13041049
Lab ID: 13041049-69
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 5/1/13	Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		37	350	µg/Kg-dry	1	05/02/13 14:28
Aroclor 1221	U		37	350	µg/Kg-dry	1	05/02/13 14:28
Aroclor 1232	U		37	350	µg/Kg-dry	1	05/02/13 14:28
Aroclor 1242	U		37	350	µg/Kg-dry	1	05/02/13 14:28
Aroclor 1248	U		37	350	µg/Kg-dry	1	05/02/13 14:28
Aroclor 1254	U		12	350	µg/Kg-dry	1	05/02/13 14:28
Aroclor 1260	U		12	350	µg/Kg-dry	1	05/02/13 14:28
Surr: Decachlorobiphenyl	45.0			40-140	%REC	1	05/02/13 14:28
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48032</u>							
Mercury	0.020	J	0.00084	0.042	mg/Kg-dry	1	04/30/13 15:27
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 5/1/13	Analyst: ML
<u>BatchID: 48082</u>							
Antimony	0.46	J	0.0086	2.1	mg/Kg-dry	5	05/02/13 20:31
Arsenic	4.1		0.29	2.1	mg/Kg-dry	5	05/02/13 20:31
Barium	110		0.060	2.1	mg/Kg-dry	5	05/02/13 20:31
Beryllium	0.41	J	0.017	0.86	mg/Kg-dry	5	05/02/13 20:31
Cadmium	0.25	J	0.0086	0.86	mg/Kg-dry	5	05/02/13 20:31
Chromium	7.3		0.35	2.1	mg/Kg-dry	5	05/02/13 20:31
Cobalt	2.8		0.0086	2.1	mg/Kg-dry	5	05/02/13 20:31
Copper	15		0.42	2.1	mg/Kg-dry	5	05/02/13 20:31
Iron	6,900		7.1	34	mg/Kg-dry	5	05/02/13 20:31
Lead	18		0.0086	2.1	mg/Kg-dry	5	05/02/13 20:31
Manganese	160		0.19	2.1	mg/Kg-dry	5	05/02/13 20:31
Molybdenum	1.1	J	0.094	2.1	mg/Kg-dry	5	05/02/13 20:31
Nickel	7.5		0.21	2.1	mg/Kg-dry	5	05/02/13 20:31
Selenium	0.84	J	0.27	2.1	mg/Kg-dry	5	05/02/13 20:31
Silver	0.013	J	0.0086	2.1	mg/Kg-dry	5	05/02/13 20:31
Thallium	0.20	J	0.052	2.1	mg/Kg-dry	5	05/02/13 20:31
Vanadium	11		0.13	2.1	mg/Kg-dry	5	05/02/13 20:31
Zinc	28		0.18	4.3	mg/Kg-dry	5	05/02/13 20:31
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/29/13	Analyst: RM
<u>BatchID: 48001</u>							
2-Methylnaphthalene	5,900	J	1,100	8,700	µg/Kg-dry	100	05/02/13 14:36
Acenaphthene	U		990	3,300	µg/Kg-dry	100	05/02/13 14:36
Acenaphthylene	U		1,000	3,300	µg/Kg-dry	100	05/02/13 14:36

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-081
Collection Date: 04/24/13 01:10 PM

Work Order: 13041049
Lab ID: 13041049-69
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	36,000		1,100	3,300	µg/Kg-dry	100	05/02/13 14:36
Benzo(a)anthracene	58,000		1,300	3,300	µg/Kg-dry	100	05/02/13 14:36
Benzo(a)pyrene	50,000		1,700	3,300	µg/Kg-dry	100	05/02/13 14:36
Benzo(b)fluoranthene	46,000		1,700	3,300	µg/Kg-dry	100	05/02/13 14:36
Benzo(g,h,i)perylene	22,000		2,600	3,300	µg/Kg-dry	100	05/02/13 14:36
Benzo(k)fluoranthene	37,000		1,500	3,300	µg/Kg-dry	100	05/02/13 14:36
Chrysene	53,000		1,200	3,300	µg/Kg-dry	100	05/02/13 14:36
Dibenzo(a,h)anthracene	8,500		1,900	3,300	µg/Kg-dry	100	05/02/13 14:36
Fluoranthene	110,000		1,300	3,300	µg/Kg-dry	100	05/02/13 14:36
Fluorene	21,000		950	3,300	µg/Kg-dry	100	05/02/13 14:36
Indeno(1,2,3-cd)pyrene	22,000		2,100	3,300	µg/Kg-dry	100	05/02/13 14:36
Naphthalene	24,000		930	3,300	µg/Kg-dry	100	05/02/13 14:36
Phenanthrene	110,000		3,300	3,300	µg/Kg-dry	100	05/02/13 14:36
Pyrene	110,000		1,400	3,300	µg/Kg-dry	100	05/02/13 14:36
Surr: 2-Fluorobiphenyl	62.0	S		12-100	%REC	100	05/02/13 14:36
Surr: 4-Terphenyl-d14	0			25-137	%REC	100	05/02/13 14:36
Surr: Nitrobenzene-d5	60.0			37-107	%REC	100	05/02/13 14:36
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: BG
BatchID: 47968							
1,1,1-Trichloroethane	U		15	40	µg/Kg-dry	1	04/30/13 01:22
1,1,2,2-Tetrachloroethane	U		17	40	µg/Kg-dry	1	04/30/13 01:22
1,1,2-Trichloroethane	U		14	40	µg/Kg-dry	1	04/30/13 01:22
1,1,2-Trichlorotrifluoroethane	U		15	40	µg/Kg-dry	1	04/30/13 01:22
1,1-Dichloroethane	U		15	40	µg/Kg-dry	1	04/30/13 01:22
1,1-Dichloroethene	U		17	40	µg/Kg-dry	1	04/30/13 01:22
1,2,4-Trichlorobenzene	U		21	40	µg/Kg-dry	1	04/30/13 01:22
1,2-Dibromo-3-chloropropane	U		19	40	µg/Kg-dry	1	04/30/13 01:22
1,2-Dibromoethane	U		16	40	µg/Kg-dry	1	04/30/13 01:22
1,2-Dichlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 01:22
1,2-Dichloroethane	U		19	40	µg/Kg-dry	1	04/30/13 01:22
1,2-Dichloropropane	U		13	40	µg/Kg-dry	1	04/30/13 01:22
1,3-Dichlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 01:22
1,4-Dichlorobenzene	U		15	40	µg/Kg-dry	1	04/30/13 01:22
2-Butanone	U		98	270	µg/Kg-dry	1	04/30/13 01:22
2-Hexanone	U		9.8	40	µg/Kg-dry	1	04/30/13 01:22
4-Methyl-2-pentanone	U		13	40	µg/Kg-dry	1	04/30/13 01:22
Acetone	U		84	130	µg/Kg-dry	1	05/02/13 07:14
Benzene	U		16	40	µg/Kg-dry	1	04/30/13 01:22
Bromodichloromethane	U		8.9	40	µg/Kg-dry	1	04/30/13 01:22

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-081
Collection Date: 04/24/13 01:10 PM

Work Order: 13041049
Lab ID: 13041049-69
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		7.8	40	µg/Kg-dry	1	04/30/13 01:22
Bromomethane	U		15	99	µg/Kg-dry	1	04/30/13 01:22
Carbon disulfide	U		20	40	µg/Kg-dry	1	04/30/13 01:22
Carbon tetrachloride	U		11	40	µg/Kg-dry	1	04/30/13 01:22
Chlorobenzene	U		16	40	µg/Kg-dry	1	04/30/13 01:22
Chloroethane	U		84	130	µg/Kg-dry	1	04/30/13 01:22
Chloroform	U		16	40	µg/Kg-dry	1	04/30/13 01:22
Chloromethane	U		22	130	µg/Kg-dry	1	04/30/13 01:22
cis-1,2-Dichloroethene	U		16	40	µg/Kg-dry	1	04/30/13 01:22
cis-1,3-Dichloropropene	U		14	40	µg/Kg-dry	1	04/30/13 01:22
Cyclohexane	65		18	40	µg/Kg-dry	1	04/30/13 01:22
Dibromochloromethane	U		7.4	40	µg/Kg-dry	1	04/30/13 01:22
Dichlorodifluoromethane	U		18	40	µg/Kg-dry	1	04/30/13 01:22
Ethylbenzene	28	J	15	40	µg/Kg-dry	1	04/30/13 01:22
Isopropylbenzene	24	J	17	40	µg/Kg-dry	1	04/30/13 01:22
Methyl acetate	U		53	270	µg/Kg-dry	1	04/30/13 01:22
Methyl tert-butyl ether	U		17	40	µg/Kg-dry	1	04/30/13 01:22
Methylcyclohexane	210		18	40	µg/Kg-dry	1	04/30/13 01:22
Methylene chloride	U		16	40	µg/Kg-dry	1	04/30/13 01:22
Styrene	U		15	40	µg/Kg-dry	1	04/30/13 01:22
Tetrachloroethene	U		18	40	µg/Kg-dry	1	04/30/13 01:22
Toluene	100		15	40	µg/Kg-dry	1	04/30/13 01:22
trans-1,2-Dichloroethene	U		12	40	µg/Kg-dry	1	04/30/13 01:22
trans-1,3-Dichloropropene	U		13	40	µg/Kg-dry	1	04/30/13 01:22
Trichloroethene	830		19	40	µg/Kg-dry	1	04/30/13 01:22
Trichlorofluoromethane	U		11	40	µg/Kg-dry	1	04/30/13 01:22
Vinyl chloride	U		18	40	µg/Kg-dry	1	04/30/13 01:22
Xylenes, Total	210		47	120	µg/Kg-dry	1	04/30/13 01:22
Surr: 1,2-Dichloroethane-d4	104			70-130	%REC	1	04/30/13 01:22
Surr: 1,2-Dichloroethane-d4	90.3			70-130	%REC	1	05/02/13 07:14
Surr: 4-Bromofluorobenzene	101			70-130	%REC	1	04/30/13 01:22
Surr: 4-Bromofluorobenzene	96.0			70-130	%REC	1	05/02/13 07:14
Surr: Dibromofluoromethane	94.0			70-130	%REC	1	04/30/13 01:22
Surr: Dibromofluoromethane	93.7			70-130	%REC	1	05/02/13 07:14
Surr: Toluene-d8	105			70-130	%REC	1	04/30/13 01:22
Surr: Toluene-d8	100			70-130	%REC	1	05/02/13 07:14

MOISTURE

A2540 G

Analyst: DC

BatchID: R119877

Moisture	9.7	0.025	0.050	% of sample	1	04/29/13 15:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-082
Collection Date: 04/24/13 01:12 PM

Work Order: 13041049
Lab ID: 13041049-70
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082			Prep: SW3541 / 5/1/13	Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		38	360	µg/Kg-dry	1	05/02/13 14:47
Aroclor 1221	U		38	360	µg/Kg-dry	1	05/02/13 14:47
Aroclor 1232	U		38	360	µg/Kg-dry	1	05/02/13 14:47
Aroclor 1242	U		38	360	µg/Kg-dry	1	05/02/13 14:47
Aroclor 1248	U		38	360	µg/Kg-dry	1	05/02/13 14:47
Aroclor 1254	U		12	360	µg/Kg-dry	1	05/02/13 14:47
Aroclor 1260	U		12	360	µg/Kg-dry	1	05/02/13 14:47
Surr: Decachlorobiphenyl	91.1			40-140	%REC	1	05/02/13 14:47
MERCURY BY CVAA							
			SW7471			Prep: SW7471 / 4/30/13	Analyst: LR
<u>BatchID: 48032</u>							
Mercury	0.0088	J	0.00083	0.041	mg/Kg-dry	1	04/30/13 15:35
METALS BY ICP-MS							
			SW6020A			Prep: SW3050B / 5/1/13	Analyst: ML
<u>BatchID: 48082</u>							
Antimony	0.28	J	0.0080	2.0	mg/Kg-dry	5	05/02/13 20:37
Arsenic	8.3		0.27	2.0	mg/Kg-dry	5	05/02/13 20:37
Barium	33		0.056	2.0	mg/Kg-dry	5	05/02/13 20:37
Beryllium	0.28	J	0.016	0.80	mg/Kg-dry	5	05/02/13 20:37
Cadmium	0.10	J	0.0080	0.80	mg/Kg-dry	5	05/02/13 20:37
Chromium	4.3		0.33	2.0	mg/Kg-dry	5	05/02/13 20:37
Cobalt	2.4		0.0080	2.0	mg/Kg-dry	5	05/02/13 20:37
Copper	8.1		0.39	2.0	mg/Kg-dry	5	05/02/13 20:37
Iron	4,500		6.7	32	mg/Kg-dry	5	05/02/13 20:37
Lead	7.4		0.0080	2.0	mg/Kg-dry	5	05/02/13 20:37
Manganese	120		0.18	2.0	mg/Kg-dry	5	05/02/13 20:37
Molybdenum	0.48	J	0.088	2.0	mg/Kg-dry	5	05/02/13 20:37
Nickel	6.0		0.20	2.0	mg/Kg-dry	5	05/02/13 20:37
Selenium	0.38	J	0.26	2.0	mg/Kg-dry	5	05/02/13 20:37
Silver	0.014	J	0.0080	2.0	mg/Kg-dry	5	05/02/13 20:37
Thallium	0.19	J	0.048	2.0	mg/Kg-dry	5	05/02/13 20:37
Vanadium	7.3		0.12	2.0	mg/Kg-dry	5	05/02/13 20:37
Zinc	13		0.17	4.0	mg/Kg-dry	5	05/02/13 20:37
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270			Prep: SW3541 / 4/29/13	Analyst: RM
<u>BatchID: 48001</u>							
2-Methylnaphthalene	32	J	11	87	µg/Kg-dry	1	04/30/13 20:35
Acenaphthene	U		9.9	33	µg/Kg-dry	1	04/30/13 20:35
Acenaphthylene	U		10	33	µg/Kg-dry	1	04/30/13 20:35

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-082
Collection Date: 04/24/13 01:12 PM

Work Order: 13041049
Lab ID: 13041049-70
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	470		11	33	µg/Kg-dry	1	04/30/13 20:35
Benzo(a)anthracene	1,300		13	33	µg/Kg-dry	1	04/30/13 20:35
Benzo(a)pyrene	1,300		17	33	µg/Kg-dry	1	04/30/13 20:35
Benzo(b)fluoranthene	1,300		17	33	µg/Kg-dry	1	04/30/13 20:35
Benzo(g,h,i)perylene	870		26	33	µg/Kg-dry	1	04/30/13 20:35
Benzo(k)fluoranthene	980		15	33	µg/Kg-dry	1	04/30/13 20:35
Chrysene	1,600		12	33	µg/Kg-dry	1	04/30/13 20:35
Dibenzo(a,h)anthracene	240		19	33	µg/Kg-dry	1	04/30/13 20:35
Fluorene	270		9.5	33	µg/Kg-dry	1	04/30/13 20:35
Indeno(1,2,3-cd)pyrene	630		21	33	µg/Kg-dry	1	04/30/13 20:35
Naphthalene	120		9.3	33	µg/Kg-dry	1	04/30/13 20:35
Surr: 2-Fluorobiphenyl	67.3			12-100	%REC	1	04/30/13 20:35
Surr: 4-Terphenyl-d14	91.5			25-137	%REC	1	04/30/13 20:35
Surr: Nitrobenzene-d5	83.6			37-107	%REC	1	04/30/13 20:35
BatchID: 48001							
Fluoranthene	2,700		65	160	µg/Kg-dry	5	05/02/13 13:54
Phenanthrene	2,800		160	160	µg/Kg-dry	5	05/02/13 13:54
Pyrene	3,200		68	160	µg/Kg-dry	5	05/02/13 13:54
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: BG
BatchID: 47968							
1,1,1-Trichloroethane	U		18	48	µg/Kg-dry	1	04/30/13 01:46
1,1,2,2-Tetrachloroethane	U		21	48	µg/Kg-dry	1	04/30/13 01:46
1,1,2-Trichloroethane	U		17	48	µg/Kg-dry	1	04/30/13 01:46
1,1,2-Trichlorotrifluoroethane	U		18	48	µg/Kg-dry	1	04/30/13 01:46
1,1-Dichloroethane	U		18	48	µg/Kg-dry	1	04/30/13 01:46
1,1-Dichloroethene	U		20	48	µg/Kg-dry	1	04/30/13 01:46
1,2,4-Trichlorobenzene	U		25	48	µg/Kg-dry	1	04/30/13 01:46
1,2-Dibromo-3-chloropropane	U		24	48	µg/Kg-dry	1	04/30/13 01:46
1,2-Dibromoethane	U		19	48	µg/Kg-dry	1	04/30/13 01:46
1,2-Dichlorobenzene	U		19	48	µg/Kg-dry	1	04/30/13 01:46
1,2-Dichloroethane	U		23	48	µg/Kg-dry	1	04/30/13 01:46
1,2-Dichloropropane	U		16	48	µg/Kg-dry	1	04/30/13 01:46
1,3-Dichlorobenzene	U		19	48	µg/Kg-dry	1	04/30/13 01:46
1,4-Dichlorobenzene	U		18	48	µg/Kg-dry	1	04/30/13 01:46
2-Butanone	U		120	320	µg/Kg-dry	1	04/30/13 01:46
2-Hexanone	U		12	48	µg/Kg-dry	1	04/30/13 01:46
4-Methyl-2-pentanone	U		16	48	µg/Kg-dry	1	04/30/13 01:46
Acetone	U		100	160	µg/Kg-dry	1	05/02/13 07:38
Benzene	U		19	48	µg/Kg-dry	1	04/30/13 01:46

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-082
Collection Date: 04/24/13 01:12 PM

Work Order: 13041049
Lab ID: 13041049-70
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromodichloromethane	U		11	48	µg/Kg-dry	1	04/30/13 01:46
Bromoform	U		9.5	48	µg/Kg-dry	1	04/30/13 01:46
Bromomethane	U		19	120	µg/Kg-dry	1	04/30/13 01:46
Carbon disulfide	U		24	48	µg/Kg-dry	1	04/30/13 01:46
Carbon tetrachloride	U		14	48	µg/Kg-dry	1	04/30/13 01:46
Chlorobenzene	U		20	48	µg/Kg-dry	1	04/30/13 01:46
Chloroethane	U		100	160	µg/Kg-dry	1	04/30/13 01:46
Chloroform	U		20	48	µg/Kg-dry	1	04/30/13 01:46
Chloromethane	U		27	160	µg/Kg-dry	1	04/30/13 01:46
cis-1,2-Dichloroethene	U		20	48	µg/Kg-dry	1	04/30/13 01:46
cis-1,3-Dichloropropene	U		17	48	µg/Kg-dry	1	04/30/13 01:46
Cyclohexane	U		22	48	µg/Kg-dry	1	04/30/13 01:46
Dibromochloromethane	U		9.0	48	µg/Kg-dry	1	04/30/13 01:46
Dichlorodifluoromethane	U		22	48	µg/Kg-dry	1	04/30/13 01:46
Ethylbenzene	U		18	48	µg/Kg-dry	1	04/30/13 01:46
Isopropylbenzene	U		21	48	µg/Kg-dry	1	04/30/13 01:46
Methyl acetate	U		65	320	µg/Kg-dry	1	04/30/13 01:46
Methyl tert-butyl ether	U		20	48	µg/Kg-dry	1	04/30/13 01:46
Methylcyclohexane	U		22	48	µg/Kg-dry	1	04/30/13 01:46
Methylene chloride	U		19	48	µg/Kg-dry	1	04/30/13 01:46
Styrene	U		18	48	µg/Kg-dry	1	04/30/13 01:46
Tetrachloroethene	U		22	48	µg/Kg-dry	1	04/30/13 01:46
Toluene	29	J	18	48	µg/Kg-dry	1	04/30/13 01:46
trans-1,2-Dichloroethene	U		15	48	µg/Kg-dry	1	04/30/13 01:46
trans-1,3-Dichloropropene	U		16	48	µg/Kg-dry	1	04/30/13 01:46
Trichloroethene	180		23	48	µg/Kg-dry	1	04/30/13 01:46
Trichlorofluoromethane	U		13	48	µg/Kg-dry	1	04/30/13 01:46
Vinyl chloride	U		22	48	µg/Kg-dry	1	04/30/13 01:46
Xylenes, Total	U		57	150	µg/Kg-dry	1	04/30/13 01:46
Surr: 1,2-Dichloroethane-d4	105			70-130	%REC	1	04/30/13 01:46
Surr: 1,2-Dichloroethane-d4	91.8			70-130	%REC	1	05/02/13 07:38
Surr: 4-Bromofluorobenzene	101			70-130	%REC	1	04/30/13 01:46
Surr: 4-Bromofluorobenzene	96.0			70-130	%REC	1	05/02/13 07:38
Surr: Dibromofluoromethane	99.2			70-130	%REC	1	04/30/13 01:46
Surr: Dibromofluoromethane	97.4			70-130	%REC	1	05/02/13 07:38
Surr: Toluene-d8	104			70-130	%REC	1	04/30/13 01:46
Surr: Toluene-d8	103			70-130	%REC	1	05/02/13 07:38

MOISTURE

A2540 G

Analyst: DC

BatchID: R119877

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-082
Collection Date: 04/24/13 01:12 PM

Work Order: 13041049
Lab ID: 13041049-70
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Moisture	8.6		0.025	0.050	% of sample	1	04/29/13 15:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-083
Collection Date: 04/24/13 01:15 PM

Work Order: 13041049
Lab ID: 13041049-71
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
PCBS							
			SW8082		Prep: SW3541 / 5/1/13		Analyst: JD
<u>BatchID: 48080</u>							
Aroclor 1016	U		41	380	µg/Kg-dry	1	05/02/13 15:07
Aroclor 1221	U		41	380	µg/Kg-dry	1	05/02/13 15:07
Aroclor 1232	U		41	380	µg/Kg-dry	1	05/02/13 15:07
Aroclor 1242	U		41	380	µg/Kg-dry	1	05/02/13 15:07
Aroclor 1248	U		41	380	µg/Kg-dry	1	05/02/13 15:07
Aroclor 1254	U		13	380	µg/Kg-dry	1	05/02/13 15:07
Aroclor 1260	U		13	380	µg/Kg-dry	1	05/02/13 15:07
Surr: Decachlorobiphenyl	77.1			40-140	%REC	1	05/02/13 15:07
MERCURY BY CVAA							
			SW7471		Prep: SW7471 / 4/30/13		Analyst: LR
<u>BatchID: 48032</u>							
Mercury	0.010	J	0.00082	0.041	mg/Kg-dry	1	04/30/13 15:37
METALS BY ICP-MS							
			SW6020A		Prep: SW3050B / 5/1/13		Analyst: ML
<u>BatchID: 48082</u>							
Antimony	0.062	J	0.0084	2.1	mg/Kg-dry	5	05/02/13 20:43
Arsenic	1.0	J	0.29	2.1	mg/Kg-dry	5	05/02/13 20:43
Barium	36		0.059	2.1	mg/Kg-dry	5	05/02/13 20:43
Beryllium	0.15	J	0.017	0.84	mg/Kg-dry	5	05/02/13 20:43
Cadmium	0.11	J	0.0084	0.84	mg/Kg-dry	5	05/02/13 20:43
Chromium	3.9		0.35	2.1	mg/Kg-dry	5	05/02/13 20:43
Cobalt	2.1	J	0.0084	2.1	mg/Kg-dry	5	05/02/13 20:43
Copper	2.8		0.41	2.1	mg/Kg-dry	5	05/02/13 20:43
Iron	4,100		7.0	34	mg/Kg-dry	5	05/02/13 20:43
Lead	4.7		0.0084	2.1	mg/Kg-dry	5	05/02/13 20:43
Manganese	430		0.19	2.1	mg/Kg-dry	5	05/02/13 20:43
Molybdenum	0.35	J	0.093	2.1	mg/Kg-dry	5	05/02/13 20:43
Nickel	3.2		0.21	2.1	mg/Kg-dry	5	05/02/13 20:43
Selenium	0.70	J	0.27	2.1	mg/Kg-dry	5	05/02/13 20:43
Silver	U		0.0084	2.1	mg/Kg-dry	5	05/02/13 20:43
Thallium	U		0.051	2.1	mg/Kg-dry	5	05/02/13 20:43
Vanadium	6.6		0.13	2.1	mg/Kg-dry	5	05/02/13 20:43
Zinc	12		0.18	4.2	mg/Kg-dry	5	05/02/13 20:43
SEMI-VOLATILE ORGANIC COMPOUNDS							
			SW8270		Prep: SW3541 / 4/29/13		Analyst: RM
<u>BatchID: 48001</u>							
2-Methylnaphthalene	U		12	95	µg/Kg-dry	1	04/30/13 20:56
Acenaphthene	U		11	36	µg/Kg-dry	1	04/30/13 20:56
Acenaphthylene	U		11	36	µg/Kg-dry	1	04/30/13 20:56

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-083
Collection Date: 04/24/13 01:15 PM

Work Order: 13041049
Lab ID: 13041049-71
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Anthracene	U		12	36	µg/Kg-dry	1	04/30/13 20:56
Benzo(a)anthracene	U		14	36	µg/Kg-dry	1	04/30/13 20:56
Benzo(a)pyrene	U		18	36	µg/Kg-dry	1	04/30/13 20:56
Benzo(b)fluoranthene	U		19	36	µg/Kg-dry	1	04/30/13 20:56
Benzo(g,h,i)perylene	U		28	36	µg/Kg-dry	1	04/30/13 20:56
Benzo(k)fluoranthene	U		16	36	µg/Kg-dry	1	04/30/13 20:56
Chrysene	U		13	36	µg/Kg-dry	1	04/30/13 20:56
Dibenzo(a,h)anthracene	U		20	36	µg/Kg-dry	1	04/30/13 20:56
Fluoranthene	U		14	36	µg/Kg-dry	1	04/30/13 20:56
Fluorene	U		10	36	µg/Kg-dry	1	04/30/13 20:56
Indeno(1,2,3-cd)pyrene	U		22	36	µg/Kg-dry	1	04/30/13 20:56
Naphthalene	U		10	36	µg/Kg-dry	1	04/30/13 20:56
Phenanthrene	U		36	36	µg/Kg-dry	1	04/30/13 20:56
Pyrene	U		15	36	µg/Kg-dry	1	04/30/13 20:56
Surr: 2-Fluorobiphenyl	71.9			12-100	%REC	1	04/30/13 20:56
Surr: 4-Terphenyl-d14	102			25-137	%REC	1	04/30/13 20:56
Surr: Nitrobenzene-d5	97.0			37-107	%REC	1	04/30/13 20:56

VOLATILE ORGANIC COMPOUNDS

SW8260

Prep: SW5035 / 4/26/13

Analyst: BG

BatchID: 47968

1,1,1-Trichloroethane	U		14	38	µg/Kg-dry	1	04/30/13 02:09
1,1,2,2-Tetrachloroethane	U		17	38	µg/Kg-dry	1	04/30/13 02:09
1,1,2-Trichloroethane	U		13	38	µg/Kg-dry	1	04/30/13 02:09
1,1,2-Trichlorotrifluoroethane	U		14	38	µg/Kg-dry	1	04/30/13 02:09
1,1-Dichloroethane	U		14	38	µg/Kg-dry	1	04/30/13 02:09
1,1-Dichloroethene	U		16	38	µg/Kg-dry	1	04/30/13 02:09
1,2,4-Trichlorobenzene	U		20	38	µg/Kg-dry	1	04/30/13 02:09
1,2-Dibromo-3-chloropropane	U		18	38	µg/Kg-dry	1	04/30/13 02:09
1,2-Dibromoethane	U		15	38	µg/Kg-dry	1	04/30/13 02:09
1,2-Dichlorobenzene	U		15	38	µg/Kg-dry	1	04/30/13 02:09
1,2-Dichloroethane	U		18	38	µg/Kg-dry	1	04/30/13 02:09
1,2-Dichloropropane	U		13	38	µg/Kg-dry	1	04/30/13 02:09
1,3-Dichlorobenzene	U		15	38	µg/Kg-dry	1	04/30/13 02:09
1,4-Dichlorobenzene	U		14	38	µg/Kg-dry	1	04/30/13 02:09
2-Butanone	U		94	250	µg/Kg-dry	1	04/30/13 02:09
2-Hexanone	U		9.3	38	µg/Kg-dry	1	04/30/13 02:09
4-Methyl-2-pentanone	U		13	38	µg/Kg-dry	1	04/30/13 02:09
Acetone	U		80	130	µg/Kg-dry	1	05/02/13 08:01
Benzene	U		15	38	µg/Kg-dry	1	04/30/13 02:09
Bromodichloromethane	U		8.5	38	µg/Kg-dry	1	04/30/13 02:09

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: SO-17360-042413-DR-083
Collection Date: 04/24/13 01:15 PM

Work Order: 13041049
Lab ID: 13041049-71
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Bromoform	U		7.5	38	µg/Kg-dry	1	04/30/13 02:09
Bromomethane	U		14	95	µg/Kg-dry	1	04/30/13 02:09
Carbon disulfide	U		19	38	µg/Kg-dry	1	04/30/13 02:09
Carbon tetrachloride	U		11	38	µg/Kg-dry	1	04/30/13 02:09
Chlorobenzene	U		15	38	µg/Kg-dry	1	04/30/13 02:09
Chloroethane	U		80	130	µg/Kg-dry	1	04/30/13 02:09
Chloroform	U		16	38	µg/Kg-dry	1	04/30/13 02:09
Chloromethane	U		21	130	µg/Kg-dry	1	04/30/13 02:09
cis-1,2-Dichloroethene	U		15	38	µg/Kg-dry	1	04/30/13 02:09
cis-1,3-Dichloropropene	U		13	38	µg/Kg-dry	1	04/30/13 02:09
Cyclohexane	U		17	38	µg/Kg-dry	1	04/30/13 02:09
Dibromochloromethane	U		7.0	38	µg/Kg-dry	1	04/30/13 02:09
Dichlorodifluoromethane	U		17	38	µg/Kg-dry	1	04/30/13 02:09
Ethylbenzene	U		14	38	µg/Kg-dry	1	04/30/13 02:09
Isopropylbenzene	U		16	38	µg/Kg-dry	1	04/30/13 02:09
Methyl acetate	U		51	250	µg/Kg-dry	1	04/30/13 02:09
Methyl tert-butyl ether	U		16	38	µg/Kg-dry	1	04/30/13 02:09
Methylcyclohexane	U		18	38	µg/Kg-dry	1	04/30/13 02:09
Methylene chloride	U		15	38	µg/Kg-dry	1	04/30/13 02:09
Styrene	U		14	38	µg/Kg-dry	1	04/30/13 02:09
Tetrachloroethene	U		17	38	µg/Kg-dry	1	04/30/13 02:09
Toluene	U		14	38	µg/Kg-dry	1	04/30/13 02:09
trans-1,2-Dichloroethene	U		12	38	µg/Kg-dry	1	04/30/13 02:09
trans-1,3-Dichloropropene	U		13	38	µg/Kg-dry	1	04/30/13 02:09
Trichloroethene	U		18	38	µg/Kg-dry	1	04/30/13 02:09
Trichlorofluoromethane	U		10	38	µg/Kg-dry	1	04/30/13 02:09
Vinyl chloride	U		17	38	µg/Kg-dry	1	04/30/13 02:09
Xylenes, Total	U		45	110	µg/Kg-dry	1	04/30/13 02:09
Surr: 1,2-Dichloroethane-d4	104			70-130	%REC	1	04/30/13 02:09
Surr: 1,2-Dichloroethane-d4	89.8			70-130	%REC	1	05/02/13 08:01
Surr: 4-Bromofluorobenzene	99.6			70-130	%REC	1	04/30/13 02:09
Surr: 4-Bromofluorobenzene	93.0			70-130	%REC	1	05/02/13 08:01
Surr: Dibromofluoromethane	94.4			70-130	%REC	1	04/30/13 02:09
Surr: Dibromofluoromethane	94.6			70-130	%REC	1	05/02/13 08:01
Surr: Toluene-d8	104			70-130	%REC	1	04/30/13 02:09
Surr: Toluene-d8	100			70-130	%REC	1	05/02/13 08:01

MOISTURE

A2540 G

Analyst: DC

BatchID: R119877

Moisture	17	0.025	0.050	% of sample	1	04/29/13 15:00

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: Trip Blank
Collection Date: 04/22/13

Work Order: 13041049
Lab ID: 13041049-72
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260		Prep: SW5035 / 4/26/13		Analyst: BG
<u>BatchID: 47968</u>							
1,1,1-Trichloroethane	U		11	30	µg/Kg	1	04/30/13 02:32
1,1,2,2-Tetrachloroethane	U		13	30	µg/Kg	1	04/30/13 02:32
1,1,2-Trichloroethane	U		11	30	µg/Kg	1	04/30/13 02:32
1,1,2-Trichlorotrifluoroethane	U		11	30	µg/Kg	1	04/30/13 02:32
1,1-Dichloroethane	U		11	30	µg/Kg	1	04/30/13 02:32
1,1-Dichloroethene	U		13	30	µg/Kg	1	04/30/13 02:32
1,2,4-Trichlorobenzene	U		16	30	µg/Kg	1	04/30/13 02:32
1,2-Dibromo-3-chloropropane	U		15	30	µg/Kg	1	04/30/13 02:32
1,2-Dibromoethane	U		12	30	µg/Kg	1	04/30/13 02:32
1,2-Dichlorobenzene	U		12	30	µg/Kg	1	04/30/13 02:32
1,2-Dichloroethane	U		14	30	µg/Kg	1	04/30/13 02:32
1,2-Dichloropropane	U		9.9	30	µg/Kg	1	04/30/13 02:32
1,3-Dichlorobenzene	U		12	30	µg/Kg	1	04/30/13 02:32
1,4-Dichlorobenzene	U		11	30	µg/Kg	1	04/30/13 02:32
2-Butanone	U		74	200	µg/Kg	1	04/30/13 02:32
2-Hexanone	U		7.4	30	µg/Kg	1	04/30/13 02:32
4-Methyl-2-pentanone	U		10	30	µg/Kg	1	04/30/13 02:32
Acetone	U		64	100	µg/Kg	1	04/30/13 02:32
Benzene	U		12	30	µg/Kg	1	04/30/13 02:32
Bromodichloromethane	U		6.7	30	µg/Kg	1	04/30/13 02:32
Bromoform	U		5.9	30	µg/Kg	1	04/30/13 02:32
Bromomethane	U		11	75	µg/Kg	1	04/30/13 02:32
Carbon disulfide	U		15	30	µg/Kg	1	04/30/13 02:32
Carbon tetrachloride	U		8.5	30	µg/Kg	1	04/30/13 02:32
Chlorobenzene	U		12	30	µg/Kg	1	04/30/13 02:32
Chloroethane	U		64	100	µg/Kg	1	04/30/13 02:32
Chloroform	U		12	30	µg/Kg	1	04/30/13 02:32
Chloromethane	U		17	100	µg/Kg	1	04/30/13 02:32
cis-1,2-Dichloroethene	U		12	30	µg/Kg	1	04/30/13 02:32
cis-1,3-Dichloropropene	U		10	30	µg/Kg	1	04/30/13 02:32
Cyclohexane	U		13	30	µg/Kg	1	04/30/13 02:32
Dibromochloromethane	U		5.6	30	µg/Kg	1	04/30/13 02:32
Dichlorodifluoromethane	U		14	30	µg/Kg	1	04/30/13 02:32
Ethylbenzene	U		11	30	µg/Kg	1	04/30/13 02:32
Isopropylbenzene	U		13	30	µg/Kg	1	04/30/13 02:32
Methyl acetate	U		40	200	µg/Kg	1	04/30/13 02:32
Methyl tert-butyl ether	U		13	30	µg/Kg	1	04/30/13 02:32

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group USA, Corp

Date: 06-May-13

Client: Conestoga-Rovers & Associates
Project: Former GRMP (017360-T05Y13-01Y13)
Sample ID: Trip Blank
Collection Date: 04/22/13

Work Order: 13041049
Lab ID: 13041049-72
Matrix: SOIL

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methylcyclohexane	U		14	30	µg/Kg	1	04/30/13 02:32
Methylene chloride	U		12	30	µg/Kg	1	04/30/13 02:32
Styrene	U		11	30	µg/Kg	1	04/30/13 02:32
Tetrachloroethene	U		13	30	µg/Kg	1	04/30/13 02:32
Toluene	U		11	30	µg/Kg	1	04/30/13 02:32
trans-1,2-Dichloroethene	U		9.2	30	µg/Kg	1	04/30/13 02:32
trans-1,3-Dichloropropene	U		10	30	µg/Kg	1	04/30/13 02:32
Trichloroethene	U		14	30	µg/Kg	1	04/30/13 02:32
Trichlorofluoromethane	U		8.3	30	µg/Kg	1	04/30/13 02:32
Vinyl chloride	U		14	30	µg/Kg	1	04/30/13 02:32
Xylenes, Total	U		35	90	µg/Kg	1	04/30/13 02:32
Surr: 1,2-Dichloroethane-d4	104			70-130	%REC	1	04/30/13 02:32
Surr: 4-Bromofluorobenzene	100			70-130	%REC	1	04/30/13 02:32
Surr: Dibromofluoromethane	95.0			70-130	%REC	1	04/30/13 02:32
Surr: Toluene-d8	103			70-130	%REC	1	04/30/13 02:32

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47971** Instrument ID **GC4** Method: **SW8082**

MBLK		Sample ID: PBLKS1-47971-47971				Units: µg/Kg		Analysis Date: 04/29/13 10:24 AM		
Client ID:		Run ID: GC4_130429A				SeqNo: 2296521		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	U	40								
Aroclor 1221	U	40								
Aroclor 1232	U	40								
Aroclor 1242	U	40								
Aroclor 1248	U	40								
Aroclor 1254	U	40								
Aroclor 1260	U	40								
<i>Surr: Decachlorobiphenyl</i>	22.67	0	33.3	0	68.1	40-140	0			

LCS		Sample ID: PLCSS1-47971-47971				Units: µg/Kg		Analysis Date: 04/29/13 10:44 AM		
Client ID:		Run ID: GC4_130429A				SeqNo: 2296522		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	794.3	40	833	0	95.4	50-130	0			
Aroclor 1260	804.3	40	833	0	96.6	50-130	0			
<i>Surr: Decachlorobiphenyl</i>	24.67	0	33.3	0	74.1	40-140	0			

MS		Sample ID: 13041049-03A MS				Units: µg/Kg		Analysis Date: 04/29/13 03:29 PM		
Client ID: SO-17360-042313-DR-003		Run ID: GC4_130429A				SeqNo: 2296518		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	713.7	38	799.8	0	89.2	40-140	0			
Aroclor 1260	806.2	38	799.8	72.71	91.7	40-140	0			
<i>Surr: Decachlorobiphenyl</i>	24.96	0	31.97	0	78.1	40-140	0			

MSD		Sample ID: 13041049-03A MSD				Units: µg/Kg		Analysis Date: 04/29/13 03:49 PM		
Client ID: SO-17360-042313-DR-003		Run ID: GC4_130429A				SeqNo: 2296519		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	757.9	39	805.6	0	94.1	40-140	713.7	6.01	50	
Aroclor 1260	880.4	39	805.6	72.71	100	40-140	806.2	8.8	50	
<i>Surr: Decachlorobiphenyl</i>	25.15	0	32.21	0	78.1	40-140	24.96	0.726	50	

The following samples were analyzed in this batch:

13041049-03A	13041049-04A	13041049-05A
13041049-06A	13041049-07A	13041049-08A
13041049-09A	13041049-10A	13041049-11A
13041049-12A	13041049-13A	13041049-14A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48007** Instrument ID **GC4** Method: **SW8082**

MBLK	Sample ID: PBLKS1-48007-48007					Units: µg/Kg		Analysis Date: 04/30/13 09:50 AM		
Client ID:	Run ID: GC4_130430A				SeqNo: 2298718		Prep Date: 04/29/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Aroclor 1016	U	40								
Aroclor 1221	U	40								
Aroclor 1232	U	40								
Aroclor 1242	U	40								
Aroclor 1248	U	40								
Aroclor 1254	U	40								
Aroclor 1260	U	40								
<i>Surr: Decachlorobiphenyl</i>	28.67	0	33.3	0	86.1	40-140	0			

LCS	Sample ID: PLCSS1-48007-48007					Units: µg/Kg		Analysis Date: 04/30/13 10:10 AM		
Client ID:	Run ID: GC4_130430A				SeqNo: 2298719		Prep Date: 04/29/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Aroclor 1016	791	40	833	0	95	50-130	0			
Aroclor 1260	839	40	833	0	101	50-130	0			
<i>Surr: Decachlorobiphenyl</i>	24.33	0	33.3	0	73.1	40-140	0			

MS	Sample ID: 13041049-25A MS					Units: µg/Kg		Analysis Date: 04/30/13 02:48 PM		
Client ID: SO-17360-042313-DR-025	Run ID: GC4_130430A				SeqNo: 2298735		Prep Date: 04/29/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Aroclor 1016	743.9	40	823.6	0	90.3	40-140	0			
Aroclor 1260	1079	40	823.6	406.7	81.7	40-140	0			
<i>Surr: Decachlorobiphenyl</i>	25.05	0	32.92	0	76.1	40-140	0			

MSD	Sample ID: 13041049-25A MSD					Units: µg/Kg		Analysis Date: 04/30/13 03:08 PM		
Client ID: SO-17360-042313-DR-025	Run ID: GC4_130430A				SeqNo: 2298736		Prep Date: 04/29/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Aroclor 1016	706.8	38	798.1	0	88.6	40-140	743.9	5.11	50	
Aroclor 1260	1064	38	798.1	406.7	82.3	40-140	1079	1.47	50	
<i>Surr: Decachlorobiphenyl</i>	22.68	0	31.91	0	71.1	40-140	25.05	9.94	50	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48007** Instrument ID **GC4** Method: **SW8082**

The following samples were analyzed in this batch:

13041049-15A	13041049-16A	13041049-17A
13041049-18A	13041049-19A	13041049-20A
13041049-21A	13041049-22A	13041049-23A
13041049-24A	13041049-25A	13041049-26A
13041049-27A	13041049-28A	13041049-29A
13041049-30A	13041049-31A	13041049-32A
13041049-33A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48039** Instrument ID **GC4** Method: **SW8082**

MBLK		Sample ID: PBLKS1-48039-48039				Units: µg/Kg		Analysis Date: 05/01/13 12:17 PM		
Client ID:		Run ID: GC4_130501A				SeqNo: 2300868		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	U	40								
Aroclor 1221	U	40								
Aroclor 1232	U	40								
Aroclor 1242	U	40								
Aroclor 1248	U	40								
Aroclor 1254	U	40								
Aroclor 1260	U	40								
<i>Surr: Decachlorobiphenyl</i>	27	0	33.3	0	81.1	40-140	0			

LCS		Sample ID: PLCSS1-48039-48039				Units: µg/Kg		Analysis Date: 05/01/13 12:37 PM		
Client ID:		Run ID: GC4_130501A				SeqNo: 2300869		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	661	40	833	0	79.4	50-130	0			
Aroclor 1260	760	40	833	0	91.2	50-130	0			
<i>Surr: Decachlorobiphenyl</i>	24.67	0	33.3	0	74.1	40-140	0			

MS		Sample ID: 13041049-41A MS				Units: µg/Kg		Analysis Date: 05/01/13 03:55 PM		
Client ID: SO-17360-042313-DR-041		Run ID: GC4_130501A				SeqNo: 2300889		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	842.1	41	843.8	0	99.8	40-140	0			
Aroclor 1260	1753	41	843.8	906.1	100	40-140	0			
<i>Surr: Decachlorobiphenyl</i>	30.05	0	33.73	0	89.1	40-140	0			

MSD		Sample ID: 13041049-41A MSD				Units: µg/Kg		Analysis Date: 05/01/13 04:15 PM		
Client ID: SO-17360-042313-DR-041		Run ID: GC4_130501A				SeqNo: 2300892		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	758.4	38	783.2	0	96.8	40-140	842.1	10.5	50	
Aroclor 1260	1637	38	783.2	906.1	93.4	40-140	1753	6.86	50	
<i>Surr: Decachlorobiphenyl</i>	27.27	0	31.31	0	87.1	40-140	30.05	9.72	50	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 48039 Instrument ID GC4 Method: SW8082

The following samples were analyzed in this batch:

13041049-34A	13041049-35A	13041049-36A
13041049-37A	13041049-38A	13041049-39A
13041049-40A	13041049-41A	13041049-42A
13041049-45B	13041049-46B	13041049-47B
13041049-48B	13041049-49B	13041049-50B
13041049-51B	13041049-52B	13041049-53B
13041049-54B	13041049-55B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48080** Instrument ID **GC4** Method: **SW8082**

MBLK		Sample ID: PBLKS1-48080-48080				Units: µg/Kg		Analysis Date: 05/02/13 08:30 AM		
Client ID:		Run ID: GC4_130502A				SeqNo: 2302110		Prep Date: 05/01/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	U	40								
Aroclor 1221	U	40								
Aroclor 1232	U	40								
Aroclor 1242	U	40								
Aroclor 1248	U	40								
Aroclor 1254	U	40								
Aroclor 1260	U	40								
Surr: Decachlorobiphenyl	30	0	33.3	0	90.1	40-140	0			

LCS		Sample ID: PLCSS1-48080-48080				Units: µg/Kg		Analysis Date: 05/02/13 08:50 AM		
Client ID:		Run ID: GC4_130502A				SeqNo: 2302111		Prep Date: 05/01/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	816.3	40	833	0	98	50-130	0			
Aroclor 1260	922.3	40	833	0	111	50-130	0			
Surr: Decachlorobiphenyl	30.33	0	33.3	0	91.1	40-140	0			

MS		Sample ID: 13041049-58B MS				Units: µg/Kg		Analysis Date: 05/02/13 10:10 AM		
Client ID: SO-17360-042413-DR-070		Run ID: GC4_130502A				SeqNo: 2302115		Prep Date: 05/01/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	796.3	38	801.4	0	99.4	40-140	0			
Aroclor 1260	826.8	38	801.4	0	103	40-140	0			
Surr: Decachlorobiphenyl	23.73	0	32.04	0	74.1	40-140	0			

MSD		Sample ID: 13041049-58B MSD				Units: µg/Kg		Analysis Date: 05/02/13 10:30 AM		
Client ID: SO-17360-042413-DR-070		Run ID: GC4_130502A				SeqNo: 2302116		Prep Date: 05/01/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Aroclor 1016	814.7	39	815.7	0	99.9	40-140	796.3	2.29	50	
Aroclor 1260	850	39	815.7	0	104	40-140	826.8	2.77	50	
Surr: Decachlorobiphenyl	23.83	0	32.61	0	73.1	40-140	23.73	0.406	50	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48080** Instrument ID **GC4** Method: **SW8082**

The following samples were analyzed in this batch:

13041049-56B	13041049-57B	13041049-58B
13041049-59B	13041049-60B	13041049-61B
13041049-62B	13041049-63B	13041049-64B
13041049-65B	13041049-66B	13041049-67B
13041049-68B	13041049-69B	13041049-70B
13041049-71B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48031** Instrument ID **HG1** Method: **SW7471**

MBLK	Sample ID: MBLK-48031-48031					Units: mg/Kg		Analysis Date: 04/30/13 12:26 PM		
Client ID:	Run ID: HG1_130430A				SeqNo: 2298028		Prep Date: 04/30/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.00125	0.020								J

LCS	Sample ID: LCS-48031-48031					Units: mg/Kg		Analysis Date: 04/30/13 12:28 PM		
Client ID:	Run ID: HG1_130430A				SeqNo: 2298029		Prep Date: 04/30/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1758	0.020	0.1665	0	106	80-120	0			

MS	Sample ID: 13041049-58BMS					Units: mg/Kg		Analysis Date: 04/30/13 01:17 PM		
Client ID: SO-17360-042413-DR-070	Run ID: HG1_130430A				SeqNo: 2298052		Prep Date: 04/30/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1252	0.014	0.1189	0.009698	97.1	75-125	0			

MSD	Sample ID: 13041049-58BMSD					Units: mg/Kg		Analysis Date: 04/30/13 01:19 PM		
Client ID: SO-17360-042413-DR-070	Run ID: HG1_130430A				SeqNo: 2298053		Prep Date: 04/30/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Mercury	0.1284	0.015	0.1226	0.009698	96.8	75-125	0.1252	2.54	35	

The following samples were analyzed in this batch:

13041049-01B	13041049-02B	13041049-45B
13041049-46B	13041049-47B	13041049-48B
13041049-49B	13041049-50B	13041049-51B
13041049-52B	13041049-53B	13041049-54B
13041049-55B	13041049-56B	13041049-57B
13041049-58B	13041049-59B	13041049-60B
13041049-61B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48032** Instrument ID **HG1** Method: **SW7471**

MBLK		Sample ID: MBLK-48032-48032				Units: mg/Kg		Analysis Date: 04/30/13 01:29 PM		
Client ID:		Run ID: HG1_130430A				SeqNo: 2298058		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury U 0.020

LCS		Sample ID: LCS-48032-48032				Units: mg/Kg		Analysis Date: 04/30/13 01:31 PM		
Client ID:		Run ID: HG1_130430A				SeqNo: 2298059		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1694 0.020 0.1665 0 102 80-120 0

MS		Sample ID: 13041049-67BMS				Units: mg/Kg		Analysis Date: 04/30/13 03:21 PM		
Client ID: SO-17360-042413-DR-079		Run ID: HG1_130430A				SeqNo: 2298398		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1174 0.014 0.1152 0.008286 94.7 75-125 0

MSD		Sample ID: 13041049-67BMSD				Units: mg/Kg		Analysis Date: 04/30/13 03:23 PM		
Client ID: SO-17360-042413-DR-079		Run ID: HG1_130430A				SeqNo: 2298399		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Mercury 0.1169 0.013 0.1119 0.008286 97.1 75-125 0.1174 0.433 35

The following samples were analyzed in this batch:

13041049-62B	13041049-63B	13041049-64B
13041049-65B	13041049-66B	13041049-67B
13041049-68B	13041049-69B	13041049-70B
13041049-71B		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48042** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK	Sample ID: MBLK-48042-48042				Units: mg/Kg		Analysis Date: 05/01/13 01:17 PM			
Client ID:			Run ID: ICPMS1_130501A		SeqNo: 2299674		Prep Date: 04/30/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	U	0.25								
Arsenic	U	0.25								
Barium	U	0.25								
Beryllium	U	0.10								
Cadmium	0.001122	0.10								J
Chromium	U	0.25								
Cobalt	U	0.25								
Copper	U	0.25								
Lead	U	0.25								
Manganese	0.0605	0.25								J
Molybdenum	U	0.25								
Nickel	U	0.25								
Selenium	U	0.25								
Silver	U	0.25								
Thallium	U	0.25								
Vanadium	U	0.25								
Zinc	U	0.50								

MBLK	Sample ID: MBLK-48042-48042					Units:mg/Kg		Analysis Date: 05/01/13 02:25 PM		
Client ID:			Run ID: ICPMS1_130501A			SeqNo: 2300005		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	2.384	4.0								J

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48042** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK		Sample ID: MBLK-48042-48042				Units: mg/Kg		Analysis Date: 05/02/13 10:28 AM		
Client ID:		Run ID: ICPMS1_130502A				SeqNo: 2301731		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	U	0.25								
Arsenic	U	0.25								
Barium	U	0.25								
Beryllium	U	0.10								
Cadmium	U	0.10								
Chromium	U	0.25								
Cobalt	U	0.25								
Copper	U	0.25								
Iron	U	4.0								
Lead	U	0.25								
Manganese	U	0.25								
Molybdenum	U	0.25								
Nickel	U	0.25								
Selenium	0.0529	0.25								J
Silver	U	0.25								
Thallium	U	0.25								
Vanadium	U	0.25								
Zinc	U	0.50								

LCS		Sample ID: LCS-48042-48042				Units: mg/Kg		Analysis Date: 05/01/13 02:02 PM		
Client ID:		Run ID: ICPMS1_130501A				SeqNo: 2299730		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	4.677	0.25	5	0	93.5	80-120	0			
Arsenic	4.396	0.25	5	0	87.9	80-120	0			
Barium	4.854	0.25	5	0	97.1	80-120	0			
Cadmium	4.628	0.10	5	0	92.6	80-120	0			
Chromium	4.616	0.25	5	0	92.3	80-120	0			
Copper	4.518	0.25	5	0	90.4	80-120	0			
Iron	478.5	4.0	500	0	95.7	80-120	0			B
Lead	4.98	0.25	5	0	99.6	80-120	0			
Manganese	4.79	0.25	5	0	95.8	80-120	0			
Molybdenum	4.796	0.25	5	0	95.9	80-120	0			
Nickel	4.575	0.25	5	0	91.5	80-120	0			
Silver	4.582	0.25	5	0	91.6	80-120	0			
Thallium	4.668	0.25	5	0	93.4	80-120	0			
Vanadium	4.706	0.25	5	0	94.1	80-120	0			
Zinc	4.226	0.50	5	0	84.5	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48042** Instrument ID **ICPMS1** Method: **SW6020A**

LCS Sample ID: LCS-48042-48042				Units: mg/Kg			Analysis Date: 05/02/13 10:34 AM			
Client ID:		Run ID: ICPMS1_130502A			SeqNo: 2301734		Prep Date: 04/30/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	4.67	0.25	5	0	93.4	80-120	0			
Arsenic	4.434	0.25	5	0	88.7	80-120	0			
Barium	4.783	0.25	5	0	95.7	80-120	0			
Beryllium	4.556	0.10	5	0	91.1	80-120	0			
Cadmium	4.658	0.10	5	0	93.2	80-120	0			
Chromium	4.87	0.25	5	0	97.4	80-120	0			
Cobalt	4.76	0.25	5	0	95.2	80-120	0			
Copper	4.798	0.25	5	0	96	80-120	0			
Iron	491.6	4.0	500	0	98.3	80-120	0			
Lead	4.882	0.25	5	0	97.6	80-120	0			
Manganese	4.894	0.25	5	0	97.9	80-120	0			
Molybdenum	4.844	0.25	5	0	96.9	80-120	0			
Nickel	4.852	0.25	5	0	97	80-120	0			
Selenium	4.166	0.25	5	0	83.3	80-120	0			
Silver	4.804	0.25	5	0	96.1	80-120	0			
Thallium	4.639	0.25	5	0	92.8	80-120	0			
Vanadium	4.912	0.25	5	0	98.2	80-120	0			
Zinc	4.331	0.50	5	0	86.6	80-120	0			

MS Sample ID: 13041049-02BMS				Units: mg/Kg			Analysis Date: 05/01/13 02:14 PM			
Client ID: SO-17360-042213-DR-002		Run ID: ICPMS1_130501A			SeqNo: 2300003		Prep Date: 04/30/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	6.151	0.37	7.44	0.0567	81.9	75-125	0			
Arsenic	7.723	0.37	7.44	0.9126	91.5	75-125	0			
Barium	21.98	0.37	7.44	11.74	138	75-125	0			S
Cadmium	6.747	0.15	7.44	0.04022	90.1	75-125	0			
Chromium	11.86	0.37	7.44	3.817	108	75-125	0			
Copper	9.777	0.37	7.44	3.44	85.2	75-125	0			
Iron	4781	6.0	744	3869	123	75-125	0			O
Lead	10.88	0.37	7.44	3.62	97.6	75-125	0			
Manganese	41.09	0.37	7.44	28.62	168	75-125	0			S
Molybdenum	7.225	0.37	7.44	0.2272	94.1	75-125	0			
Nickel	10.52	0.37	7.44	3.338	96.5	75-125	0			
Selenium	5.871	0.37	7.44	0.1995	76.2	75-125	0			
Silver	6.453	0.37	7.44	0.006656	86.6	75-125	0			
Thallium	7.022	0.37	7.44	-0.008429	94.5	75-125	0			
Vanadium	15.09	0.37	7.44	6.263	119	75-125	0			
Zinc	19.36	0.74	7.44	9.178	137	75-125	0			S

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48042** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: 13041049-02BMS				Units: mg/Kg			Analysis Date: 05/02/13 10:46 AM			
Client ID: SO-17360-042213-DR-002				Run ID: ICPMS1_130502A		SeqNo: 2301738		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	6.139	0.37	7.44	0.05464	81.8	75-125	0			
Arsenic	7.954	0.37	7.44	0.8943	94.9	75-125	0			
Barium	21.75	0.37	7.44	11.56	137	75-125	0			S
Beryllium	5.644	0.15	7.44	0.09288	74.6	75-125	0			S
Cadmium	6.889	0.15	7.44	0.0355	92.1	75-125	0			
Chromium	12.57	0.37	7.44	4.001	115	75-125	0			
Cobalt	8.393	0.37	7.44	1.305	95.3	75-125	0			
Copper	10.41	0.37	7.44	3.59	91.7	75-125	0			
Iron	4983	6.0	744	3943	140	75-125	0			SO
Lead	10.71	0.37	7.44	3.49	97	75-125	0			
Manganese	42.84	0.37	7.44	28.1	198	75-125	0			S
Molybdenum	7.295	0.37	7.44	0.2278	95	75-125	0			
Nickel	11.07	0.37	7.44	3.446	102	75-125	0			
Selenium	6.141	0.37	7.44	0.1842	80.1	75-125	0			
Silver	6.799	0.37	7.44	0.007293	91.3	75-125	0			
Thallium	6.982	0.37	7.44	-0.02117	94.1	75-125	0			
Vanadium	15.8	0.37	7.44	6.51	125	75-125	0			
Zinc	19.59	0.74	7.44	9.369	137	75-125	0			S

MSD Sample ID: 13041049-02BMSD				Units: mg/Kg			Analysis Date: 05/01/13 02:20 PM			
Client ID: SO-17360-042213-DR-002				Run ID: ICPMS1_130501A		SeqNo: 2300004		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	6.175	0.36	7.267	0.0567	84.2	75-125	6.151	0.391	25	
Arsenic	7.304	0.36	7.267	0.9126	87.9	75-125	7.723	5.58	25	
Barium	22.01	0.36	7.267	11.74	141	75-125	21.98	0.154	25	S
Cadmium	6.688	0.15	7.267	0.04022	91.5	75-125	6.747	0.875	25	
Chromium	11.93	0.36	7.267	3.817	112	75-125	11.86	0.553	25	
Copper	11.18	0.36	7.267	3.44	107	75-125	9.777	13.4	25	
Iron	5171	5.8	726.7	3869	179	75-125	4781	7.83	25	SO
Lead	14.65	0.36	7.267	3.62	152	75-125	10.88	29.6	25	SR
Manganese	52.85	0.36	7.267	28.62	333	75-125	41.09	25	25	SR
Molybdenum	7.2	0.36	7.267	0.2272	95.9	75-125	7.225	0.355	25	
Nickel	10.13	0.36	7.267	3.338	93.5	75-125	10.52	3.78	25	
Selenium	5.799	0.36	7.267	0.1995	77	75-125	5.871	1.24	25	
Silver	6.377	0.36	7.267	0.006656	87.7	75-125	6.453	1.18	25	
Thallium	6.97	0.36	7.267	-0.008429	96	75-125	7.022	0.745	25	
Vanadium	17.89	0.36	7.267	6.263	160	75-125	15.09	17	25	S
Zinc	19.58	0.73	7.267	9.178	143	75-125	19.36	1.12	25	S

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48042** Instrument ID **ICPMS1** Method: **SW6020A**

MSD		Sample ID: 13041049-02BMSD				Units: mg/Kg		Analysis Date: 05/02/13 10:51 AM		
Client ID: SO-17360-042213-DR-002		Run ID: ICPMS1_130502A				SeqNo: 2301740		Prep Date: 04/30/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	6.048	0.36	7.267	0.05464	82.5	75-125	6.139	1.5	25	
Arsenic	7.34	0.36	7.267	0.8943	88.7	75-125	7.954	8.03	25	
Barium	21.88	0.36	7.267	11.56	142	75-125	21.75	0.613	25	S
Beryllium	5.591	0.15	7.267	0.09288	75.7	75-125	5.644	0.939	25	
Cadmium	6.718	0.15	7.267	0.0355	92	75-125	6.889	2.52	25	
Chromium	12.6	0.36	7.267	4.001	118	75-125	12.57	0.217	25	
Cobalt	8.263	0.36	7.267	1.305	95.7	75-125	8.393	1.56	25	
Copper	11.79	0.36	7.267	3.59	113	75-125	10.41	12.4	25	
Iron	5314	5.8	726.7	3943	189	75-125	4983	6.43	25	SO
Lead	14.45	0.36	7.267	3.49	151	75-125	10.71	29.8	25	SR
Manganese	55.39	0.36	7.267	28.1	376	75-125	42.84	25.6	25	SR
Molybdenum	7.267	0.36	7.267	0.2278	96.9	75-125	7.295	0.384	25	
Nickel	10.55	0.36	7.267	3.446	97.8	75-125	11.07	4.8	25	
Selenium	5.915	0.36	7.267	0.1842	78.9	75-125	6.141	3.74	25	
Silver	6.629	0.36	7.267	0.007293	91.1	75-125	6.799	2.54	25	
Thallium	6.937	0.36	7.267	-0.02117	95.7	75-125	6.982	0.652	25	
Vanadium	17.98	0.36	7.267	6.51	158	75-125	15.8	12.9	25	S
Zinc	19.86	0.73	7.267	9.369	144	75-125	19.59	1.37	25	S

The following samples were analyzed in this batch:

13041049-01B	13041049-02B	13041049-45B
13041049-46B	13041049-47B	13041049-48B
13041049-49B	13041049-50B	13041049-51B
13041049-52B	13041049-53B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48082** Instrument ID **ICPMS1** Method: **SW6020A**

MBLK	Sample ID: MBLK-48082-48082				Units: mg/Kg		Analysis Date: 05/02/13 04:12 AM			
Client ID:			Run ID: ICPMS1_130501A		SeqNo: 2300457		Prep Date: 05/01/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	U	0.25								
Arsenic	U	0.25								
Barium	U	0.25								
Beryllium	U	0.10								
Cadmium	U	0.10								
Chromium	0.06605	0.25								J
Cobalt	U	0.25								
Copper	0.1862	0.25								J
Lead	0.02234	0.25								J
Manganese	0.1602	0.25								J
Molybdenum	0.1296	0.25								J
Nickel	U	0.25								
Selenium	U	0.25								
Silver	U	0.25								
Thallium	U	0.25								
Vanadium	U	0.25								
Zinc	U	0.50								

MBLK		Sample ID: MBLK-48082-48082					Units:mg/Kg		Analysis Date: 05/02/13 05:54 PM		
Client ID:		Run ID: ICPMS1_130502A			SeqNo: 2302453		Prep Date: 05/01/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Iron	U	4.0									

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48082** Instrument ID **ICPMS1** Method: **SW6020A**

LCS		Sample ID: LCS-48082-48082				Units: mg/Kg		Analysis Date: 05/02/13 04:19 AM		
Client ID:		Run ID: ICPMS1_130501A				SeqNo: 2300458		Prep Date: 05/01/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	5.005	0.25	5	0	100	80-120	0			
Arsenic	4.757	0.25	5	0	95.1	80-120	0			
Barium	4.87	0.25	5	0	97.4	80-120	0			
Cadmium	4.998	0.10	5	0	100	80-120	0			
Chromium	4.728	0.25	5	0	94.6	80-120	0			
Cobalt	4.644	0.25	5	0	92.9	80-120	0			
Copper	4.732	0.25	5	0	94.6	80-120	0			
Lead	4.982	0.25	5	0	99.6	80-120	0			
Manganese	4.856	0.25	5	0	97.1	80-120	0			
Molybdenum	4.974	0.25	5	0	99.5	80-120	0			
Nickel	4.681	0.25	5	0	93.6	80-120	0			
Selenium	4.602	0.25	5	0	92	80-120	0			
Silver	4.99	0.25	5	0	99.8	80-120	0			
Thallium	4.684	0.25	5	0	93.7	80-120	0			
Vanadium	4.7	0.25	5	0	94	80-120	0			
Zinc	4.748	0.50	5	0	95	80-120	0			

LCS		Sample ID: LCS-48082-48082				Units: mg/Kg		Analysis Date: 05/02/13 06:00 PM		
Client ID:		Run ID: ICPMS1_130502A				SeqNo: 2302454		Prep Date: 05/01/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Beryllium	4.668	0.10	5	0	93.4	80-120	0			
Iron	490.2	4.0	500	0	98	80-120	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48082** Instrument ID **ICPMS1** Method: **SW6020A**

MS Sample ID: 13041049-58BMS				Units: mg/Kg			Analysis Date: 05/02/13 09:14 PM			
Client ID: SO-17360-042413-DR-070		Run ID: ICPMS1_130502A		SeqNo: 2302494		Prep Date: 05/01/13		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	7.268	1.8	7.375	0.6372	89.9	75-125	0			
Arsenic	12.77	1.8	7.375	4.685	110	75-125	0			
Barium	65.15	1.8	7.375	44.19	284	75-125	0			SO
Beryllium	7.268	0.74	7.375	0.3116	94.3	75-125	0			
Cadmium	7.891	0.74	7.375	0.1766	105	75-125	0			
Chromium	16.15	1.8	7.375	9.084	95.9	75-125	0			
Cobalt	10.52	1.8	7.375	2.686	106	75-125	0			
Copper	23.31	1.8	7.375	15.14	111	75-125	0			
Iron	5608	29	737.5	4742	118	75-125	0			O
Lead	30.35	1.8	7.375	21.31	123	75-125	0			
Manganese	93.66	1.8	7.375	100.4	-91.2	75-125	0			SO
Molybdenum	9.41	1.8	7.375	1.698	105	75-125	0			
Nickel	15.84	1.8	7.375	6.998	120	75-125	0			
Selenium	7.489	1.8	7.375	0.3363	97	75-125	0			
Silver	7.257	1.8	7.375	0.02187	98.1	75-125	0			
Thallium	7.338	1.8	7.375	0.1194	97.9	75-125	0			
Vanadium	15.74	1.8	7.375	8.541	97.6	75-125	0			
Zinc	40.63	3.7	7.375	21.9	254	75-125	0			S

MSD Sample ID: 13041049-58BMSD				Units: mg/Kg			Analysis Date: 05/02/13 09:20 PM			
Client ID: SO-17360-042413-DR-070		Run ID: ICPMS1_130502A		SeqNo: 2302496		Prep Date: 05/01/13		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Antimony	9.013	2.0	7.837	0.6372	107	75-125	7.268	21.4	25	
Arsenic	15.91	2.0	7.837	4.685	143	75-125	12.77	21.9	25	S
Barium	102.2	2.0	7.837	44.19	740	75-125	65.15	44.3	25	SRO
Beryllium	8.515	0.78	7.837	0.3116	105	75-125	7.268	15.8	25	
Cadmium	9.275	0.78	7.837	0.1766	116	75-125	7.891	16.1	25	
Chromium	21.57	2.0	7.837	9.084	159	75-125	16.15	28.7	25	SR
Cobalt	12.99	2.0	7.837	2.686	131	75-125	10.52	21	25	S
Copper	42.28	2.0	7.837	15.14	346	75-125	23.31	57.9	25	SR
Iron	12460	31	783.7	4742	985	75-125	5608	75.9	25	SRO
Lead	64.15	2.0	7.837	21.31	547	75-125	30.35	71.5	25	SR
Manganese	163.4	2.0	7.837	100.4	804	75-125	93.66	54.2	25	SRO
Molybdenum	11.43	2.0	7.837	1.698	124	75-125	9.41	19.4	25	
Nickel	23.23	2.0	7.837	6.998	207	75-125	15.84	37.8	25	SR
Selenium	9.048	2.0	7.837	0.3363	111	75-125	7.489	18.9	25	
Silver	8.664	2.0	7.837	0.02187	110	75-125	7.257	17.7	25	
Thallium	8.742	2.0	7.837	0.1194	110	75-125	7.338	17.5	25	
Vanadium	21.47	2.0	7.837	8.541	165	75-125	15.74	30.8	25	SR
Zinc	60.03	3.9	7.837	21.9	487	75-125	40.63	38.5	25	SR

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48082** Instrument ID **ICPMS1** Method: **SW6020A**

The following samples were analyzed in this batch:

13041049-54B	13041049-55B	13041049-56B
13041049-57B	13041049-58B	13041049-59B
13041049-60B	13041049-61B	13041049-62B
13041049-63B	13041049-64B	13041049-65B
13041049-66B	13041049-67B	13041049-68B
13041049-69B	13041049-70B	13041049-71B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47962** Instrument ID **SVMS5** Method: **SW8270**

MBLK		Sample ID: SBLKS1-47962-47962				Units: µg/Kg		Analysis Date: 04/29/13 11:08 AM		
Client ID:		Run ID: SVMS5_130429A				SeqNo: 2297445		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	U	80								
Acenaphthene	U	30								
Acenaphthylene	U	30								
Anthracene	U	30								
Benzo(a)anthracene	U	30								
Benzo(a)pyrene	U	30								
Benzo(b)fluoranthene	U	30								
Benzo(g,h,i)perylene	U	30								
Benzo(k)fluoranthene	U	30								
Chrysene	U	30								
Dibenzo(a,h)anthracene	U	30								
Fluoranthene	U	30								
Fluorene	U	30								
Indeno(1,2,3-cd)pyrene	U	30								
Naphthalene	U	30								
Phenanthrene	U	30								
Pyrene	U	30								
Surr: 2-Fluorobiphenyl	1429	0	1667	0	85.7	12-100	0			
Surr: 4-Terphenyl-d14	2079	0	1667	0	125	25-137	0			
Surr: Nitrobenzene-d5	1490	0	1667	0	89.4	37-107	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47962** Instrument ID **SVMS5** Method: **SW8270**

LCS		Sample ID: SLCSS1-47962-47962				Units: µg/Kg		Analysis Date: 04/29/13 11:30 AM		
Client ID:		Run ID: SVMS5_130429A				SeqNo: 2297446		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	544	80	666.7	0	81.6	45-105	0			
Acenaphthene	535	30	666.7	0	80.2	45-110	0			
Acenaphthylene	519	30	666.7	0	77.8	45-105	0			
Anthracene	513	30	666.7	0	76.9	55-105	0			
Benzo(a)anthracene	516	30	666.7	0	77.4	50-110	0			
Benzo(a)pyrene	477.7	30	666.7	0	71.6	50-110	0			
Benzo(b)fluoranthene	546.3	30	666.7	0	81.9	45-115	0			
Benzo(g,h,i)perylene	390	30	666.7	0	58.5	40-125	0			
Benzo(k)fluoranthene	692.7	30	666.7	0	104	45-115	0			
Chrysene	582.3	30	666.7	0	87.3	55-110	0			
Dibenzo(a,h)anthracene	418.7	30	666.7	0	62.8	40-125	0			
Fluoranthene	480	30	666.7	0	72	55-115	0			
Fluorene	565.3	30	666.7	0	84.8	50-110	0			
Indeno(1,2,3-cd)pyrene	437	30	666.7	0	65.5	40-120	0			
Naphthalene	539.3	30	666.7	0	80.9	40-105	0			
Phenanthrene	527	30	666.7	0	79	50-110	0			
Pyrene	594.3	30	666.7	0	89.1	45-125	0			
Surr: 2-Fluorobiphenyl	1350	0	1667	0	81	12-100	0			
Surr: 4-Terphenyl-d14	1856	0	1667	0	111	25-137	0			
Surr: Nitrobenzene-d5	1394	0	1667	0	83.7	37-107	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47962** Instrument ID **SVMS5** Method: **SW8270**

MS Sample ID: 13041009-05A MS				Units: µg/Kg			Analysis Date: 04/29/13 11:52 AM			
Client ID:		Run ID: SVMS5_130429A		SeqNo: 2297447		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	1554	240	1973	0	78.7	45-105	0			
Acenaphthene	1577	89	1973	0	79.9	45-110	0			
Acenaphthylene	1502	89	1973	0	76.1	45-105	0			
Anthracene	1592	89	1973	0	80.6	55-105	0			
Benzo(a)anthracene	1660	89	1973	0	84.1	50-110	0			
Benzo(a)pyrene	1775	89	1973	0	89.9	50-110	0			
Benzo(b)fluoranthene	1833	89	1973	0	92.9	45-115	0			
Benzo(g,h,i)perylene	1815	89	1973	0	91.9	40-125	0			
Benzo(k)fluoranthene	1878	89	1973	0	95.1	45-115	0			
Chrysene	1810	89	1973	0	91.7	55-110	0			
Dibenzo(a,h)anthracene	1609	89	1973	0	81.5	40-125	0			
Fluoranthene	1660	89	1973	0	84.1	55-115	0			
Fluorene	1712	89	1973	0	86.7	50-110	0			
Indeno(1,2,3-cd)pyrene	1580	89	1973	0	80	40-120	0			
Naphthalene	1459	89	1973	0	73.9	40-105	0			
Phenanthrene	1643	89	1973	0	83.2	50-110	0			
Pyrene	2052	89	1973	0	104	45-125	0			
Surr: 2-Fluorobiphenyl	3837	0	4933	0	77.8	12-100	0			
Surr: 4-Terphenyl-d14	5688	0	4933	0	115	25-137	0			
Surr: Nitrobenzene-d5	4042	0	4933	0	81.9	37-107	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47962** Instrument ID **SVMS5** Method: **SW8270**

MSD				Sample ID: 13041009-05A MSD			Units: µg/Kg		Analysis Date: 04/29/13 12:14 PM	
Client ID:				Run ID: SVMS5_130429A			SeqNo: 2297448		Prep Date: 04/26/13	
									DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	1534	240	1995	0	76.9	45-105	1554	1.29	30	
Acenaphthene	1580	90	1995	0	79.2	45-110	1577	0.211	30	
Acenaphthylene	1565	90	1995	0	78.4	45-105	1502	4.13	30	
Anthracene	1560	90	1995	0	78.2	55-105	1592	1.99	30	
Benzo(a)anthracene	1711	90	1995	0	85.7	50-110	1660	3.03	30	
Benzo(a)pyrene	1857	90	1995	0	93.1	50-110	1775	4.53	30	
Benzo(b)fluoranthene	1882	90	1995	0	94.3	45-115	1833	2.64	30	
Benzo(g,h,i)perylene	1652	90	1995	0	82.8	40-125	1815	9.38	30	
Benzo(k)fluoranthene	1862	90	1995	0	93.3	45-115	1878	0.819	30	
Chrysene	1812	90	1995	0	90.8	55-110	1810	0.16	30	
Dibenzo(a,h)anthracene	1568	90	1995	0	78.6	40-125	1609	2.59	30	
Fluoranthene	1599	90	1995	0	80.1	55-115	1660	3.72	30	
Fluorene	1771	90	1995	0	88.7	50-110	1712	3.37	30	
Indeno(1,2,3-cd)pyrene	1518	90	1995	0	76.1	40-120	1580	3.97	30	
Naphthalene	1390	90	1995	0	69.6	40-105	1459	4.9	30	
Phenanthrene	1594	90	1995	0	79.9	50-110	1643	3.02	30	
Pyrene	1997	90	1995	0	100	45-125	2052	2.73	30	
Surr: 2-Fluorobiphenyl	3912	0	4988	0	78.4	12-100	3837	1.94	40	
Surr: 4-Terphenyl-d14	5605	0	4988	0	112	25-137	5688	1.47	40	
Surr: Nitrobenzene-d5	3679	0	4988	0	73.8	37-107	4042	9.42	40	

The following samples were analyzed in this batch:

13041049-01B	13041049-62B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47970** Instrument ID **SVMS4** Method: **SW8270**

MBLK		Sample ID: SBLKS1-47970-47970				Units: µg/Kg		Analysis Date: 04/29/13 01:06 PM		
Client ID:		Run ID: SVMS4_130429A				SeqNo: 2297669		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	U	80								
Acenaphthene	U	30								
Acenaphthylene	U	30								
Anthracene	U	30								
Benzo(a)anthracene	U	30								
Benzo(a)pyrene	U	30								
Benzo(b)fluoranthene	U	30								
Benzo(g,h,i)perylene	U	30								
Benzo(k)fluoranthene	U	30								
Chrysene	U	30								
Dibenzo(a,h)anthracene	U	30								
Fluoranthene	U	30								
Fluorene	U	30								
Indeno(1,2,3-cd)pyrene	U	30								
Naphthalene	U	30								
Phenanthrene	U	30								
Pyrene	U	30								
Surr: 2-Fluorobiphenyl	1155	0	1667	0	69.3	12-100	0			
Surr: 4-Terphenyl-d14	1874	0	1667	0	112	25-137	0			
Surr: Nitrobenzene-d5	1139	0	1667	0	68.3	37-107	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47970** Instrument ID **SVMS4** Method: **SW8270**

LCS		Sample ID: SLCSS1-47970-47970				Units: µg/Kg		Analysis Date: 04/29/13 10:27 AM		
Client ID:		Run ID: SVMS4_130429A				SeqNo: 2297664		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	492.7	80	666.7	0	73.9	45-105	0			
Acenaphthene	577	30	666.7	0	86.5	45-110	0			
Acenaphthylene	578.7	30	666.7	0	86.8	45-105	0			
Anthracene	575.3	30	666.7	0	86.3	55-105	0			
Benzo(a)anthracene	572.3	30	666.7	0	85.8	50-110	0			
Benzo(a)pyrene	612	30	666.7	0	91.8	50-110	0			
Benzo(b)fluoranthene	533.3	30	666.7	0	80	45-115	0			
Benzo(g,h,i)perylene	557.3	30	666.7	0	83.6	40-125	0			
Benzo(k)fluoranthene	731.3	30	666.7	0	110	45-115	0			
Chrysene	665	30	666.7	0	99.7	55-110	0			
Dibenzo(a,h)anthracene	553.7	30	666.7	0	83	40-125	0			
Fluoranthene	562.7	30	666.7	0	84.4	55-115	0			
Fluorene	547	30	666.7	0	82	50-110	0			
Indeno(1,2,3-cd)pyrene	558.3	30	666.7	0	83.7	40-120	0			
Naphthalene	528	30	666.7	0	79.2	40-105	0			
Phenanthrene	562	30	666.7	0	84.3	50-110	0			
Pyrene	662	30	666.7	0	99.3	45-125	0			
Surr: 2-Fluorobiphenyl	1256	0	1667	0	75.4	12-100	0			
Surr: 4-Terphenyl-d14	1796	0	1667	0	108	25-137	0			
Surr: Nitrobenzene-d5	1277	0	1667	0	76.6	37-107	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47970** Instrument ID **SVMS4** Method: **SW8270**

MS Sample ID: 13041049-58B MS				Units: µg/Kg		Analysis Date: 04/29/13 12:02 PM				
Client ID: SO-17360-042413-DR-070		Run ID: SVMS4_130429A		SeqNo: 2297667		Prep Date: 04/26/13		DF: 10		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	880.9	1,600	1296	0	68	45-105	0			J
Acenaphthene	1030	580	1296	0	79.5	45-110	0			
Acenaphthylene	971.6	580	1296	0	75	45-105	0			
Anthracene	1121	580	1296	0	86.5	55-105	0			
Benzo(a)anthracene	1380	580	1296	359.7	78.7	50-110	0			
Benzo(a)pyrene	1522	580	1296	296.4	94.6	50-110	0			
Benzo(b)fluoranthene	1619	580	1296	509.5	85.7	45-115	0			
Benzo(g,h,i)perylene	1075	580	1296	283.1	61.1	40-125	0			
Benzo(k)fluoranthene	1457	580	1296	283.1	90.6	45-115	0			
Chrysene	1645	580	1296	449.6	92.3	55-110	0			
Dibenzo(a,h)anthracene	1017	580	1296	0	78.5	40-125	0			
Fluoranthene	1600	580	1296	666	72.1	55-115	0			
Fluorene	997.5	580	1296	0	77	50-110	0			
Indeno(1,2,3-cd)pyrene	1036	580	1296	193.2	65.1	40-120	0			
Naphthalene	900.4	580	1296	0	69.5	40-105	0			
Phenanthrene	1393	580	1296	396.3	76.9	50-110	0			
Pyrene	1820	580	1296	616.1	92.9	45-125	0			
Surr: 2-Fluorobiphenyl	1956	0	3239	0	60.4	12-100	0			
Surr: 4-Terphenyl-d14	2921	0	3239	0	90.2	25-137	0			
Surr: Nitrobenzene-d5	1878	0	3239	0	58	37-107	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47970** Instrument ID **SVMS4** Method: **SW8270**

MSD				Sample ID: 13041049-58B MSD				Units: µg/Kg		Analysis Date: 04/29/13 12:34 PM	
Client ID: SO-17360-042413-DR-070			Run ID: SVMS4_130429A			SeqNo: 2297668		Prep Date: 04/26/13		DF: 10	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
2-Methylnaphthalene	883.7	1,500	1290	0	68.5	45-105	880.9	0	30	J	
Acenaphthene	1006	580	1290	0	78	45-110	1030	2.32	30		
Acenaphthylene	954.7	580	1290	0	74	45-105	971.6	1.76	30		
Anthracene	1135	580	1290	0	88	55-105	1121	1.3	30		
Benzo(a)anthracene	1400	580	1290	359.7	80.6	50-110	1380	1.44	30		
Benzo(a)pyrene	1516	580	1290	296.4	94.5	50-110	1522	0.42	30		
Benzo(b)fluoranthene	1632	580	1290	509.5	87	45-115	1619	0.773	30		
Benzo(g,h,i)perylene	1064	580	1290	283.1	60.6	40-125	1075	1.02	30		
Benzo(k)fluoranthene	1451	580	1290	283.1	90.6	45-115	1457	0.42	30		
Chrysene	1645	580	1290	449.6	92.6	55-110	1645	0.0272	30		
Dibenzo(a,h)anthracene	838.5	580	1290	0	65	40-125	1017	19.2	30		
Fluoranthene	1793	580	1290	666	87.4	55-115	1600	11.4	30		
Fluorene	999.8	580	1290	0	77.5	50-110	997.5	0.227	30		
Indeno(1,2,3-cd)pyrene	1058	580	1290	193.2	67	40-120	1036	2.05	30		
Naphthalene	916	580	1290	0	71	40-105	900.4	1.72	30		
Phenanthrene	1548	580	1290	396.3	89.3	50-110	1393	10.6	30		
Pyrene	1922	580	1290	616.1	101	45-125	1820	5.45	30		
Surr: 2-Fluorobiphenyl	1980	0	3225	0	61.4	12-100	1956	1.22	40		
Surr: 4-Terphenyl-d14	2948	0	3225	0	91.4	25-137	2921	0.901	40		
Surr: Nitrobenzene-d5	1903	0	3225	0	59	37-107	1878	1.29	40		

The following samples were analyzed in this batch:

13041049-02B	13041049-43A	13041049-44A
13041049-45B	13041049-46B	13041049-47B
13041049-48B	13041049-49B	13041049-50B
13041049-51B	13041049-52B	13041049-53B
13041049-54B	13041049-55B	13041049-56B
13041049-57B	13041049-58B	13041049-59B
13041049-60B	13041049-61B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48001** Instrument ID **SVMS6** Method: **SW8270**

MBLK		Sample ID: SBLKS1-48001-48001				Units: µg/Kg		Analysis Date: 04/30/13 05:20 PM		
Client ID:		Run ID: SVMS6_130430A				SeqNo: 2299733		Prep Date: 04/29/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	U	80								
Acenaphthene	U	30								
Acenaphthylene	U	30								
Anthracene	U	30								
Benzo(a)anthracene	U	30								
Benzo(a)pyrene	U	30								
Benzo(b)fluoranthene	U	30								
Benzo(g,h,i)perylene	U	30								
Benzo(k)fluoranthene	U	30								
Chrysene	U	30								
Dibenzo(a,h)anthracene	U	30								
Fluoranthene	U	30								
Fluorene	U	30								
Indeno(1,2,3-cd)pyrene	U	30								
Naphthalene	U	30								
Phenanthrene	U	30								
Pyrene	U	30								
<i>Surr: 2-Fluorobiphenyl</i>	<i>1537</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>92.2</i>	<i>12-100</i>	<i>0</i>			
<i>Surr: 4-Terphenyl-d14</i>	<i>2181</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>131</i>	<i>25-137</i>	<i>0</i>			
<i>Surr: Nitrobenzene-d5</i>	<i>1432</i>	<i>0</i>	<i>1667</i>	<i>0</i>	<i>85.9</i>	<i>37-107</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48001** Instrument ID **SVMS6** Method: **SW8270**

LCS		Sample ID: SLCSS1-48001-48001				Units: µg/Kg		Analysis Date: 04/30/13 05:40 PM		
Client ID:		Run ID: SVMS6_130430A				SeqNo: 2299734		Prep Date: 04/29/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	558.3	80	666.7	0	83.7	45-105	0			
Acenaphthene	539.7	30	666.7	0	80.9	45-110	0			
Acenaphthylene	571	30	666.7	0	85.6	45-105	0			
Anthracene	566.3	30	666.7	0	84.9	55-105	0			
Benzo(a)anthracene	559.7	30	666.7	0	83.9	50-110	0			
Benzo(a)pyrene	561.7	30	666.7	0	84.2	50-110	0			
Benzo(b)fluoranthene	610.3	30	666.7	0	91.5	45-115	0			
Benzo(g,h,i)perylene	496.7	30	666.7	0	74.5	40-125	0			
Benzo(k)fluoranthene	620.7	30	666.7	0	93.1	45-115	0			
Chrysene	625.3	30	666.7	0	93.8	55-110	0			
Dibenzo(a,h)anthracene	510	30	666.7	0	76.5	40-125	0			
Fluoranthene	495	30	666.7	0	74.2	55-115	0			
Fluorene	531	30	666.7	0	79.6	50-110	0			
Indeno(1,2,3-cd)pyrene	478.3	30	666.7	0	71.7	40-120	0			
Naphthalene	528.3	30	666.7	0	79.2	40-105	0			
Phenanthrene	523.7	30	666.7	0	78.5	50-110	0			
Pyrene	731	30	666.7	0	110	45-125	0			
Surr: 2-Fluorobiphenyl	1421	0	1667	0	85.2	12-100	0			
Surr: 4-Terphenyl-d14	2004	0	1667	0	120	25-137	0			
Surr: Nitrobenzene-d5	1446	0	1667	0	86.8	37-107	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48001** Instrument ID **SVMS6** Method: **SW8270**

MS Sample ID: 13041088-14C MS				Units: µg/Kg			Analysis Date: 04/30/13 07:10 PM			
Client ID:		Run ID: SVMS6_130430A		SeqNo: 2299735		Prep Date: 04/29/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	982.4	150	1257	0	78.1	45-105	0			
Acenaphthene	1000	57	1257	0	79.5	45-110	0			
Acenaphthylene	1036	57	1257	0	82.4	45-105	0			
Anthracene	1090	57	1257	0	86.7	55-105	0			
Benzo(a)anthracene	1131	57	1257	0	90	50-110	0			
Benzo(a)pyrene	1130	57	1257	0	89.9	50-110	0			
Benzo(b)fluoranthene	1208	57	1257	0	96.1	45-115	0			
Benzo(g,h,i)perylene	1002	57	1257	0	79.7	40-125	0			
Benzo(k)fluoranthene	1172	57	1257	0	93.2	45-115	0			
Chrysene	1209	57	1257	0	96.1	55-110	0			
Dibenzo(a,h)anthracene	992.5	57	1257	0	78.9	40-125	0			
Fluoranthene	983.7	57	1257	0	78.2	55-115	0			
Fluorene	986.8	57	1257	0	78.5	50-110	0			
Indeno(1,2,3-cd)pyrene	999.4	57	1257	0	79.5	40-120	0			
Naphthalene	981.1	57	1257	0	78	40-105	0			
Phenanthrene	1029	57	1257	0	81.8	50-110	0			
Pyrene	1439	57	1257	0	114	45-125	0			
Surr: 2-Fluorobiphenyl	2538	0	3143	0	80.8	12-100	0			
Surr: 4-Terphenyl-d14	3825	0	3143	0	122	25-137	0			
Surr: Nitrobenzene-d5	2590	0	3143	0	82.4	37-107	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **48001** Instrument ID **SVMS6** Method: **SW8270**

MSD				Sample ID: 13041088-14C MSD			Units: µg/Kg		Analysis Date: 04/30/13 07:30 PM	
Client ID:				Run ID: SVMS6_130430A			SeqNo: 2299736		Prep Date: 04/29/13	
							DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Methylnaphthalene	959.5	150	1259	0	76.2	45-105	982.4	2.36	30	
Acenaphthene	1008	57	1259	0	80	45-110	1000	0.796	30	
Acenaphthylene	1039	57	1259	0	82.5	45-105	1036	0.291	30	
Anthracene	1099	57	1259	0	87.2	55-105	1090	0.802	30	
Benzo(a)anthracene	1113	57	1259	0	88.4	50-110	1131	1.62	30	
Benzo(a)pyrene	1128	57	1259	0	89.5	50-110	1130	0.22	30	
Benzo(b)fluoranthene	1172	57	1259	0	93	45-115	1208	3.06	30	
Benzo(g,h,i)perylene	1040	57	1259	0	82.6	40-125	1002	3.74	30	
Benzo(k)fluoranthene	1164	57	1259	0	92.4	45-115	1172	0.692	30	
Chrysene	1218	57	1259	0	96.7	55-110	1209	0.74	30	
Dibenzo(a,h)anthracene	1043	57	1259	0	82.8	40-125	992.5	4.99	30	
Fluoranthene	1028	57	1259	0	81.6	55-115	983.7	4.42	30	
Fluorene	965.2	57	1259	0	76.6	50-110	986.8	2.21	30	
Indeno(1,2,3-cd)pyrene	1030	57	1259	0	81.8	40-120	999.4	3.02	30	
Naphthalene	963.9	57	1259	0	76.5	40-105	981.1	1.77	30	
Phenanthrene	1018	57	1259	0	80.8	50-110	1029	1.06	30	
Pyrene	1389	57	1259	0	110	45-125	1439	3.52	30	
Surr: 2-Fluorobiphenyl	2586	0	3148	0	82.1	12-100	2538	1.86	40	
Surr: 4-Terphenyl-d14	3912	0	3148	0	124	25-137	3825	2.25	40	
Surr: Nitrobenzene-d5	2568	0	3148	0	81.6	37-107	2590	0.855	40	

The following samples were analyzed in this batch:

13041049-63B	13041049-64B	13041049-65B
13041049-66B	13041049-67B	13041049-68B
13041049-69B	13041049-70B	13041049-71B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47967** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: MBLK-47967-47967				Units: µg/Kg		Analysis Date: 04/30/13 12:41 PM		
Client ID:		Run ID: VMS8_130429B				SeqNo: 2297574		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	34.5	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	U	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47967	Instrument ID VMS8	Method: SW8260					
trans-1,2-Dichloroethene	U	30					
trans-1,3-Dichloropropene	U	30					
Trichloroethene	U	30					
Trichlorofluoromethane	U	30					
Vinyl chloride	U	30					
Xylenes, Total	U	90					
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>810</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>81</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>994.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.4</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>914.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>91.4</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>966.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>96.6</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47967** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: MBLK-47967-47967				Units: µg/Kg		Analysis Date: 04/30/13 02:16 PM		
Client ID:		Run ID: VMS9_130430A				SeqNo: 2298758		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	U	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47967	Instrument ID VMS8	Method: SW8260						
trans-1,2-Dichloroethene	U	30						
trans-1,3-Dichloropropene	U	30						
Trichloroethene	U	30						
Trichlorofluoromethane	U	30						
Vinyl chloride	U	30						
Xylenes, Total	U	90						
<i>Surr: 1,2-Dichloroethane-d4</i>	988	0	1000	0	98.8	70-130	0	
<i>Surr: 4-Bromofluorobenzene</i>	998.5	0	1000	0	99.8	70-130	0	
<i>Surr: Dibromofluoromethane</i>	891	0	1000	0	89.1	70-130	0	
<i>Surr: Toluene-d8</i>	977	0	1000	0	97.7	70-130	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47967** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: MBLK-47967-47967				Units: µg/Kg		Analysis Date: 05/02/13 05:48 AM		
Client ID:		Run ID: VMS6_130501B				SeqNo: 2301560		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	U	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47967		Instrument ID VMS8		Method: SW8260				
trans-1,2-Dichloroethene	U	30						
trans-1,3-Dichloropropene	U	30						
Trichloroethene	U	30						
Trichlorofluoromethane	U	30						
Vinyl chloride	U	30						
Xylenes, Total	U	90						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1140</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>114</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>955.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>95.6</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>980.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>1066</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>107</i>	<i>70-130</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47967** Instrument ID **VMS8** Method: **SW8260**

MBLK		Sample ID: MBLK-47967-47967				Units: µg/Kg		Analysis Date: 05/02/13 05:16 AM		
Client ID:		Run ID: VMS8_130501B				SeqNo: 2301639		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	U	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47967	Instrument ID VMS8		Method: SW8260					
trans-1,2-Dichloroethene	U	30						
trans-1,3-Dichloropropene	U	30						
Trichloroethene	U	30						
Trichlorofluoromethane	U	30						
Vinyl chloride	U	30						
Xylenes, Total	U	90						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>958.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>95.8</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>980.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>1008</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>1041</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47967** Instrument ID **VMS8** Method: **SW8260**

LCS Sample ID: LCS-47967-47967				Units: µg/Kg		Analysis Date: 04/29/13 11:30 PM				
Client ID:		Run ID: VMS8_130429B		SeqNo: 2297573		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	970	30	1000	0	97	70-135	0			
1,1,2,2-Tetrachloroethane	974.5	30	1000	0	97.4	55-130	0			
1,1,2-Trichloroethane	979.5	30	1000	0	98	60-125	0			
1,1-Dichloroethane	889	30	1000	0	88.9	75-125	0			
1,1-Dichloroethene	847.5	30	1000	0	84.8	65-135	0			
1,2,4-Trichlorobenzene	1138	30	1000	0	114	65-130	0			
1,2-Dibromo-3-chloropropane	1102	30	1000	0	110	40-135	0			
1,2-Dibromoethane	988.5	30	1000	0	98.8	70-125	0			
1,2-Dichlorobenzene	1062	30	1000	0	106	75-120	0			
1,2-Dichloroethane	919	30	1000	0	91.9	70-135	0			
1,2-Dichloropropane	986.5	30	1000	0	98.6	70-120	0			
1,3-Dichlorobenzene	1040	30	1000	0	104	70-125	0			
1,4-Dichlorobenzene	1049	30	1000	0	105	70-125	0			
2-Butanone	918.5	200	1000	0	91.8	30-160	0			
2-Hexanone	1026	30	1000	0	103	45-145	0			
4-Methyl-2-pentanone	1330	30	1000	0	133	45-145	0			
Acetone	1026	100	1000	0	103	20-160	0			
Benzene	954.5	30	1000	0	95.4	75-125	0			
Bromodichloromethane	980.5	30	1000	0	98	70-130	0			
Bromoform	1086	30	1000	0	109	55-135	0			
Bromomethane	1126	75	1000	0	113	30-160	0			
Carbon disulfide	910	30	1000	0	91	45-160	0			
Carbon tetrachloride	973.5	30	1000	0	97.4	65-135	0			
Chlorobenzene	1013	30	1000	0	101	75-125	0			
Chloroethane	755	100	1000	0	75.5	40-155	0			
Chloroform	940	30	1000	0	94	70-125	0			B
Chloromethane	749	100	1000	0	74.9	50-130	0			
cis-1,2-Dichloroethene	928.5	30	1000	0	92.8	65-125	0			
cis-1,3-Dichloropropene	986	30	1000	0	98.6	70-125	0			
Dibromochloromethane	948.5	30	1000	0	94.8	65-135	0			
Dichlorodifluoromethane	627	30	1000	0	62.7	35-135	0			
Ethylbenzene	1028	30	1000	0	103	75-125	0			
Isopropylbenzene	1036	30	1000	0	104	75-130	0			
Methyl tert-butyl ether	1014	30	1000	0	101	75-125	0			
Methylene chloride	824	30	1000	0	82.4	55-145	0			
Styrene	1110	30	1000	0	111	75-125	0			
Tetrachloroethene	1083	30	1000	0	108	64-140	0			
Toluene	982	30	1000	0	98.2	70-125	0			
trans-1,2-Dichloroethene	887.5	30	1000	0	88.8	65-135	0			
trans-1,3-Dichloropropene	999	30	1000	0	99.9	65-125	0			
Trichloroethene	1003	30	1000	0	100	75-125	0			
Trichlorofluoromethane	927	30	1000	0	92.7	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47967	Instrument ID VMS8	Method: SW8260					
Vinyl chloride	813.5	30	1000	0	81.4	60-125	0
Xylenes, Total	3082	90	3000	0	103	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>847</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>84.7</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>1030</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>944</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>94.4</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>976.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>97.6</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47967** Instrument ID **VMS8** Method: **SW8260**

LCS Sample ID: LCS-47967-47967				Units: µg/Kg			Analysis Date: 04/30/13 12:59 PM			
Client ID:		Run ID: VMS9_130430A		SeqNo: 2298756		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1023	30	1000	0	102	70-135	0			
1,1,2,2-Tetrachloroethane	992.5	30	1000	0	99.2	55-130	0			
1,1,2-Trichloroethane	1010	30	1000	0	101	60-125	0			
1,1-Dichloroethane	1008	30	1000	0	101	75-125	0			
1,1-Dichloroethene	952.5	30	1000	0	95.2	65-135	0			
1,2,4-Trichlorobenzene	1270	30	1000	0	127	65-130	0			
1,2-Dibromo-3-chloropropane	888.5	30	1000	0	88.8	40-135	0			
1,2-Dibromoethane	U	30	1000	0	0	70-125	0			S
1,2-Dichlorobenzene	1082	30	1000	0	108	75-120	0			
1,2-Dichloroethane	988	30	1000	0	98.8	70-135	0			
1,2-Dichloropropane	1022	30	1000	0	102	70-120	0			
1,3-Dichlorobenzene	1084	30	1000	0	108	70-125	0			
1,4-Dichlorobenzene	1110	30	1000	0	111	70-125	0			
2-Butanone	1014	200	1000	0	101	30-160	0			
2-Hexanone	1126	30	1000	0	113	45-145	0			
4-Methyl-2-pentanone	1266	30	1000	0	127	45-145	0			
Acetone	1028	100	1000	0	103	20-160	0			
Benzene	1041	30	1000	0	104	75-125	0			
Bromodichloromethane	904.5	30	1000	0	90.4	70-130	0			
Bromoform	804	30	1000	0	80.4	55-135	0			
Bromomethane	727.5	75	1000	0	72.8	30-160	0			
Carbon disulfide	866.5	30	1000	0	86.6	45-160	0			
Carbon tetrachloride	883	30	1000	0	88.3	65-135	0			
Chlorobenzene	1112	30	1000	0	111	75-125	0			
Chloroethane	931	100	1000	0	93.1	40-155	0			
Chloroform	960.5	30	1000	0	96	70-125	0			
Chloromethane	778	100	1000	0	77.8	50-130	0			
cis-1,2-Dichloroethene	968.5	30	1000	0	96.8	65-125	0			
cis-1,3-Dichloropropene	990	30	1000	0	99	70-125	0			
Dibromochloromethane	853	30	1000	0	85.3	65-135	0			
Dichlorodifluoromethane	733.5	30	1000	0	73.4	35-135	0			
Ethylbenzene	1108	30	1000	0	111	75-125	0			
Isopropylbenzene	1130	30	1000	0	113	75-130	0			
Methyl tert-butyl ether	992.5	30	1000	0	99.2	75-125	0			
Methylene chloride	953.5	30	1000	0	95.4	55-145	0			
Styrene	1136	30	1000	0	114	75-125	0			
Tetrachloroethene	1228	30	1000	0	123	64-140	0			
Toluene	1044	30	1000	0	104	70-125	0			
trans-1,2-Dichloroethene	991	30	1000	0	99.1	65-135	0			
trans-1,3-Dichloropropene	971.5	30	1000	0	97.2	65-125	0			
Trichloroethene	1058	30	1000	0	106	75-125	0			
Trichlorofluoromethane	907	30	1000	0	90.7	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47967	Instrument ID VMS8			Method: SW8260			
Vinyl chloride	732.5	30	1000	0	73.2	60-125	0
Xylenes, Total	3215	90	3000	0	107	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>979</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>97.9</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>1005</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>964</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>96.4</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>984.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98.4</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47967** Instrument ID **VMS8** Method: **SW8260**

LCS Sample ID: LCS-47967-47967				Units: µg/Kg		Analysis Date: 05/02/13 04:33 AM				
Client ID:		Run ID: VMS6_130501B		SeqNo: 2301559		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	894	30	1000	0	89.4	70-135	0			
1,1,2,2-Tetrachloroethane	1112	30	1000	0	111	55-130	0			
1,1,2-Trichloroethane	971.5	30	1000	0	97.2	60-125	0			
1,1-Dichloroethane	885	30	1000	0	88.5	75-125	0			
1,1-Dichloroethene	823.5	30	1000	0	82.4	65-135	0			
1,2,4-Trichlorobenzene	987	30	1000	0	98.7	65-130	0			
1,2-Dibromo-3-chloropropane	1066	30	1000	0	107	40-135	0			
1,2-Dibromoethane	1245	30	1000	0	124	70-125	0			
1,2-Dichlorobenzene	1001	30	1000	0	100	75-120	0			
1,2-Dichloroethane	925.5	30	1000	0	92.6	70-135	0			
1,2-Dichloropropane	943	30	1000	0	94.3	70-120	0			
1,3-Dichlorobenzene	972	30	1000	0	97.2	70-125	0			
1,4-Dichlorobenzene	977	30	1000	0	97.7	70-125	0			
2-Butanone	1438	200	1000	0	144	30-160	0			
2-Hexanone	1400	30	1000	0	140	45-145	0			
4-Methyl-2-pentanone	1754	30	1000	0	175	45-145	0			S
Acetone	1478	100	1000	0	148	20-160	0			
Benzene	879	30	1000	0	87.9	75-125	0			
Bromodichloromethane	963.5	30	1000	0	96.4	70-130	0			
Bromoform	911	30	1000	0	91.1	55-135	0			
Bromomethane	866.5	75	1000	0	86.6	30-160	0			
Carbon disulfide	924.5	30	1000	0	92.4	45-160	0			
Carbon tetrachloride	841	30	1000	0	84.1	65-135	0			
Chlorobenzene	947	30	1000	0	94.7	75-125	0			
Chloroethane	876	100	1000	0	87.6	40-155	0			
Chloroform	912.5	30	1000	0	91.2	70-125	0			
Chloromethane	791.5	100	1000	0	79.2	50-130	0			
cis-1,2-Dichloroethene	887.5	30	1000	0	88.8	65-125	0			
cis-1,3-Dichloropropene	929	30	1000	0	92.9	70-125	0			
Dibromochloromethane	874.5	30	1000	0	87.4	65-135	0			
Dichlorodifluoromethane	877	30	1000	0	87.7	35-135	0			
Ethylbenzene	990.5	30	1000	0	99	75-125	0			
Isopropylbenzene	1020	30	1000	0	102	75-130	0			
Methyl tert-butyl ether	1052	30	1000	0	105	75-125	0			
Methylene chloride	901.5	30	1000	0	90.2	55-145	0			
Styrene	1012	30	1000	0	101	75-125	0			
Tetrachloroethene	942	30	1000	0	94.2	64-140	0			
Toluene	945.5	30	1000	0	94.6	70-125	0			
trans-1,2-Dichloroethene	885	30	1000	0	88.5	65-135	0			
trans-1,3-Dichloropropene	1021	30	1000	0	102	65-125	0			
Trichloroethene	848	30	1000	0	84.8	75-125	0			
Trichlorofluoromethane	894.5	30	1000	0	89.4	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47967	Instrument ID VMS8	Method: SW8260					
Vinyl chloride	801	30	1000	0	80.1	60-125	0
Xylenes, Total	2983	90	3000	0	99.4	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1100</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>110</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>994.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.4</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>1023</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>1076</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>108</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47967** Instrument ID **VMS8** Method: **SW8260**

LCS Sample ID: LCS-47967-47967				Units: µg/Kg			Analysis Date: 05/02/13 04:05 AM			
Client ID:		Run ID: VMS8_130501B		SeqNo: 2301638		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1002	30	1000	0	100	70-135	0			
1,1,2,2-Tetrachloroethane	1154	30	1000	0	115	55-130	0			
1,1,2-Trichloroethane	1080	30	1000	0	108	60-125	0			
1,1-Dichloroethane	873	30	1000	0	87.3	75-125	0			
1,1-Dichloroethene	839.5	30	1000	0	84	65-135	0			
1,2,4-Trichlorobenzene	1204	30	1000	0	120	65-130	0			
1,2-Dibromo-3-chloropropane	1427	30	1000	0	143	40-135	0			S
1,2-Dibromoethane	1132	30	1000	0	113	70-125	0			
1,2-Dichlorobenzene	1096	30	1000	0	110	75-120	0			
1,2-Dichloroethane	926	30	1000	0	92.6	70-135	0			
1,2-Dichloropropane	978.5	30	1000	0	97.8	70-120	0			
1,3-Dichlorobenzene	1080	30	1000	0	108	70-125	0			
1,4-Dichlorobenzene	1070	30	1000	0	107	70-125	0			
2-Butanone	1190	200	1000	0	119	30-160	0			
2-Hexanone	1263	30	1000	0	126	45-145	0			
4-Methyl-2-pentanone	1596	30	1000	0	160	45-145	0			S
Acetone	1200	100	1000	0	120	20-160	0			
Benzene	978.5	30	1000	0	97.8	75-125	0			
Bromodichloromethane	976	30	1000	0	97.6	70-130	0			
Bromoform	1146	30	1000	0	115	55-135	0			
Bromomethane	1120	75	1000	0	112	30-160	0			
Carbon disulfide	930	30	1000	0	93	45-160	0			
Carbon tetrachloride	1022	30	1000	0	102	65-135	0			
Chlorobenzene	1048	30	1000	0	105	75-125	0			
Chloroethane	597	100	1000	0	59.7	40-155	0			
Chloroform	880	30	1000	0	88	70-125	0			
Chloromethane	801.5	100	1000	0	80.2	50-130	0			
cis-1,2-Dichloroethene	871.5	30	1000	0	87.2	65-125	0			
cis-1,3-Dichloropropene	982.5	30	1000	0	98.2	70-125	0			
Dibromochloromethane	1056	30	1000	0	106	65-135	0			
Dichlorodifluoromethane	724	30	1000	0	72.4	35-135	0			
Ethylbenzene	1042	30	1000	0	104	75-125	0			
Isopropylbenzene	1060	30	1000	0	106	75-130	0			
Methyl tert-butyl ether	1065	30	1000	0	106	75-125	0			
Methylene chloride	815	30	1000	0	81.5	55-145	0			
Styrene	1116	30	1000	0	112	75-125	0			
Tetrachloroethene	1155	30	1000	0	116	64-140	0			
Toluene	1004	30	1000	0	100	70-125	0			
trans-1,2-Dichloroethene	883	30	1000	0	88.3	65-135	0			
trans-1,3-Dichloropropene	987.5	30	1000	0	98.8	65-125	0			
Trichloroethene	1082	30	1000	0	108	75-125	0			
Trichlorofluoromethane	952.5	30	1000	0	95.2	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47967	Instrument ID VMS8	Method: SW8260					
Vinyl chloride	867.5	30	1000	0	86.8	60-125	0
Xylenes, Total	3102	90	3000	0	103	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>934.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>93.4</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>967.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>96.8</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>1004</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>1021</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47967** Instrument ID **VMS8** Method: **SW8260**

MS Sample ID: 13041049-58A MS				Units: µg/Kg			Analysis Date: 04/30/13 09:02 AM			
Client ID: SO-17360-042413-DR-070			Run ID: VMS8_130429B		SeqNo: 2297614		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1656	52	1733	0	95.6	70-135	0			
1,1,2,2-Tetrachloroethane	1481	52	1733	0	85.4	55-130	0			
1,1,2-Trichloroethane	1594	52	1733	0	92	60-125	0			
1,1-Dichloroethane	1480	52	1733	0	85.4	75-125	0			
1,1-Dichloroethene	1471	52	1733	0	84.9	65-135	0			
1,2,4-Trichlorobenzene	1612	52	1733	0	93	65-130	0			
1,2-Dibromo-3-chloropropane	1263	52	1733	0	72.9	40-135	0			
1,2-Dibromoethane	1554	52	1733	0	89.6	70-125	0			
1,2-Dichlorobenzene	1716	52	1733	0	99	75-120	0			
1,2-Dichloroethane	1493	52	1733	0	86.2	70-135	0			
1,2-Dichloropropane	1615	52	1733	0	93.2	70-120	0			
1,3-Dichlorobenzene	1734	52	1733	0	100	70-125	0			
1,4-Dichlorobenzene	1712	52	1733	0	98.8	70-125	0			
2-Butanone	1388	350	1733	0	80.1	30-160	0			
2-Hexanone	1346	52	1733	0	77.6	45-145	0			
4-Methyl-2-pentanone	1765	52	1733	0	102	45-145	0			
Acetone	1715	170	1733	0	99	20-160	0			
Benzene	1630	52	1733	0	94	75-125	0			
Bromodichloromethane	1480	52	1733	0	85.4	70-130	0			
Bromoform	1348	52	1733	0	77.8	55-135	0			
Bromomethane	1873	130	1733	0	108	30-160	0			
Carbon disulfide	1393	52	1733	0	80.4	45-160	0			
Carbon tetrachloride	1610	52	1733	0	92.9	65-135	0			
Chlorobenzene	1718	52	1733	0	99.2	75-125	0			
Chloroethane	996.5	170	1733	0	57.5	40-155	0			
Chloroform	1500	52	1733	0	86.6	70-125	0			B
Chloromethane	1570	170	1733	0	90.6	50-130	0			
cis-1,2-Dichloroethene	1443	52	1733	0	83.2	65-125	0			
cis-1,3-Dichloropropene	1494	52	1733	0	86.2	70-125	0			
Dibromochloromethane	1405	52	1733	0	81	65-135	0			
Dichlorodifluoromethane	1368	52	1733	0	79	35-135	0			
Ethylbenzene	1723	52	1733	0	99.4	75-125	0			
Isopropylbenzene	1749	52	1733	0	101	75-130	0			
Methyl tert-butyl ether	1553	52	1733	0	89.6	75-125	0			
Methylene chloride	1371	52	1733	0	79.1	55-145	0			
Styrene	1849	52	1733	0	107	75-125	0			
Tetrachloroethene	1852	52	1733	0	107	64-140	0			
Toluene	1658	52	1733	0	95.6	70-125	0			
trans-1,2-Dichloroethene	1486	52	1733	0	85.8	65-135	0			
trans-1,3-Dichloropropene	1485	52	1733	0	85.7	65-125	0			
Trichloroethene	2091	52	1733	321.5	102	75-125	0			
Trichlorofluoromethane	1620	52	1733	0	93.4	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47967	Instrument ID VMS8		Method: SW8260				
Vinyl chloride	1710	52	1733	0	98.6	60-125	0
Xylenes, Total	5157	160	5199	0	99.2	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	1385	0	1733	0	79.9	70-130	0
<i>Surr: 4-Bromofluorobenzene</i>	1767	0	1733	0	102	70-130	0
<i>Surr: Dibromofluoromethane</i>	1583	0	1733	0	91.4	70-130	0
<i>Surr: Toluene-d8</i>	1649	0	1733	0	95.2	70-130	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47967** Instrument ID **VMS8** Method: **SW8260**

MSD Sample ID: 13041049-58A MSD				Units: µg/Kg			Analysis Date: 04/30/13 09:26 AM			
Client ID: SO-17360-042413-DR-070			Run ID: VMS8_130429B		SeqNo: 2297615		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1598	52	1733	0	92.2	70-135	1656	3.57	30	
1,1,2,2-Tetrachloroethane	1416	52	1733	0	81.7	55-130	1481	4.49	30	
1,1,2-Trichloroethane	1526	52	1733	0	88	60-125	1594	4.33	30	
1,1-Dichloroethane	1401	52	1733	0	80.8	75-125	1480	5.47	30	
1,1-Dichloroethene	1413	52	1733	0	81.6	65-135	1471	4.03	30	
1,2,4-Trichlorobenzene	1673	52	1733	0	96.6	65-130	1612	3.75	30	
1,2-Dibromo-3-chloropropane	1325	52	1733	0	76.4	40-135	1263	4.75	30	
1,2-Dibromoethane	1562	52	1733	0	90.2	70-125	1554	0.556	30	
1,2-Dichlorobenzene	1674	52	1733	0	96.6	75-120	1716	2.45	30	
1,2-Dichloroethane	1451	52	1733	0	83.8	70-135	1493	2.83	30	
1,2-Dichloropropane	1542	52	1733	0	89	70-120	1615	4.67	30	
1,3-Dichlorobenzene	1671	52	1733	0	96.4	70-125	1734	3.72	30	
1,4-Dichlorobenzene	1692	52	1733	0	97.6	70-125	1712	1.22	30	
2-Butanone	1308	350	1733	0	75.5	30-160	1388	5.91	30	
2-Hexanone	1331	52	1733	0	76.8	45-145	1346	1.1	30	
4-Methyl-2-pentanone	1759	52	1733	0	102	45-145	1765	0.344	30	
Acetone	1724	170	1733	0	99.5	20-160	1715	0.554	30	
Benzene	1568	52	1733	0	90.4	75-125	1630	3.9	30	
Bromodichloromethane	1408	52	1733	0	81.2	70-130	1480	4.98	30	
Bromoform	1287	52	1733	0	74.2	55-135	1348	4.67	30	
Bromomethane	1733	130	1733	0	100	30-160	1873	7.78	30	
Carbon disulfide	1321	52	1733	0	76.2	45-160	1393	5.24	30	
Carbon tetrachloride	1572	52	1733	0	90.7	65-135	1610	2.4	30	
Chlorobenzene	1642	52	1733	0	94.8	75-125	1718	4.54	30	
Chloroethane	937.6	170	1733	0	54.1	40-155	996.5	6.09	30	
Chloroform	1445	52	1733	0	83.4	70-125	1500	3.77	30	B
Chloromethane	1480	170	1733	0	85.4	50-130	1570	5.91	30	
cis-1,2-Dichloroethene	1388	52	1733	0	80.1	65-125	1443	3.86	30	
cis-1,3-Dichloropropene	1436	52	1733	0	82.8	70-125	1494	3.96	30	
Dibromochloromethane	1380	52	1733	0	79.6	65-135	1405	1.74	30	
Dichlorodifluoromethane	1295	52	1733	0	74.8	35-135	1368	5.47	30	
Ethylbenzene	1642	52	1733	0	94.8	75-125	1723	4.79	30	
Isopropylbenzene	1707	52	1733	0	98.5	75-130	1749	2.41	30	
Methyl tert-butyl ether	1512	52	1733	0	87.2	75-125	1553	2.66	30	
Methylene chloride	1300	52	1733	0	75	55-145	1371	5.32	30	
Styrene	1802	52	1733	0	104	75-125	1849	2.61	30	
Tetrachloroethene	1823	52	1733	0	105	64-140	1852	1.56	30	
Toluene	1600	52	1733	0	92.3	70-125	1658	3.56	30	
trans-1,2-Dichloroethene	1406	52	1733	0	81.1	65-135	1486	5.57	30	
trans-1,3-Dichloropropene	1431	52	1733	0	82.6	65-125	1485	3.74	30	
Trichloroethene	1983	52	1733	321.5	95.8	75-125	2091	5.32	30	
Trichlorofluoromethane	1542	52	1733	0	89	25-185	1620	4.88	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47967	Instrument ID VMS8		Method: SW8260						
Vinyl chloride	1612	52	1733	0	93	60-125	1710	5.9	30
Xylenes, Total	4947	160	5199	0	95.2	75-125	5157	4.15	30
Surr: 1,2-Dichloroethane-d4	1330	0	1733	0	76.8	70-130	1385	4.02	30
Surr: 4-Bromofluorobenzene	1723	0	1733	0	99.4	70-130	1767	2.53	30
Surr: Dibromofluoromethane	1557	0	1733	0	89.8	70-130	1583	1.66	30
Surr: Toluene-d8	1616	0	1733	0	93.2	70-130	1649	2.02	30

The following samples were analyzed in this batch:	13041049-01A	13041049-02A	13041049-45A
	13041049-46A	13041049-47A	13041049-48A
	13041049-49A	13041049-50A	13041049-51A
	13041049-52A	13041049-53A	13041049-54A
	13041049-55A	13041049-56A	13041049-57A
	13041049-58A	13041049-59A	13041049-60A
	13041049-61A		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: MBLK-47968-47968				Units: µg/Kg		Analysis Date: 04/27/13 12:54 PM		
Client ID:		Run ID: VMS6_130426A				SeqNo: 2294758		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	U	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6	Method: SW8260						
trans-1,2-Dichloroethene	U	30						
trans-1,3-Dichloropropene	U	30						
Trichloroethene	U	30						
Trichlorofluoromethane	U	30						
Vinyl chloride	U	30						
Xylenes, Total	U	90						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1012</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>965</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>96.5</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>993.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.4</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>995.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.6</i>	<i>70-130</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: MBLK-47968-47968				Units: µg/Kg		Analysis Date: 04/29/13 12:42 PM		
Client ID:		Run ID: VMS8_130428B				SeqNo: 2295332		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	U	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6	Method: SW8260						
trans-1,2-Dichloroethene	U	30						
trans-1,3-Dichloropropene	U	30						
Trichloroethene	U	30						
Trichlorofluoromethane	U	30						
Vinyl chloride	U	30						
Xylenes, Total	U	90						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>844.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>84.4</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>959.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>96</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>880</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>88</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>955</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>95.5</i>	<i>70-130</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: MBLK-47968-47968				Units: µg/Kg		Analysis Date: 04/28/13 12:21 PM		
Client ID:		Run ID: VMS5_130428A				SeqNo: 2295412		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	U	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6	Method: SW8260						
trans-1,2-Dichloroethene	U	30						
trans-1,3-Dichloropropene	U	30						
Trichloroethene	U	30						
Trichlorofluoromethane	U	30						
Vinyl chloride	U	30						
Xylenes, Total	U	90						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1014</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>969</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>96.9</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>977.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>97.8</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>1042</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: MBLK-47968-47968				Units: µg/Kg		Analysis Date: 04/30/13 12:41 PM		
Client ID:		Run ID: VMS8_130429B				SeqNo: 2297637		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	34.5	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	U	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6	Method: SW8260					
trans-1,2-Dichloroethene	U	30					
trans-1,3-Dichloropropene	U	30					
Trichloroethene	U	30					
Trichlorofluoromethane	U	30					
Vinyl chloride	U	30					
Xylenes, Total	U	90					
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>810</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>81</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>994.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.4</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>914.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>91.4</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>966.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>96.6</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: MBLK-47968-47968				Units: µg/Kg		Analysis Date: 04/29/13 07:31 PM		
Client ID:		Run ID: VMS5_130429A				SeqNo: 2297721		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	U	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6	Method: SW8260						
trans-1,2-Dichloroethene	U	30						
trans-1,3-Dichloropropene	U	30						
Trichloroethene	U	30						
Trichlorofluoromethane	U	30						
Vinyl chloride	U	30						
Xylenes, Total	U	90						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1028</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>996</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.6</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>991</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.1</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>1032</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: MBLK-47968-47968				Units: µg/Kg		Analysis Date: 05/02/13 05:16 AM		
Client ID:		Run ID: VMS8_130501B				SeqNo: 2301650		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	U	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6	Method: SW8260						
trans-1,2-Dichloroethene	U	30						
trans-1,3-Dichloropropene	U	30						
Trichloroethene	U	30						
Trichlorofluoromethane	U	30						
Vinyl chloride	U	30						
Xylenes, Total	U	90						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>958.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>95.8</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>980.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>1008</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>1041</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: MBLK-47968-47968				Units: µg/Kg		Analysis Date: 05/02/13 11:11 AM		
Client ID:		Run ID: VMS5_130502A				SeqNo: 2301964		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	U	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6	Method: SW8260						
trans-1,2-Dichloroethene	U	30						
trans-1,3-Dichloropropene	U	30						
Trichloroethene	U	30						
Trichlorofluoromethane	U	30						
Vinyl chloride	U	30						
Xylenes, Total	U	90						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1044</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>991</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99.1</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>945</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>94.5</i>	<i>70-130</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>1020</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: MBLK-47968-47968				Units: µg/Kg		Analysis Date: 05/03/13 03:49 AM		
Client ID:		Run ID: VMS9_130502A				SeqNo: 2303473		Prep Date: 04/26/13		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	30								
1,1,2,2-Tetrachloroethane	U	30								
1,1,2-Trichloroethane	U	30								
1,1,2-Trichlorotrifluoroethane	U	30								
1,1-Dichloroethane	U	30								
1,1-Dichloroethene	U	30								
1,2,4-Trichlorobenzene	U	30								
1,2-Dibromo-3-chloropropane	U	30								
1,2-Dibromoethane	U	30								
1,2-Dichlorobenzene	U	30								
1,2-Dichloroethane	U	30								
1,2-Dichloropropane	U	30								
1,3-Dichlorobenzene	U	30								
1,4-Dichlorobenzene	U	30								
2-Butanone	U	200								
2-Hexanone	U	30								
4-Methyl-2-pentanone	U	30								
Acetone	U	100								
Benzene	U	30								
Bromodichloromethane	U	30								
Bromoform	U	30								
Bromomethane	U	75								
Carbon disulfide	U	30								
Carbon tetrachloride	U	30								
Chlorobenzene	U	30								
Chloroethane	U	100								
Chloroform	U	30								
Chloromethane	U	100								
cis-1,2-Dichloroethene	U	30								
cis-1,3-Dichloropropene	U	30								
Cyclohexane	U	30								
Dibromochloromethane	U	30								
Dichlorodifluoromethane	U	30								
Ethylbenzene	U	30								
Isopropylbenzene	U	30								
Methyl acetate	U	200								
Methyl tert-butyl ether	U	30								
Methylcyclohexane	U	30								
Methylene chloride	U	30								
Styrene	U	30								
Tetrachloroethene	U	30								
Toluene	U	30								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968		Instrument ID VMS6		Method: SW8260				
trans-1,2-Dichloroethene	U	30						
trans-1,3-Dichloropropene	U	30						
Trichloroethene	U	30						
Trichlorofluoromethane	U	30						
Vinyl chloride	U	30						
Xylenes, Total	U	90						
<i>Surr: 1,2-Dichloroethane-d4</i>	987	0	1000	0	98.7	70-130	0	
<i>Surr: 4-Bromofluorobenzene</i>	947	0	1000	0	94.7	70-130	0	
<i>Surr: Dibromofluoromethane</i>	941.5	0	1000	0	94.2	70-130	0	
<i>Surr: Toluene-d8</i>	1024	0	1000	0	102	70-130	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

LCS Sample ID: LCS-47968-47968				Units: µg/Kg			Analysis Date: 04/26/13 11:41 PM			
Client ID:		Run ID: VMS6_130426A		SeqNo: 2294752		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1084	30	1000	0	108	70-135	0			
1,1,2,2-Tetrachloroethane	1069	30	1000	0	107	55-130	0			
1,1,2-Trichloroethane	1022	30	1000	0	102	60-125	0			
1,1-Dichloroethane	1023	30	1000	0	102	75-125	0			
1,1-Dichloroethene	1014	30	1000	0	101	65-135	0			
1,2,4-Trichlorobenzene	1044	30	1000	0	104	65-130	0			
1,2-Dibromo-3-chloropropane	945.5	30	1000	0	94.6	40-135	0			
1,2-Dibromoethane	1278	30	1000	0	128	70-125	0			S
1,2-Dichlorobenzene	1041	30	1000	0	104	75-120	0			
1,2-Dichloroethane	1024	30	1000	0	102	70-135	0			
1,2-Dichloropropane	1045	30	1000	0	104	70-120	0			
1,3-Dichlorobenzene	1012	30	1000	0	101	70-125	0			
1,4-Dichlorobenzene	1006	30	1000	0	101	70-125	0			
2-Butanone	1001	200	1000	0	100	30-160	0			
2-Hexanone	1013	30	1000	0	101	45-145	0			
4-Methyl-2-pentanone	1336	30	1000	0	134	45-145	0			
Acetone	848.5	100	1000	0	84.8	20-160	0			
Benzene	1062	30	1000	0	106	75-125	0			
Bromodichloromethane	1131	30	1000	0	113	70-130	0			
Bromoform	932.5	30	1000	0	93.2	55-135	0			
Bromomethane	1111	75	1000	0	111	30-160	0			
Carbon disulfide	1091	30	1000	0	109	45-160	0			
Carbon tetrachloride	1016	30	1000	0	102	65-135	0			
Chlorobenzene	1064	30	1000	0	106	75-125	0			
Chloroethane	1131	100	1000	0	113	40-155	0			
Chloroform	1051	30	1000	0	105	70-125	0			
Chloromethane	1098	100	1000	0	110	50-130	0			
cis-1,2-Dichloroethene	1032	30	1000	0	103	65-125	0			
cis-1,3-Dichloropropene	1068	30	1000	0	107	70-125	0			
Dibromochloromethane	919	30	1000	0	91.9	65-135	0			
Dichlorodifluoromethane	1148	30	1000	0	115	35-135	0			
Ethylbenzene	1076	30	1000	0	108	75-125	0			
Isopropylbenzene	1092	30	1000	0	109	75-130	0			
Methyl tert-butyl ether	1080	30	1000	0	108	75-125	0			
Methylene chloride	1000	30	1000	0	100	55-145	0			
Styrene	1136	30	1000	0	114	75-125	0			
Tetrachloroethene	1047	30	1000	0	105	64-140	0			
Toluene	1061	30	1000	0	106	70-125	0			
trans-1,2-Dichloroethene	1046	30	1000	0	105	65-135	0			
trans-1,3-Dichloropropene	1100	30	1000	0	110	65-125	0			
Trichloroethene	1010	30	1000	0	101	75-125	0			
Trichlorofluoromethane	1060	30	1000	0	106	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6	Method: SW8260					
Vinyl chloride	1146	30	1000	0	115	60-125	0
Xylenes, Total	3249	90	3000	0	108	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>989</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98.9</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>981.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98.2</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>1015</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>990.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

LCS Sample ID: LCS-47968-47968				Units: µg/Kg			Analysis Date: 04/28/13 11:31 PM			
Client ID:		Run ID: VMS8_130428B		SeqNo: 2295326		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1030	30	1000	0	103	70-135	0			
1,1,2,2-Tetrachloroethane	893	30	1000	0	89.3	55-130	0			
1,1,2-Trichloroethane	950.5	30	1000	0	95	60-125	0			
1,1-Dichloroethane	941	30	1000	0	94.1	75-125	0			
1,1-Dichloroethene	968	30	1000	0	96.8	65-135	0			
1,2,4-Trichlorobenzene	1096	30	1000	0	110	65-130	0			
1,2-Dibromo-3-chloropropane	871.5	30	1000	0	87.2	40-135	0			
1,2-Dibromoethane	959.5	30	1000	0	96	70-125	0			
1,2-Dichlorobenzene	1068	30	1000	0	107	75-120	0			
1,2-Dichloroethane	946	30	1000	0	94.6	70-135	0			
1,2-Dichloropropane	987	30	1000	0	98.7	70-120	0			
1,3-Dichlorobenzene	1056	30	1000	0	106	70-125	0			
1,4-Dichlorobenzene	1054	30	1000	0	105	70-125	0			
2-Butanone	810.5	200	1000	0	81	30-160	0			
2-Hexanone	853	30	1000	0	85.3	45-145	0			
4-Methyl-2-pentanone	1100	30	1000	0	110	45-145	0			
Acetone	1000	100	1000	0	100	20-160	0			
Benzene	969.5	30	1000	0	97	75-125	0			
Bromodichloromethane	979.5	30	1000	0	98	70-130	0			
Bromoform	868	30	1000	0	86.8	55-135	0			
Bromomethane	1264	75	1000	0	126	30-160	0			
Carbon disulfide	993.5	30	1000	0	99.4	45-160	0			
Carbon tetrachloride	1016	30	1000	0	102	65-135	0			
Chlorobenzene	1028	30	1000	0	103	75-125	0			
Chloroethane	1010	100	1000	0	101	40-155	0			
Chloroform	950.5	30	1000	0	95	70-125	0			
Chloromethane	972	100	1000	0	97.2	50-130	0			
cis-1,2-Dichloroethene	957.5	30	1000	0	95.8	65-125	0			
cis-1,3-Dichloropropene	963	30	1000	0	96.3	70-125	0			
Dibromochloromethane	927.5	30	1000	0	92.8	65-135	0			
Dichlorodifluoromethane	856	30	1000	0	85.6	35-135	0			
Ethylbenzene	1031	30	1000	0	103	75-125	0			
Isopropylbenzene	1046	30	1000	0	105	75-130	0			
Methyl tert-butyl ether	949	30	1000	0	94.9	75-125	0			
Methylene chloride	890	30	1000	0	89	55-145	0			
Styrene	1094	30	1000	0	109	75-125	0			
Tetrachloroethene	1100	30	1000	0	110	64-140	0			
Toluene	1006	30	1000	0	101	70-125	0			
trans-1,2-Dichloroethene	964	30	1000	0	96.4	65-135	0			
trans-1,3-Dichloropropene	981	30	1000	0	98.1	65-125	0			
Trichloroethene	1003	30	1000	0	100	75-125	0			
Trichlorofluoromethane	1044	30	1000	0	104	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6	Method: SW8260					
Vinyl chloride	1094	30	1000	0	109	60-125	0
Xylenes, Total	3103	90	3000	0	103	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	850	0	1000	0	85	70-130	0
<i>Surr: 4-Bromofluorobenzene</i>	997.5	0	1000	0	99.8	70-130	0
<i>Surr: Dibromofluoromethane</i>	938.5	0	1000	0	93.8	70-130	0
<i>Surr: Toluene-d8</i>	976	0	1000	0	97.6	70-130	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

LCS Sample ID: LCS-47968-47968				Units: µg/Kg			Analysis Date: 04/28/13 11:12 AM			
Client ID:		Run ID: VMS5_130428A		SeqNo: 2295411		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1007	30	1000	0	101	70-135	0			
1,1,2,2-Tetrachloroethane	1178	30	1000	0	118	55-130	0			
1,1,2-Trichloroethane	1096	30	1000	0	110	60-125	0			
1,1-Dichloroethane	1002	30	1000	0	100	75-125	0			
1,1-Dichloroethene	1034	30	1000	0	103	65-135	0			
1,2,4-Trichlorobenzene	1145	30	1000	0	114	65-130	0			
1,2-Dibromo-3-chloropropane	1240	30	1000	0	124	40-135	0			
1,2-Dibromoethane	1156	30	1000	0	116	70-125	0			
1,2-Dichlorobenzene	1091	30	1000	0	109	75-120	0			
1,2-Dichloroethane	1017	30	1000	0	102	70-135	0			
1,2-Dichloropropane	990.5	30	1000	0	99	70-120	0			
1,3-Dichlorobenzene	1082	30	1000	0	108	70-125	0			
1,4-Dichlorobenzene	1084	30	1000	0	108	70-125	0			
2-Butanone	1318	200	1000	0	132	30-160	0			
2-Hexanone	1334	30	1000	0	133	45-145	0			
4-Methyl-2-pentanone	1719	30	1000	0	172	45-145	0			S
Acetone	1354	100	1000	0	135	20-160	0			
Benzene	1036	30	1000	0	104	75-125	0			
Bromodichloromethane	1054	30	1000	0	105	70-130	0			
Bromoform	1096	30	1000	0	110	55-135	0			
Bromomethane	1254	75	1000	0	125	30-160	0			
Carbon disulfide	1026	30	1000	0	103	45-160	0			
Carbon tetrachloride	1070	30	1000	0	107	65-135	0			
Chlorobenzene	1102	30	1000	0	110	75-125	0			
Chloroethane	1034	100	1000	0	103	40-155	0			
Chloroform	965.5	30	1000	0	96.6	70-125	0			
Chloromethane	1101	100	1000	0	110	50-130	0			
cis-1,2-Dichloroethene	1038	30	1000	0	104	65-125	0			
cis-1,3-Dichloropropene	1012	30	1000	0	101	70-125	0			
Dibromochloromethane	1063	30	1000	0	106	65-135	0			
Dichlorodifluoromethane	1150	30	1000	0	115	35-135	0			
Ethylbenzene	1095	30	1000	0	110	75-125	0			
Isopropylbenzene	1097	30	1000	0	110	75-130	0			
Methyl tert-butyl ether	1126	30	1000	0	113	75-125	0			
Methylene chloride	1026	30	1000	0	103	55-145	0			
Styrene	1104	30	1000	0	110	75-125	0			
Tetrachloroethene	1086	30	1000	0	109	64-140	0			
Toluene	1112	30	1000	0	111	70-125	0			
trans-1,2-Dichloroethene	1038	30	1000	0	104	65-135	0			
trans-1,3-Dichloropropene	1069	30	1000	0	107	65-125	0			
Trichloroethene	1006	30	1000	0	101	75-125	0			
Trichlorofluoromethane	1093	30	1000	0	109	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6		Method: SW8260				
Vinyl chloride	1210	30	1000	0	121	60-125	0
Xylenes, Total	3271	90	3000	0	109	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1004</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>1030</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>987</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>98.7</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>1053</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>105</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

LCS Sample ID: LCS-47968-47968				Units: µg/Kg		Analysis Date: 04/29/13 11:30 PM				
Client ID:		Run ID: VMS8_130429B		SeqNo: 2297633		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	970	30	1000	0	97	70-135	0			
1,1,2,2-Tetrachloroethane	974.5	30	1000	0	97.4	55-130	0			
1,1,2-Trichloroethane	979.5	30	1000	0	98	60-125	0			
1,1-Dichloroethane	889	30	1000	0	88.9	75-125	0			
1,1-Dichloroethene	847.5	30	1000	0	84.8	65-135	0			
1,2,4-Trichlorobenzene	1138	30	1000	0	114	65-130	0			
1,2-Dibromo-3-chloropropane	1102	30	1000	0	110	40-135	0			
1,2-Dibromoethane	988.5	30	1000	0	98.8	70-125	0			
1,2-Dichlorobenzene	1062	30	1000	0	106	75-120	0			
1,2-Dichloroethane	919	30	1000	0	91.9	70-135	0			
1,2-Dichloropropane	986.5	30	1000	0	98.6	70-120	0			
1,3-Dichlorobenzene	1040	30	1000	0	104	70-125	0			
1,4-Dichlorobenzene	1049	30	1000	0	105	70-125	0			
2-Butanone	918.5	200	1000	0	91.8	30-160	0			
2-Hexanone	1026	30	1000	0	103	45-145	0			
4-Methyl-2-pentanone	1330	30	1000	0	133	45-145	0			
Acetone	1026	100	1000	0	103	20-160	0			
Benzene	954.5	30	1000	0	95.4	75-125	0			
Bromodichloromethane	980.5	30	1000	0	98	70-130	0			
Bromoform	1086	30	1000	0	109	55-135	0			
Bromomethane	1126	75	1000	0	113	30-160	0			
Carbon disulfide	910	30	1000	0	91	45-160	0			
Carbon tetrachloride	973.5	30	1000	0	97.4	65-135	0			
Chlorobenzene	1013	30	1000	0	101	75-125	0			
Chloroethane	755	100	1000	0	75.5	40-155	0			
Chloroform	940	30	1000	0	94	70-125	0			
Chloromethane	749	100	1000	0	74.9	50-130	0			
cis-1,2-Dichloroethene	928.5	30	1000	0	92.8	65-125	0			
cis-1,3-Dichloropropene	986	30	1000	0	98.6	70-125	0			
Dibromochloromethane	948.5	30	1000	0	94.8	65-135	0			
Dichlorodifluoromethane	627	30	1000	0	62.7	35-135	0			
Ethylbenzene	1028	30	1000	0	103	75-125	0			
Isopropylbenzene	1036	30	1000	0	104	75-130	0			
Methyl tert-butyl ether	1014	30	1000	0	101	75-125	0			
Methylene chloride	824	30	1000	0	82.4	55-145	0			
Styrene	1110	30	1000	0	111	75-125	0			
Tetrachloroethene	1083	30	1000	0	108	64-140	0			
Toluene	982	30	1000	0	98.2	70-125	0			
trans-1,2-Dichloroethene	887.5	30	1000	0	88.8	65-135	0			
trans-1,3-Dichloropropene	999	30	1000	0	99.9	65-125	0			
Trichloroethene	1003	30	1000	0	100	75-125	0			
Trichlorofluoromethane	927	30	1000	0	92.7	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6		Method: SW8260				
Vinyl chloride	813.5	30	1000	0	81.4	60-125	0
Xylenes, Total	3082	90	3000	0	103	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>847</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>84.7</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>1030</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>944</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>94.4</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>976.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>97.6</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

LCS Sample ID: LCS-47968-47968				Units: µg/Kg		Analysis Date: 04/29/13 06:20 PM				
Client ID:		Run ID: VMS5_130429A		SeqNo: 2297720		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	970	30	1000	0	97	70-135	0			
1,1,2,2-Tetrachloroethane	1197	30	1000	0	120	55-130	0			
1,1,2-Trichloroethane	1101	30	1000	0	110	60-125	0			
1,1-Dichloroethane	935	30	1000	0	93.5	75-125	0			
1,1-Dichloroethene	925	30	1000	0	92.5	65-135	0			
1,2,4-Trichlorobenzene	1064	30	1000	0	106	65-130	0			
1,2-Dibromo-3-chloropropane	1222	30	1000	0	122	40-135	0			
1,2-Dibromoethane	1178	30	1000	0	118	70-125	0			
1,2-Dichlorobenzene	1108	30	1000	0	111	75-120	0			
1,2-Dichloroethane	1022	30	1000	0	102	70-135	0			
1,2-Dichloropropane	960.5	30	1000	0	96	70-120	0			
1,3-Dichlorobenzene	1088	30	1000	0	109	70-125	0			
1,4-Dichlorobenzene	1074	30	1000	0	107	70-125	0			
2-Butanone	1296	200	1000	0	130	30-160	0			
2-Hexanone	1410	30	1000	0	141	45-145	0			
4-Methyl-2-pentanone	1795	30	1000	0	180	45-145	0			S
Acetone	1360	100	1000	0	136	20-160	0			
Benzene	998	30	1000	0	99.8	75-125	0			
Bromodichloromethane	1032	30	1000	0	103	70-130	0			
Bromoform	1018	30	1000	0	102	55-135	0			
Bromomethane	975	75	1000	0	97.5	30-160	0			
Carbon disulfide	901.5	30	1000	0	90.2	45-160	0			
Carbon tetrachloride	1020	30	1000	0	102	65-135	0			
Chlorobenzene	1072	30	1000	0	107	75-125	0			
Chloroethane	875.5	100	1000	0	87.6	40-155	0			
Chloroform	908.5	30	1000	0	90.8	70-125	0			
Chloromethane	794.5	100	1000	0	79.4	50-130	0			
cis-1,2-Dichloroethene	971.5	30	1000	0	97.2	65-125	0			
cis-1,3-Dichloropropene	1010	30	1000	0	101	70-125	0			
Dibromochloromethane	1038	30	1000	0	104	65-135	0			
Dichlorodifluoromethane	869	30	1000	0	86.9	35-135	0			
Ethylbenzene	1071	30	1000	0	107	75-125	0			
Isopropylbenzene	1110	30	1000	0	111	75-130	0			
Methyl tert-butyl ether	1126	30	1000	0	113	75-125	0			
Methylene chloride	1014	30	1000	0	101	55-145	0			
Styrene	1096	30	1000	0	110	75-125	0			
Tetrachloroethene	1077	30	1000	0	108	64-140	0			
Toluene	1069	30	1000	0	107	70-125	0			
trans-1,2-Dichloroethene	971	30	1000	0	97.1	65-135	0			
trans-1,3-Dichloropropene	1092	30	1000	0	109	65-125	0			
Trichloroethene	985.5	30	1000	0	98.6	75-125	0			
Trichlorofluoromethane	1002	30	1000	0	100	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6		Method: SW8260				
Vinyl chloride	874	30	1000	0	87.4	60-125	0
Xylenes, Total	3251	90	3000	0	108	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1032</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>1021</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>970</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>97</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>1042</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>104</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

LCS Sample ID: LCS-47968-47968				Units: µg/Kg			Analysis Date: 05/02/13 04:05 AM			
Client ID:		Run ID: VMS8_130501B		SeqNo: 2301649		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1002	30	1000	0	100	70-135	0			
1,1,2,2-Tetrachloroethane	1154	30	1000	0	115	55-130	0			
1,1,2-Trichloroethane	1080	30	1000	0	108	60-125	0			
1,1-Dichloroethane	873	30	1000	0	87.3	75-125	0			
1,1-Dichloroethene	839.5	30	1000	0	84	65-135	0			
1,2,4-Trichlorobenzene	1204	30	1000	0	120	65-130	0			
1,2-Dibromo-3-chloropropane	1427	30	1000	0	143	40-135	0			S
1,2-Dibromoethane	1132	30	1000	0	113	70-125	0			
1,2-Dichlorobenzene	1096	30	1000	0	110	75-120	0			
1,2-Dichloroethane	926	30	1000	0	92.6	70-135	0			
1,2-Dichloropropane	978.5	30	1000	0	97.8	70-120	0			
1,3-Dichlorobenzene	1080	30	1000	0	108	70-125	0			
1,4-Dichlorobenzene	1070	30	1000	0	107	70-125	0			
2-Butanone	1190	200	1000	0	119	30-160	0			
2-Hexanone	1263	30	1000	0	126	45-145	0			
4-Methyl-2-pentanone	1596	30	1000	0	160	45-145	0			S
Acetone	1200	100	1000	0	120	20-160	0			
Benzene	978.5	30	1000	0	97.8	75-125	0			
Bromodichloromethane	976	30	1000	0	97.6	70-130	0			
Bromoform	1146	30	1000	0	115	55-135	0			
Bromomethane	1120	75	1000	0	112	30-160	0			
Carbon disulfide	930	30	1000	0	93	45-160	0			
Carbon tetrachloride	1022	30	1000	0	102	65-135	0			
Chlorobenzene	1048	30	1000	0	105	75-125	0			
Chloroethane	597	100	1000	0	59.7	40-155	0			
Chloroform	880	30	1000	0	88	70-125	0			
Chloromethane	801.5	100	1000	0	80.2	50-130	0			
cis-1,2-Dichloroethene	871.5	30	1000	0	87.2	65-125	0			
cis-1,3-Dichloropropene	982.5	30	1000	0	98.2	70-125	0			
Dibromochloromethane	1056	30	1000	0	106	65-135	0			
Dichlorodifluoromethane	724	30	1000	0	72.4	35-135	0			
Ethylbenzene	1042	30	1000	0	104	75-125	0			
Isopropylbenzene	1060	30	1000	0	106	75-130	0			
Methyl tert-butyl ether	1065	30	1000	0	106	75-125	0			
Methylene chloride	815	30	1000	0	81.5	55-145	0			
Styrene	1116	30	1000	0	112	75-125	0			
Tetrachloroethene	1155	30	1000	0	116	64-140	0			
Toluene	1004	30	1000	0	100	70-125	0			
trans-1,2-Dichloroethene	883	30	1000	0	88.3	65-135	0			
trans-1,3-Dichloropropene	987.5	30	1000	0	98.8	65-125	0			
Trichloroethene	1082	30	1000	0	108	75-125	0			
Trichlorofluoromethane	952.5	30	1000	0	95.2	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6	Method: SW8260					
Vinyl chloride	867.5	30	1000	0	86.8	60-125	0
Xylenes, Total	3102	90	3000	0	103	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>934.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>93.4</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>967.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>96.8</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>1004</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>1021</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

LCS Sample ID: LCS-47968-47968				Units: µg/Kg		Analysis Date: 05/02/13 10:01 AM				
Client ID:		Run ID: VMS5_130502A		SeqNo: 2301963		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1038	30	1000	0	104	70-135	0			
1,1,2,2-Tetrachloroethane	1252	30	1000	0	125	55-130	0			
1,1,2-Trichloroethane	1133	30	1000	0	113	60-125	0			
1,1-Dichloroethane	1042	30	1000	0	104	75-125	0			
1,1-Dichloroethene	1034	30	1000	0	103	65-135	0			
1,2,4-Trichlorobenzene	1080	30	1000	0	108	65-130	0			
1,2-Dibromo-3-chloropropane	1192	30	1000	0	119	40-135	0			
1,2-Dibromoethane	1177	30	1000	0	118	70-125	0			
1,2-Dichlorobenzene	1092	30	1000	0	109	75-120	0			
1,2-Dichloroethane	1106	30	1000	0	111	70-135	0			
1,2-Dichloropropane	1046	30	1000	0	105	70-120	0			
1,3-Dichlorobenzene	1075	30	1000	0	108	70-125	0			
1,4-Dichlorobenzene	1110	30	1000	0	111	70-125	0			
2-Butanone	1586	200	1000	0	159	30-160	0			
2-Hexanone	1506	30	1000	0	151	45-145	0			S
4-Methyl-2-pentanone	1911	30	1000	0	191	45-145	0			S
Acetone	1408	100	1000	0	141	20-160	0			
Benzene	1084	30	1000	0	108	75-125	0			
Bromodichloromethane	1090	30	1000	0	109	70-130	0			
Bromoform	1048	30	1000	0	105	55-135	0			
Bromomethane	1091	75	1000	0	109	30-160	0			
Carbon disulfide	1032	30	1000	0	103	45-160	0			
Carbon tetrachloride	1109	30	1000	0	111	65-135	0			
Chlorobenzene	1109	30	1000	0	111	75-125	0			
Chloroethane	959.5	100	1000	0	96	40-155	0			
Chloroform	995	30	1000	0	99.5	70-125	0			
Chloromethane	1008	100	1000	0	101	50-130	0			
cis-1,2-Dichloroethene	1051	30	1000	0	105	65-125	0			
cis-1,3-Dichloropropene	1091	30	1000	0	109	70-125	0			
Dibromochloromethane	1046	30	1000	0	105	65-135	0			
Dichlorodifluoromethane	1091	30	1000	0	109	35-135	0			
Ethylbenzene	1122	30	1000	0	112	75-125	0			
Isopropylbenzene	1122	30	1000	0	112	75-130	0			
Methyl tert-butyl ether	1170	30	1000	0	117	75-125	0			
Methylene chloride	1080	30	1000	0	108	55-145	0			
Styrene	1136	30	1000	0	114	75-125	0			
Tetrachloroethene	1120	30	1000	0	112	64-140	0			
Toluene	1120	30	1000	0	112	70-125	0			
trans-1,2-Dichloroethene	1068	30	1000	0	107	65-135	0			
trans-1,3-Dichloropropene	1109	30	1000	0	111	65-125	0			
Trichloroethene	1070	30	1000	0	107	75-125	0			
Trichlorofluoromethane	1142	30	1000	0	114	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6	Method: SW8260					
Vinyl chloride	1059	30	1000	0	106	60-125	0
Xylenes, Total	3363	90	3000	0	112	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>1028</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>1003</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>1020</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>1028</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>103</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

LCS Sample ID: LCS-47968-47968				Units: µg/Kg			Analysis Date: 05/03/13 02:32 AM			
Client ID:		Run ID: VMS9_130502A		SeqNo: 2303472		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1096	30	1000	0	110	70-135	0			
1,1,2,2-Tetrachloroethane	977	30	1000	0	97.7	55-130	0			
1,1,2-Trichloroethane	1062	30	1000	0	106	60-125	0			
1,1-Dichloroethane	1090	30	1000	0	109	75-125	0			
1,1-Dichloroethene	1099	30	1000	0	110	65-135	0			
1,2,4-Trichlorobenzene	1032	30	1000	0	103	65-130	0			
1,2-Dibromo-3-chloropropane	920	30	1000	0	92	40-135	0			
1,2-Dibromoethane	916.5	30	1000	0	91.6	70-125	0			
1,2-Dichlorobenzene	1163	30	1000	0	116	75-120	0			
1,2-Dichloroethane	1064	30	1000	0	106	70-135	0			
1,2-Dichloropropane	1096	30	1000	0	110	70-120	0			
1,3-Dichlorobenzene	1128	30	1000	0	113	70-125	0			
1,4-Dichlorobenzene	1153	30	1000	0	115	70-125	0			
2-Butanone	1074	200	1000	0	107	30-160	0			
2-Hexanone	992	30	1000	0	99.2	45-145	0			
4-Methyl-2-pentanone	1254	30	1000	0	125	45-145	0			
Acetone	1056	100	1000	0	106	20-160	0			
Benzene	1086	30	1000	0	109	75-125	0			
Bromodichloromethane	1073	30	1000	0	107	70-130	0			
Bromoform	874	30	1000	0	87.4	55-135	0			
Bromomethane	894	75	1000	0	89.4	30-160	0			
Carbon disulfide	1048	30	1000	0	105	45-160	0			
Carbon tetrachloride	1105	30	1000	0	110	65-135	0			
Chlorobenzene	1124	30	1000	0	112	75-125	0			
Chloroethane	961.5	100	1000	0	96.2	40-155	0			
Chloroform	1088	30	1000	0	109	70-125	0			
Chloromethane	776.5	100	1000	0	77.6	50-130	0			
cis-1,2-Dichloroethene	1077	30	1000	0	108	65-125	0			
cis-1,3-Dichloropropene	1066	30	1000	0	107	70-125	0			
Dibromochloromethane	1029	30	1000	0	103	65-135	0			
Dichlorodifluoromethane	721.5	30	1000	0	72.2	35-135	0			
Ethylbenzene	1154	30	1000	0	115	75-125	0			
Isopropylbenzene	1068	30	1000	0	107	75-130	0			
Methyl tert-butyl ether	1083	30	1000	0	108	75-125	0			
Methylene chloride	1068	30	1000	0	107	55-145	0			
Styrene	1204	30	1000	0	120	75-125	0			
Tetrachloroethene	1081	30	1000	0	108	64-140	0			
Toluene	1108	30	1000	0	111	70-125	0			
trans-1,2-Dichloroethene	1132	30	1000	0	113	65-135	0			
trans-1,3-Dichloropropene	1078	30	1000	0	108	65-125	0			
Trichloroethene	976.5	30	1000	0	97.6	75-125	0			
Trichlorofluoromethane	929	30	1000	0	92.9	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6		Method: SW8260				
Vinyl chloride	827	30	1000	0	82.7	60-125	0
Xylenes, Total	3279	90	3000	0	109	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>990</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>99</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>1006</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>101</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>1024</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>102</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>1004</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>100</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

MS Sample ID: 13041071-02A MS				Units: µg/Kg		Analysis Date: 04/27/13 09:24 AM				
Client ID:		Run ID: VMS6_130426A		SeqNo: 2294756		Prep Date: 04/26/13		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	939	30	1000	0	93.9	70-135	0			
1,1,2,2-Tetrachloroethane	812	30	1000	0	81.2	55-130	0			
1,1,2-Trichloroethane	834.5	30	1000	0	83.4	60-125	0			
1,1-Dichloroethane	914.5	30	1000	0	91.4	75-125	0			
1,1-Dichloroethene	943.5	30	1000	0	94.4	65-135	0			
1,2,4-Trichlorobenzene	869.5	30	1000	0	87	65-130	0			
1,2-Dibromo-3-chloropropane	644.5	30	1000	0	64.4	40-135	0			
1,2-Dibromoethane	1024	30	1000	0	102	70-125	0			
1,2-Dichlorobenzene	912.5	30	1000	0	91.2	75-120	0			
1,2-Dichloroethane	866.5	30	1000	0	86.6	70-135	0			
1,2-Dichloropropane	929.5	30	1000	0	93	70-120	0			
1,3-Dichlorobenzene	896.5	30	1000	0	89.6	70-125	0			
1,4-Dichlorobenzene	900.5	30	1000	0	90	70-125	0			
2-Butanone	1188	200	1000	0	119	30-160	0			
2-Hexanone	661.5	30	1000	0	66.2	45-145	0			
4-Methyl-2-pentanone	877.5	30	1000	0	87.8	45-145	0			
Acetone	1980	100	1000	0	198	20-160	0			S
Benzene	2960	30	1000	2035	92.6	75-125	0			
Bromodichloromethane	876	30	1000	0	87.6	70-130	0			
Bromoform	679	30	1000	0	67.9	55-135	0			
Bromomethane	954	75	1000	0	95.4	30-160	0			
Carbon disulfide	964.5	30	1000	0	96.4	45-160	0			
Carbon tetrachloride	883	30	1000	0	88.3	65-135	0			
Chlorobenzene	916	30	1000	0	91.6	75-125	0			
Chloroethane	1004	100	1000	0	100	40-155	0			
Chloroform	915.5	30	1000	0	91.6	70-125	0			
Chloromethane	1038	100	1000	0	104	50-130	0			
cis-1,2-Dichloroethene	895.5	30	1000	0	89.6	65-125	0			
cis-1,3-Dichloropropene	861	30	1000	0	86.1	70-125	0			
Dibromochloromethane	711	30	1000	0	71.1	65-135	0			
Dichlorodifluoromethane	1150	30	1000	0	115	35-135	0			
Ethylbenzene	1086	30	1000	140.5	94.6	75-125	0			
Isopropylbenzene	956.5	30	1000	0	95.6	75-130	0			
Methyl tert-butyl ether	873.5	30	1000	0	87.4	75-125	0			
Methylene chloride	913	30	1000	0	91.3	55-145	0			
Styrene	980	30	1000	0	98	75-125	0			
Tetrachloroethene	929.5	30	1000	0	93	64-140	0			
Toluene	7260	30	1000	6431	82.9	70-125	0			EO
trans-1,2-Dichloroethene	974	30	1000	0	97.4	65-135	0			
trans-1,3-Dichloropropene	849.5	30	1000	0	85	65-125	0			
Trichloroethene	863	30	1000	0	86.3	75-125	0			
Trichlorofluoromethane	1005	30	1000	0	100	25-185	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6		Method: SW8260				
Vinyl chloride	1082	30	1000	0	108	60-125	0
Xylenes, Total	4455	90	3000	1584	95.7	75-125	0
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>933.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>93.4</i>	<i>70-130</i>	<i>0</i>
<i>Surr: 4-Bromofluorobenzene</i>	<i>975.5</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>97.6</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Dibromofluoromethane</i>	<i>972</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>97.2</i>	<i>70-130</i>	<i>0</i>
<i>Surr: Toluene-d8</i>	<i>1096</i>	<i>0</i>	<i>1000</i>	<i>0</i>	<i>110</i>	<i>70-130</i>	<i>0</i>

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **47968** Instrument ID **VMS6** Method: **SW8260**

MSD				Sample ID: 13041071-02A MSD				Units: µg/Kg		Analysis Date: 04/27/13 09:48 AM	
Client ID:			Run ID: VMS6_130426A			SeqNo: 2294757		Prep Date: 04/26/13		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
1,1,1-Trichloroethane	979	30	1000	0	97.9	70-135	939	4.17	30		
1,1,2,2-Tetrachloroethane	876.5	30	1000	0	87.6	55-130	812	7.64	30		
1,1,2-Trichloroethane	891	30	1000	0	89.1	60-125	834.5	6.55	30		
1,1-Dichloroethane	931	30	1000	0	93.1	75-125	914.5	1.79	30		
1,1-Dichloroethene	948.5	30	1000	0	94.8	65-135	943.5	0.529	30		
1,2,4-Trichlorobenzene	996.5	30	1000	0	99.6	65-130	869.5	13.6	30		
1,2-Dibromo-3-chloropropane	669.5	30	1000	0	67	40-135	644.5	3.81	30		
1,2-Dibromoethane	1084	30	1000	0	108	70-125	1024	5.79	30		
1,2-Dichlorobenzene	979	30	1000	0	97.9	75-120	912.5	7.03	30		
1,2-Dichloroethane	896.5	30	1000	0	89.6	70-135	866.5	3.4	30		
1,2-Dichloropropane	967	30	1000	0	96.7	70-120	929.5	3.95	30		
1,3-Dichlorobenzene	977.5	30	1000	0	97.8	70-125	896.5	8.64	30		
1,4-Dichlorobenzene	962.5	30	1000	0	96.2	70-125	900.5	6.66	30		
2-Butanone	1172	200	1000	0	117	30-160	1188	1.36	30		
2-Hexanone	697.5	30	1000	0	69.8	45-145	661.5	5.3	30		
4-Methyl-2-pentanone	937	30	1000	0	93.7	45-145	877.5	6.56	30		
Acetone	2061	100	1000	0	206	20-160	1980	4.03	30	S	
Benzene	3039	30	1000	2035	100	75-125	2960	2.62	30		
Bromodichloromethane	972.5	30	1000	0	97.2	70-130	876	10.4	30		
Bromoform	706.5	30	1000	0	70.6	55-135	679	3.97	30		
Bromomethane	951.5	75	1000	0	95.2	30-160	954	0.262	30		
Carbon disulfide	965.5	30	1000	0	96.6	45-160	964.5	0.104	30		
Carbon tetrachloride	909	30	1000	0	90.9	65-135	883	2.9	30		
Chlorobenzene	950.5	30	1000	0	95	75-125	916	3.7	30		
Chloroethane	1047	100	1000	0	105	40-155	1004	4.14	30		
Chloroform	949	30	1000	0	94.9	70-125	915.5	3.59	30		
Chloromethane	1068	100	1000	0	107	50-130	1038	2.75	30		
cis-1,2-Dichloroethene	910	30	1000	0	91	65-125	895.5	1.61	30		
cis-1,3-Dichloropropene	907	30	1000	0	90.7	70-125	861	5.2	30		
Dibromochloromethane	765	30	1000	0	76.5	65-135	711	7.32	30		
Dichlorodifluoromethane	1160	30	1000	0	116	35-135	1150	0.866	30		
Ethylbenzene	1152	30	1000	140.5	101	75-125	1086	5.94	30		
Isopropylbenzene	1057	30	1000	0	106	75-130	956.5	9.98	30		
Methyl tert-butyl ether	928.5	30	1000	0	92.8	75-125	873.5	6.1	30		
Methylene chloride	935.5	30	1000	0	93.6	55-145	913	2.43	30		
Styrene	1035	30	1000	0	104	75-125	980	5.46	30		
Tetrachloroethene	984.5	30	1000	0	98.4	64-140	929.5	5.75	30		
Toluene	7550	30	1000	6431	112	70-125	7260	3.92	30	EO	
trans-1,2-Dichloroethene	965	30	1000	0	96.5	65-135	974	0.928	30		
trans-1,3-Dichloropropene	885	30	1000	0	88.5	65-125	849.5	4.09	30		
Trichloroethene	901.5	30	1000	0	90.2	75-125	863	4.36	30		
Trichlorofluoromethane	998	30	1000	0	99.8	25-185	1005	0.699	30		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: 47968	Instrument ID VMS6	Method: SW8260							
Vinyl chloride	1098	30	1000	0	110	60-125	1082	1.47	30
Xylenes, Total	4750	90	3000	1584	106	75-125	4455	6.4	30
<i>Surr: 1,2-Dichloroethane-d4</i>	936	0	1000	0	93.6	70-130	933.5	0.267	30
<i>Surr: 4-Bromofluorobenzene</i>	990	0	1000	0	99	70-130	975.5	1.48	30
<i>Surr: Dibromofluoromethane</i>	987.5	0	1000	0	98.8	70-130	972	1.58	30
<i>Surr: Toluene-d8</i>	1120	0	1000	0	112	70-130	1096	2.17	30

The following samples were analyzed in this batch:

13041049-62A	13041049-63A	13041049-64A
13041049-65A	13041049-66A	13041049-67A
13041049-68A	13041049-69A	13041049-70A
13041049-71A	13041049-72A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119658** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS-R119658					Units: % of sample		Analysis Date: 04/25/13 04:45 PM		
Client ID:	Run ID: MOIST_130425C				SeqNo: 2293113		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture U 0.050

LCS	Sample ID: LCS-R119658					Units: % of sample		Analysis Date: 04/25/13 04:45 PM		
Client ID:	Run ID: MOIST_130425C				SeqNo: 2293106		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 13041005-01ADUP					Units: % of sample		Analysis Date: 04/25/13 04:45 PM		
Client ID:	Run ID: MOIST_130425C				SeqNo: 2293084		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 17.67 0.050 0 0 0 0-0 15.08 15.8 20

DUP	Sample ID: 13041049-10ADUP					Units: % of sample		Analysis Date: 04/25/13 04:45 PM		
Client ID: SO-17360-042313-DR-010	Run ID: MOIST_130425C				SeqNo: 2293095		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 4.86 0.050 0 0 0 0-0 4.51 7.47 20

The following samples were analyzed in this batch:

13041049-01B	13041049-02B	13041049-03A
13041049-04A	13041049-05A	13041049-06A
13041049-07A	13041049-08A	13041049-09A
13041049-10A	13041049-11A	13041049-12A
13041049-13A	13041049-18A	13041049-19A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119732** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS-R119732					Units: % of sample		Analysis Date: 04/26/13 01:50 PM		
Client ID:	Run ID: MOIST_130426C				SeqNo: 2295022		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture U 0.050

LCS	Sample ID: LCS-R119732					Units: % of sample		Analysis Date: 04/26/13 01:50 PM		
Client ID:	Run ID: MOIST_130426C				SeqNo: 2295018		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 13041049-25ADUP					Units: % of sample		Analysis Date: 04/26/13 01:50 PM		
Client ID: SO-17360-042313-DR-025	Run ID: MOIST_130426C				SeqNo: 2295005		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 3.51 0.050 0 0 0 0-0 3.5 0.285 20

DUP	Sample ID: 13041049-26ADUP					Units: % of sample		Analysis Date: 04/26/13 01:50 PM		
Client ID: SO-17360-042313-DR-026	Run ID: MOIST_130426C				SeqNo: 2295007		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 2.02 0.050 0 0 0 0-0 2.06 1.96 20

The following samples were analyzed in this batch:

13041049-14A	13041049-15A	13041049-16A
13041049-17A	13041049-20A	13041049-21A
13041049-22A	13041049-23A	13041049-24A
13041049-25A	13041049-26A	13041049-27A
13041049-28A	13041049-29A	13041049-30A
13041049-31A	13041049-32A	13041049-33A
13041049-34A	13041049-35A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119733** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS-R119733					Units: % of sample		Analysis Date: 04/26/13 03:30 PM		
Client ID:	Run ID: MOIST_130426D				SeqNo: 2295050		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture U 0.050

LCS	Sample ID: LCS-R119733					Units: % of sample		Analysis Date: 04/26/13 03:30 PM		
Client ID:	Run ID: MOIST_130426D				SeqNo: 2295046		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 13041049-40ADUP					Units: % of sample		Analysis Date: 04/26/13 03:30 PM		
Client ID: SO-17360-042313-DR-040	Run ID: MOIST_130426D				SeqNo: 2295035		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 3.84 0.050 0 0 0 0-0 3.71 3.44 20

DUP	Sample ID: 13041049-41ADUP					Units: % of sample		Analysis Date: 04/26/13 03:30 PM		
Client ID: SO-17360-042313-DR-041	Run ID: MOIST_130426D				SeqNo: 2295037		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 3 0.050 0 0 0 0-0 3.46 14.2 20

The following samples were analyzed in this batch:

13041049-36A	13041049-37A	13041049-38A
13041049-39A	13041049-40A	13041049-41A
13041049-42A	13041049-43A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119864** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS-R119864				Units: % of sample			Analysis Date: 04/29/13 01:00 PM		
Client ID:	Run ID: MOIST_130429A				SeqNo: 2297764		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	0.03	0.050								J

LCS	Sample ID: LCS-R119864				Units: % of sample			Analysis Date: 04/29/13 01:00 PM		
Client ID:	Run ID: MOIST_130429A				SeqNo: 2297763		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	100	0.050	100		0	100	99.5-100.5	0		

DUP	Sample ID: 13041148-01ADUP				Units: % of sample			Analysis Date: 04/29/13 01:00 PM		
Client ID:	Run ID: MOIST_130429A				SeqNo: 2297746		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	11.54	0.050	0		0	0	0-0	11.31	2.01	20

DUP	Sample ID: 13041148-11ADUP				Units: % of sample			Analysis Date: 04/29/13 01:00 PM		
Client ID:	Run ID: MOIST_130429A				SeqNo: 2297757		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Moisture	11.96	0.050	0		0	0	0-0	17.01	34.9	20 R

The following samples were analyzed in this batch:

13041049-44A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119865** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS-R119865				Units: % of sample			Analysis Date: 04/29/13 01:40 PM		
Client ID:	Run ID: MOIST_130429B				SeqNo: 2297788		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture U 0.050

LCS	Sample ID: LCS-R119865				Units: % of sample			Analysis Date: 04/29/13 01:40 PM		
Client ID:	Run ID: MOIST_130429B				SeqNo: 2297787		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 13041050-01ADUP				Units: % of sample			Analysis Date: 04/29/13 01:40 PM		
Client ID:	Run ID: MOIST_130429B				SeqNo: 2297768		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 14.69 0.050 0 0 0 0-0 17.15 15.5 20

DUP	Sample ID: 13041130-11BDUP				Units: % of sample			Analysis Date: 04/29/13 01:40 PM		
Client ID:	Run ID: MOIST_130429B				SeqNo: 2297786		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 12.38 0.050 0 0 0 0-0 10.7 14.6 20

The following samples were analyzed in this batch:

13041049-45B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119875** Instrument ID **MOIST** Method: **A2540 G**

MBLK		Sample ID: WBLKS-R119875					Units: % of sample			Analysis Date: 04/29/13 02:10 PM		
Client ID:		Run ID: MOIST_130429C			SeqNo: 2298099			Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual		

Moisture U 0.050

LCS		Sample ID: LCS-R119875					Units: % of sample		Analysis Date: 04/29/13 02:10 PM		
Client ID:		Run ID: MOIST_130429C			SeqNo: 2298098		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP					Sample ID: 13041049-46BDUP					Units: % of sample			Analysis Date: 04/29/13 02:10 PM		
Client ID: SO-17360-042413-DR-058					Run ID: MOIST_130429C					SeqNo: 2298075		Prep Date:		DF: 1	
Analyte					Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 5.15 0.050 0 0 0 0-0 4.8 7.04 20

DUP					Sample ID: 13041049-58BDUP					Units: % of sample			Analysis Date: 04/29/13 02:10 PM		
Client ID: SO-17360-042413-DR-070					Run ID: MOIST_130429C					SeqNo: 2298088		Prep Date:		DF: 1	
Analyte					Result		PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 8.94 0.050 0 0 0 0-0 9.18 2.65 20

The following samples were analyzed in this batch:

13041049-46B	13041049-47B	13041049-48B
13041049-49B	13041049-50B	13041049-51B
13041049-52B	13041049-53B	13041049-54B
13041049-55B	13041049-56B	13041049-57B
13041049-58B	13041049-59B	13041049-60B
13041049-61B	13041049-62B	13041049-63B
13041049-64B	13041049-65B	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Conestoga-Rovers & Associates
Work Order: 13041049
Project: Former GRMP (017360-T05Y13-01Y13)

QC BATCH REPORT

Batch ID: **R119877** Instrument ID **MOIST** Method: **A2540 G**

MBLK	Sample ID: WBLKS-R119877				Units: % of sample			Analysis Date: 04/29/13 03:00 PM		
Client ID:	Run ID: MOIST_130429D				SeqNo: 2298131		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture U 0.050

LCS	Sample ID: LCS-R119877				Units: % of sample			Analysis Date: 04/29/13 03:00 PM		
Client ID:	Run ID: MOIST_130429D				SeqNo: 2298130		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 100 0.050 100 0 100 99.5-100.5 0

DUP	Sample ID: 13041049-66BDUP				Units: % of sample			Analysis Date: 04/29/13 03:00 PM		
Client ID: SO-17360-042413-DR-078	Run ID: MOIST_130429D				SeqNo: 2298109		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 11.63 0.050 0 0 0 0-0 13.24 12.9 20

DUP	Sample ID: 13041167-01BDUP				Units: % of sample			Analysis Date: 04/29/13 03:00 PM		
Client ID:	Run ID: MOIST_130429D				SeqNo: 2298124		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Moisture 12.6 0.050 0 0 0 0-0 13.86 9.52 20

The following samples were analyzed in this batch:

13041049-66B	13041049-67B	13041049-68B
13041049-69B	13041049-70B	13041049-71B

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



**CONESTOGA-ROVERS
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CHAIN OF CUSTODY RECORD

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170

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13041049
COC NO.: **PL-11147**
PAGE **1** OF **2**

(See Reverse Side for Instructions)

Project No/Phase/Task Code: 017360-T05Y13-01Y13				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 17360-T05-019																			
Project Name: Former RACER-Grand Rapids Metal Plant				Lab Contact: Tam Beamish				Lab Quote No:				Cooler No:																			
Project Location: Wyoming, MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)																			
Chemistry Contact: P. Wiseman				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other:				Total Containers/Sample TU Vols PAHs PCBs Sit TAL Metals																			
Sampler(s): D. Rivers																															
DATE (mm/dd/yy)				TIME (hh:mm)				MS/MSD Request				Date Shipped: 4/25/13																			
SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)				COMMENTS/ SPECIAL INSTRUCTIONS:																											
1	SO-17360-042213-DL-001			4/22/13	1430	SO	G	1					2		3	X	X	X													
2	↓ -DL-002			↓	1445	SO	G	1					2		3	X	X	X													
3	↓ -042313-DL-003			4/23/12	820	SO	G	1							1			X													
4	↓ -004				822			1							1			X													
5	↓ -005				830			1							1			X													
6	↓ -006				900			1							1			X													
7	↓ -007				902			1							1			X													
8	↓ -008				905			1							1			X													
9	↓ -009				907			1							1			X													
10	↓ -010				910			1							1			X													
11	↓ -011				915			1							1			X													
12	↓ -012				1000			1							1			X													
13	↓ -013				1002			1							1			X													
14	↓ -014				1005			1							1			X													
15	↓ -015				1007			1							1			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: 19				Notes/ Special Requirements: 3.4°C																			
RELINQUISHED BY				COMPANY				DATE				TIME				RECEIVED BY				COMPANY				DATE				TIME			
1. D. Rivers				CRA				4/25/13				1140				1.															
2.																2.															
3.																3.															

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Fax: (734) 453-5201

13041049
COC NO.: **PL- 11148**
PAGE **2** OF **5**

(See Reverse Side for Instructions)

Project No/ Phase/Task Code: 017360-T05 Y13-01 Y13				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 17360-T05-089			
Project Name: RACER-FRR GRMP				Lab Contact: T. Beamish				Lab Quote No:				Cooler No:			
Project Location: Wyoming, MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)			
Chemistry Contact: P. Wiseman				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other:				Total Containers/Sample			
Sampler(s): D. Rivers															
Carrier: Courier-Pickup				Airbill No:				Date Shipped: 4/25/13				COMMENTS/ SPECIAL INSTRUCTIONS:			
MS/MSD Request															

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 ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	PCBs	MS/MSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:
16	50-17360-042313-DR-016	4/23/13	1010	SO G	1								1	X		
17	-017		1012		1								1	X		
18	-018		1015		1								1	X		
19	-019		1058		1								1	X		
20	-020		1100		1								1	X		
21	-021		1102		1								1	X		
22	-022		1105		1								1	X		
23	-023		1107		1								1	X		
24	-024		1110		1								1	X		
25	-025		1142		2								2	X	X	
26	-026		1145		1								1	X		
27	-027		1147		1								1	X		
28	-028		1150		1								1	X		
29	-029		1152		1								1	X		
30	-030		1155		1								1	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: 16		Notes/ Special Requirements: 3.4°C	
				All Samples in Cooler must be on COC			

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
1. D. Rivers	CRA	4/25/13	1140	1. [Signature]			
2.				2.			
3.				3.			

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13041049
COC NO.: **PL-11149**
PAGE **3** OF **5**

(See Reverse Side for Instructions)

Project No/Phase/Task Code: 017360-T05 Y13-01 Y13				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 17360-T05-019			
Project Name: RACER-Fmr GRMP				Lab Contact: T. Beamish				Lab Quote No:				Cooler No:			
Project Location: Wyoming, MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)			
Chemistry Contact: P. Wiseman				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other:				Total Containers/Sample			
Sampler(s): D. Rivers															
Date Shipped: 4/25/13				Carrier: Carrier-Pickup				Airbill No:				Date Shipped: 4/25/13			
COMMENTS/ SPECIAL INSTRUCTIONS:															

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 ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	PCBs	PAH	MS/MSD Request
31	1	SO-17360-042313 DR-031			4/23/13	1320	SO	G	1								1	X		
32	2	-032				1322			1								1	X		
33	3	-033				1325			1								1	X		
34	4	-034				1330			1								1	X		
35	5	✓	✓	✓	✓	-035	✓	✓	1								1	X		
36	6	✓	✓	✓	✓	-036	✓	✓	1								1	X		
37	7	✓	✓	✓	✓	-037	✓	✓	1								1	X		
38	8	✓	✓	✓	✓	-038	✓	✓	1								1	X		
39	9	✓	✓	✓	✓	-039	✓	✓	1								1	X		
40	10	✓	✓	✓	✓	-040	✓	✓	1								1	X		
41	11	✓	✓	✓	✓	-041	✓	✓	1								1	X		
42	12	✓	✓	✓	✓	-042	✓	✓	1								1	X		
43	13	✓	✓	✓	✓	-043	✓	✓	1								1	X		
44	14	✓	✓	✓	✓	-044	✓	✓	1								1	X		

TAT Required in business days (use separate COCs for different TATs):				Total Number of Containers: 14		Notes/ Special Requirements:	
☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:				All Samples in Cooler must be on COC		3.42	

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
1. D. Rivers	CRA	4/25/13	1140	1. [Signature]			
2.				2.			
3.				3.			

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Phone: (734) 453-5123

Fax: (734) 453-5201

13041049
COC NO.: **PL- 11150**
PAGE **4** OF **5**

(See Reverse Side for Instructions)

Project No/Phase/Task Code: 017360-T05Y13-01Y13				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 17360-T05-019																			
Project Name: RACER-Fmr GRMP				Lab Contact: T. Beamish				Lab Quote No.:				Cooler No.:																			
Project Location: Wyoming, MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)																			
Chemistry Contact: P. Wiseman				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other:				Total Containers/Sample TCL VOCs PAHs PCBs Sik-TAL Metals MS/MSD Request																			
Sampler(s): D. Rivers																															
Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)			DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code	Grab (G) or Comp (C)	Unpreserved	Hydrochloric Acid (HCl)	Nitric Acid (HNO ₃)	Sulfuric Acid (H ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	PAHs	PCBs	Sik-TAL Metals	MS/MSD Request	Carrier: Concave - Pick-up	Airbill No.:	Date Shipped: 4/25/13	COMMENTS/ SPECIAL INSTRUCTIONS:						
45	SO-17360-042413-DR-057			4/24/13	1100	SO	G	1					2			3	X	X	X	X											
46	-058				1102			1					2			3	X	X	X	X											
47	-059				1105			1					2			3	X	X	X	X											
48	-060				1107			1					2			3	X	X	X	X											
49	-061				1110			1					2			3	X	X	X	X											
50	-062				1130			1					2			3	X	X	X	X											
51	-063				1132			1					2			3	X	X	X	X											
52	-064				1135			1					2			3	X	X	X	X											
53	-065				1137			1					2			3	X	X	X	X											
54	-066				1140			1					2			3	X	X	X	X											
55	-067				1145			1					2			3	X	X	X	X											
56	-068				1205			1					2			3	X	X	X	X											
57	-069				1207			1					2			3	X	X	X	X											
58	-070				1210			2					4			6	X	X	X	X					X						
59	-071				1212			1					2			3	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: 48		Notes/ Special Requirements: 3.4.0																	
All Samples in Cooler must be on COC																															
RELINQUISHED BY				COMPANY				DATE				TIME				RECEIVED BY				COMPANY				DATE				TIME			
1. D. Rivers				CNA				4/25/13				1140				1. [Signature]															
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)

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**CONESTOGA-ROVERS
& ASSOCIATES**

CHAIN OF CUSTODY RECORD

14496 Sheldon Road, Suite #200, Plymouth, Michigan 48170

Phone: (734) 453-5123

Fax: (734) 453-5201

13041049
COC NO.: **PL-11151**
PAGE **5** OF **5**

(See Reverse Side for Instructions)

Project No/Phase/Task Code: 017360-T05Y13-01Y13				Laboratory Name: ALS				Lab Location: Holland, MI				SSOW ID: 17360-T05-019			
Project Name: RACER - Fmr GRMP				Lab Contact: T. Beaumish				Lab Quote No:				Cooler No:			
Project Location: Wyoming, MI				SAMPLE TYPE				CONTAINER QUANTITY & PRESERVATION				ANALYSIS REQUESTED (See Back of COC for Definitions)			
Chemistry Contact: P. Wiseman				Matrix Code (see back of COC) Grab (G) or Comp (C)				Unpreserved Hydrochloric Acid (HCl) Nitric Acid (HNO ₃) Sulfuric Acid (H ₂ SO ₄) Sodium Hydroxide (NaOH) Methanol/Water (Soil VOC) EnCores 3x5-g, 1x25-g Other:				Total Containers/Sample TCL VOCs PAHs PCBs SIT TAL MEX			
Sampler(s): D. Rivers															
Date Shipped: 4/25/13				Carrier: County - Pickup				Airbill No:				MS/MSD Request			
COMMENTS/ SPECIAL INSTRUCTIONS:															

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 ₂ SO ₄)	Sodium Hydroxide (NaOH)	Methanol/Water (Soil VOC)	EnCores 3x5-g, 1x25-g	Other:	Total Containers/Sample	TCL VOCs	PAHs	PCBs	SIT TAL MEX	MS/MSD Request
60	1	SO-17360-042413-DR-072	4/24/13	1215	SO	G	1						2			3	X	X	X	X	
61	2	-073		1230			1						2			3	X	X	X	X	
62	3	-074		1232			1						2			3	X	X	X	X	
63	4	-075		1235			1						2			3	X	X	X	X	
64	5	✓ -076	✓	1245	✓	✓	1						2			3	X	X	X	X	
65	6	-077		1247			1						2			3	X	X	X	X	
66	7	-078		1250			1						2			3	X	X	X	X	
67	8	✓ -079	✓	1305	✓	✓	1						2			3	X	X	X	X	
68	9	-080		1307			1						2			3	X	X	X	X	
69	10	-081		1310			1						2			3	X	X	X	X	
70	11	-082		1312			1						2			3	X	X	X	X	
71	12	✓ -083	✓	1315	✓	✓	1						2			3	X	X	X	X	
72	13	Trip Blank		-		SO	-						2			2	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: 78		Notes/ Special Requirements: 3.4c	
All Samples in Cooler must be on COC							

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
1. D. Rivers	CNA	4/25/13	1140	1. [Signature]			
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)

Sample Receipt Checklist

Client Name: **CRA - PLYMOUTH**

Date/Time Received: **25-Apr-13 11:40**

Work Order: **13041049**

Received by: **KRW**

Checklist completed by Diane Shaw 25-Apr-13
eSignature Date

Reviewed by: Tom Bramish 25-Apr-13
eSignature Date

Matrices: Soil

Carrier name: Client

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☒
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time?	Yes ☒	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☒	No ☐	
Temperature(s)/Thermometer(s):	<u>3.4 c</u>		
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:	<u>4/25/2013 3:22:00 PM</u>		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☒
pH adjusted?	Yes ☐	No ☐	N/A ☒
pH adjusted by:			
Login Notes:			

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

ATTACHMENT C

DATA VALIDATION MEMORANDA



**CONESTOGA-ROVERS
& ASSOCIATES**

14496 Sheldon Road, Suite #200
Plymouth, Michigan 48170
Telephone: (734) 453-5123 Fax: (734) 453-5201
www.CRAworld.com

MEMORANDUM

TO: Jeni Quigley *ok*
FROM: Rawa Fleisher/tl/65/Det

REF. NO.: 17360
DATE: July 24, 2013
E-Mail and Hard Copy if Requested

RE: Analytical Results and Reduced Validation
Groundwater Monitoring Sampling
Former Grand Rapids Metals Plant
Wyoming, Michigan
April / May 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 former Grand Rapids Metals Plant site during April/May 2013. Samples were submitted to ALS Environmental (ALS) located in Holland, Michigan. A sample collection and analysis summary is presented in Table 1. A summary of the analytical methodology is presented in Table 2.

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, 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 2 and the documents entitled:

- i) "Former Grand Rapids Metal Plant Quality Assurance Project Plan (QAPP), Revision I, January 2006."
- 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.

CRA MEMORANDUM

SAMPLE HOLDING TIME AND PRESERVATION

The sample holding time criteria and sample preservation requirements for the analyses are summarized in Table 2. 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.

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.

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.

All method blank results were non-detect or did not contain target compounds with concentrations that impacted the investigative samples, 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 volatile organic compounds (VOC) and semi-volatile organic compounds (SVOC) determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Each individual surrogate compound is expected to meet the laboratory control limits with the exception of SVOC analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the base/neutral or acid fractions is acceptable as long as the recovery is at least 10 percent.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries met the above criteria.

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.

CRA MEMORANDUM

LABORATORY CONTROL SAMPLE (LCS) ANALYSES (CONTINUED)

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 3.

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. All percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision with the exception of the qualified sample presented in Table 4.

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 five (5) 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, five trip blanks was collected and submitted to the laboratory for VOC analysis. All results were non-detect for the compounds of interest or did not contain concentrations that impacted investigative samples.

CRA MEMORANDUM

FIELD QA/QC SAMPLES (CONTINUED)

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, six 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 for water samples. 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 for water samples.

All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision with the exception of tetrachloroethene in sample WG-17360-050313-MR-030 qualified and presented in Table 5.

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) unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL.

CONCLUSION

Based on this assessment of the information provided, the data produced by ALS were found to exhibit acceptable levels of accuracy and precision and may be used with the qualifications noted.

TABLE 1

**SAMPLE COLLECTION AND ANALYSIS SUMMARY
GROUNDWATER MONITORING SAMPLING
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL / MAY 2013**

					Analysis/Parameters					
Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	TCL VOC	TCL SVOC	Select Metals	Hex Cr	Tri Cr	Comments
ALS SDG Number: 1305241										
WG-17360-043013-MR-001	87-13	water	4/30/2013	12:45:00 PM	X					
WG-17360-043013-MR-002	MW6-03	water	4/30/2013	2:08:00 PM	X					
WG-17360-043013-MR-003	MW8-04	water	4/30/2013	3:29:00 PM	X					
WG-17360-043013-MR-004	MW8-04	water	4/30/2013	3:39:00 PM	X					Field Duplicate (MW8-04)
WG-17360-043013-MR-005	87-8	water	4/30/2013	4:43:00 PM	X					
WG-17360-050113-MR-006	MW5-03	water	5/1/2013	8:30:00 AM	X					
WG-17360-050113-MR-007	87-10	water	5/1/2013	10:10:00 AM	X					
WG-17360-050113-MR-008	87-11	water	5/1/2013	11:59:00 AM	X		X			
WS-17360-050113-MR-009	C-3	water	5/1/2013	12:15:00 PM	X					
WG-17360-050113-MR-010	MW9-04	water	5/1/2013	12:52:00 PM	X					MS/MSD
WG-17360-050113-MR-011	MW4-03	water	5/1/2013	1:55:00 PM	X					
WS-17360-050113-MR-012	C-2	water	5/1/2013	2:20:00 PM	X					
WS-17360-050113-MR-013	C-1	water	5/1/2013	2:35:00 PM	X					
WG-17360-050113-MR-014	87-9	water	5/1/2013	3:39:00 PM	X					
WG-17360-050113-MR-015	87-9	water	5/1/2013	3:49:00 PM	X					Field Duplicate (87-9)
WG-17360-050113-MR-016	MW7-03	water	5/1/2013	4:09:00 PM	X					
WG-17360-050113-MR-017	PWDISCH	water	5/1/2013	5:00:00 PM	X					
WG-17360-050113-MR-018	86-3	water	5/1/2013	6:42:00 PM	X					
WG-17360-050213-MR-019	MW10-04	water	5/2/2013	8:59:00 AM	X					
WG-17360-050213-MR-020	MW11S-05	water	5/2/2013	10:04:00 AM	X					MS/MSD
WG-17360-050213-MR-021	MW11D-04	water	5/2/2013	10:39:00 AM	X					
WG-17360-050213-MR-022	88-4	water	5/2/2013	12:35:00 PM	X					
WG-17360-050213-MR-023	88-3	water	5/2/2013	1:18:00 PM	X					
WG-17360-050213-MR-024	88-2	water	5/2/2013	1:54:00 PM	X					
WG-17360-050213-MR-025	88-2	water	5/2/2013	2:04:00 PM	X					Field Duplicate (88-2)
WG-17360-050213-MR-026	MW17-06	water	5/2/2013	3:31:00 PM	X					
WG-17360-050213-MR-027	MW28-12	water	5/2/2013	4:22:00 PM	X					

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
GROUNDWATER MONITORING SAMPLING
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL / MAY 2013

						Analysis/Parameters					
Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	TCL VOC	TCL SVOC	Select Metals	Hex Cr	Tri Cr	Comments	
ALS SDG Number: 1305241											
WG-17360-050213-MR-028	MW53-12	water	5/2/2013	5:02:00 PM	X						
WG-17360-050313-MR-029	MW13-04	water	5/3/2013	10:40:00 AM	X						
WG-17360-050313-MR-030	MW43-12	water	5/3/2013	11:40:00 AM	X						
WG-17360-050313-MR-031	MW45-12	water	5/3/2013	10:21:00 AM	X	X	X				
WG-17360-050313-MR-032	MW44-12	water	5/3/2013	11:42:00 AM	X	X	X			MS/MSD	
WG-17360-050313-MR-033	MW43-12	water	5/3/2013	11:55:00 AM	X						
WG-17360-050313-MR-034	MW50-12	water	5/3/2013	12:20:00 PM	X	X					
WG-17360-050313-MR-035	MW38-12	water	5/3/2013	4:52:00 PM	X		X				
WG-17360-050313-MR-036	MW37-12	water	5/3/2013	4:17:00 PM	X		X				
WG-17360-050313-MR-037	MW51-12	water	5/3/2013	4:40:00 PM	X	X					
WG-17360-050313-MR-038	MW51-12	water	5/3/2013	4:50:00 PM	X	X					
WG-17360-050313-MR-039	MW52-12	water	5/3/2013	5:20:00 PM	X	X					
TB-17360-050313-MR-040	Trip Blank	water	5/3/2013	---	X					Trip Blank	
TB-17360-050313-MR-041	Trip Blank	water	5/3/2013	---	X					Trip Blank	
TB-17360-050313-MR-042	Trip Blank	water	5/3/2013	---	X					Trip Blank	
WG-17360-050613-EB-040	85-2	water	5/6/2013	11:55:00 AM	X		X				
WG-17360-050613-EB-041	MW15-04	water	5/6/2013	12:25:00 PM	X						
WG-17360-050613-EB-042	85-7	water	5/6/2013	12:50:00 PM	X		X				
WG-17360-050613-EB-043	MW27-11	water	5/6/2013	1:15:00 PM	X						
WG-17360-050613-EB-044	MW42-12	water	5/6/2013	2:28:00 PM	X					MS/MSD	
WG-17360-050613-EB-045	MW39-12	water	5/6/2013	3:50:00 PM	X		X				
WG-17360-050713-EB-046	MW40-12	water	5/7/2013	10:45:00 AM	X						
WG-17360-050713-EB-047	MW41-12	water	5/7/2013	12:05:00 PM	X						
GW-17360-050713-BW-048	MW57-13	water	5/7/2013	10:34:00 AM	X						
GW-17360-050713-BW-049	MW29-12	water	5/7/2013	11:25:00 AM	X						
GW-17360-050713-BW-050	MW30-12	water	5/7/2013	12:20:00 PM	X						
WG-17360-050713-MR-051	MW34-12	water	5/7/2013	10:50:00 AM	X		X				

TABLE 1

**SAMPLE COLLECTION AND ANALYSIS SUMMARY
GROUNDWATER MONITORING SAMPLING
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL / MAY 2013**

					Analysis/Parameters					
Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	TCL VOC	TCL SVOC	Select Metals	Hex Cr	Tri Cr	Comments
ALS SDG Number: 1305241										
WG-17360-050713-MR-052	MW35-12	water	5/7/2013	11:25:00 AM	X					
GW-17360-050713-BW-053	85-6	water	5/7/2013	2:26:00 PM	X	X				
GW-17360-050713-BW-054	MW2-03	water	5/7/2013	1:55:00 PM	X					
GW-17360-050713-BW-055	MW1-03	water	5/7/2013	1:15:00 PM	X					
WG-17360-050713-MR-056	MW32-12	water	5/7/2013	1:55:00 PM	X					
WG-17360-050713-MR-057	MW33-12	water	5/7/2013	2:25:00 PM	X		X			
WG-17360-050713-MR-060	MW36-12	water	5/7/2013	3:10:00 PM	X					
WG-17360-050713-EB-058	85-1	water	5/7/2013	2:30:00 PM	X					
WG-17360-050713-EB-059	MW31-12	water	5/7/2013	3:30:00 PM	X		X			
WG-17360-050713-EB-061	MW46-12	water	5/7/2013	6:35:00 PM	X	X	X	X	X	MS/MSD
TB-17360-050713-EB-062	Trip Blank	water	5/6/2013	---	X					Trip Blank
ALS SDG Number: 1305508										
WG-17360-051313-EB-004	MW48-13	water	5/13/2013	2:40:00 PM	X					
WG-17360-051313-EB-005	MW49-13	water	5/13/2013	3:35:00 PM	X					
TB-17360-051313-EB	Trip Blank	water	5/13/2013	---	X					Trip Blank

Notes:

- VOC - Volatile Organic Compounds
- SVOC - Semi-volatile Organic Compounds
- Hex Cr - Hexavalent Chromium
- Tri Cr - Trivalent Chromium
- DUP - Field Duplicate of sample identified in parenthesis
- MS/MSD - Matrix Spike/Matrix Spike Duplicate
- TCL - Target Compound List

TABLE 2

**ANALYTICAL METHODS AND HOLDING TIME CRITERIA
GROUNDWATER MONITORING SAMPLING
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL / MAY 2013**

<i>Parameter</i>	<i>Method</i>	<i>Matrix</i>	<i>Holding Time</i>	
			<i>Collection to Extraction (Days)</i>	<i>Collection or Extraction to Analysis (Days)</i>
TCL VOC	SW-846 8260	Water	-	14
TCL SVOC	SW-846 8270C	Water	7	40
Select Metals (except Mercury)	SW-846 6020	Water	-	180
Mercury	SW-846 7470A	Water	-	28
Hexavalent Chromium	SW-846 7196	Water	-	24 hours
Trivalent Chromium	SW-846 7196 (calculation)	Water	-	24 hours

Notes:

SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, Third Edition, 1986, with subsequent revisions.

VOC - Volatile Organic Compounds

SVOC - Semi-volatile Organic Compounds

TCL - Target Compound List

TABLE 3

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING LABORATORY CONTROL SAMPLE RESULTS
GROUNDWATER MONITORING SAMPLING
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL / MAY 2013

<i>Parameter</i>	<i>Analyte</i>	<i>LCS Date</i>	<i>LCS (percent)</i>	<i>Control Limits (percent)</i>	<i>Associated Sample ID</i>	<i>Qualified Results</i>	<i>Units</i>
TCL SVOC	Hexachlorocyclopentadiene	5/13/2013	24.2	25-105	GW-17360-050713-BW-053	5.0 UJ	µg/L
					WG-17360-050713-EB-061	5.0 UJ	µg/L
TCL VOC	4-Methyl-2-pentanone	5/14/2013	146	60-135	WG-17360-050313-MR-032	15 J	µg/L
TCL VOC	Acetone	5/16/2013	156	40-140	TB-17360-051313-EB	3.5 J	µg/L

Notes:

J - Estimated concentration

UJ - Not detected; associated reporting limit is estimated

LCS - Laboratory control sample

VOC - Volatile Organic Compounds

SVOC - Semi-volatile Organic Compounds

TCL - Target Compound List

TABLE 4

QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS
GROUNDWATER MONITORING SAMPLING
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL / MAY 2013

<i>Parameter</i>	<i>Sample ID</i>	<i>Analyte</i>	<i>MS</i>	<i>MSD</i>	<i>RPD</i>	<i>Control Limits</i>		<i>Qualified Result</i>	<i>Units</i>
			<i>% Recovery</i>	<i>% Recovery</i>	<i>(percent)</i>	<i>% Recovery</i>	<i>RPD</i>		
TCL VOC	WG-17360-050313-MR-032	4-Methyl-2-pentanone	148	147	0.399	60-135	30	15 J	µg/L
		Chloromethane	69.6	68	2.33	70-125	30	25 UJ	µg/L

Notes:

J - Estimated concentration

UJ - Not detected; associated reporting limit is estimated

MS - Matrix spike.

MSD - Matrix spike duplicate.

RPD - Relative percent difference.

VOC - Volatile Organic Compounds

TCL - Target Compound List

TABLE 5

**QUALIFIED SAMPLE DATA DUE TO VARIABILITY IN FIELD DUPLICATE RESULTS
GROUNDWATER MONITORING SAMPLING
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL / MAY 2013**

<i>Parameter</i>	<i>Analyte</i>	<i>RPD/Diff</i>	<i>Sample ID</i>	<i>Qualified Result</i>	<i>Field Duplicate Sample ID</i>	<i>Qualified Result</i>	<i>Units</i>
TCL VOC	Tetrachloroethene	2.6	WG-17360-050313-MR-030	1.8 J	WG-17360-050313-MR-033	4.4 J	µg/L

Notes:

J - Estimated concentration

Diff - Difference (i.e. >1X RL for waters or >2XRL for soils.)

RPD - Relative percent difference

VOC - Volatile Organic Compounds

TCL - Target Compound List



**CONESTOGA-ROVERS
& ASSOCIATES**

14496 Sheldon Road, Suite #200
Plymouth, Michigan 48170
Telephone: (734) 453-5123 Fax: (734) 453-5201
www.CRAworld.com

MEMORANDUM

TO: Jeni Quigley *OK*
FROM: Rawa Fleisher/tl/66/Det

REF. NO.: 17360
DATE: August 5, 2013
E-Mail and Hard Copy if Requested

RE: **Analytical Results and Reduced Validation
Site-Wide and Bulk Unload Area Investigations
Former Grand Rapids Metals Plant
Wyoming, Michigan
April 2013**

INTRODUCTION

The following document details a reduced validation of analytical results for soil and water samples collected in support of the Site-Wide and Bulk Unload Area Investigations at the former Grand Rapids Metals Plant site during April 2013. Samples were submitted to ALS Environmental (ALS) located in Holland, Michigan. A sample collection and analysis summary is presented in Table 1. A summary of the analytical methodology is presented in Table 2.

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, 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 2 and the documents entitled:

- i) "Former Grand Rapids Metal Plant Quality Assurance Project Plan (QAPP), Revision I, January 2006."
- 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.

CRA MEMORANDUM

SAMPLE HOLDING TIME AND PRESERVATION

The sample holding time criteria and sample preservation requirements for the analyses are summarized in Table 2. 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.

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.

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.

All method blank results were non-detect or did not contain target compounds with concentrations that impacted the investigative samples with the exception of those samples qualified and presented in Table 3.

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 volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), polynuclear aromatic hydrocarbons (PAH), and polychlorinated biphenyls (PCB) determinations were spiked with the appropriate number of surrogate compounds prior to sample extraction and/or analysis.

Each individual surrogate compound is expected to meet the laboratory control limits with the exception of SVOC analyses. According to the "Guidelines" for SVOC analyses, up to one outlying surrogate in the base/neutral or acid fractions is acceptable as long as the recovery is at least 10 percent.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries met the above criteria.

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.

CRA MEMORANDUM

LABORATORY CONTROL SAMPLE (LCS) ANALYSES (CONTINUED)

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 or did not impact the accuracy of the associated samples, demonstrating acceptable analytical accuracy.

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. All percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

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 with the exception of the qualified samples presented in Table 4.

FIELD QA/QC SAMPLES

The field QA/QC consisted of two (2) trip blank samples, and five (5) field duplicate sample sets.

Trip Blank Sample Analysis

To evaluate contamination from sample collection, transportation, storage, and analytical activities, five trip blanks were collected and submitted to the laboratory for VOC analysis. All results were non-detect for the compounds of interest or did not contain concentrations that impacted investigative samples.

CRA MEMORANDUM

FIELD QA/QC SAMPLES (CONTINUED)

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, five 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 and 100 percent for water and soil samples, respectively. 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 or two times the RL value for water and soil samples, respectively. All field duplicate results were within acceptable agreement, demonstrating acceptable sampling and analytical precision with the exception of metals analyses in sample SO-17360-042413-DR-075 qualified and presented in Table 5.

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) unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL.

CONCLUSION

Based on this assessment of the information provided, the data produced by ALS were found to exhibit acceptable levels of accuracy and precision and may be used with the qualifications noted.

TABLE 1

**SAMPLE COLLECTION AND ANALYSIS SUMMARY
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

							Analysis/Parameters						
Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	VOCs	SVOCs	PAHs	PCB	Metals Hex Cr/Tri Cr	Comments	
ALS SDG Number: 13041050													
SO-17360-042413-DR-050	SB232-13	soil	0	2	4/24/2013	8:45:00 AM		X		X	X		
SO-17360-042413-DR-051	SB232-13	soil	2	4	4/24/2013	8:47:00 AM		X		X	X		
SO-17360-042413-DR-052	SB232-13	soil	4	6	4/24/2013	8:50:00 AM		X		X	X		
SO-17360-042413-DR-053	SB232-13	soil	6	8	4/24/2013	9:05:00 AM		X		X	X		
SO-17360-042413-DR-054	SB232-13	soil	8	10	4/24/2013	9:10:00 AM		X		X	X		
SO-17360-042413-DR-055	SB239-13	soil	2	4	4/24/2013	9:45:00 AM					X	X	MS/MSD
SO-17360-042413-DR-056	SB240-13	soil	2	4	4/24/2013	10:25:00 AM					X	X	MS/MSD
ALS SDG Number: 13041047													
GW-17360-042513-DR-084	MW57-13	water	10	20	04/25/2013	8:50			X				MS/MSD
GW-17360-042513-DR-085	MW58-13	water	13.5	18.5	04/25/2013	9:45	X		X		X		
GW-17360-042513-DR-086	MW58-13	water	13.5	18.5	04/25/2013	10:15	X		X		X		Field Duplicate (MW58-13)
Trip Blank-GW	Trip Blank	water	---	---	04/25/2013	---	X						Trip Blank

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013

							Analysis/Parameters						
Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	VOCs	SVOCs	PAHs	PCB	Metals Hex Cr / Tri Cr	Comments	
ALS SDG Number: 13041049													
SO-17360-042213-DR-001	SB221-13/MW58-13	soil	1	3	04/22/2013	14:30	X		X		X		
SO-17360-042213-DR-002	SB221-13/MW58-13	soil	6.5	8.5	04/22/2013	14:45	X		X		X	MS/MSD	
SO-17360-042313-DR-003	SB223-13	soil	6	8	04/23/2013	8:20				X		MS/MSD	
SO-17360-042313-DR-004	SB223-13	soil	8	10	04/23/2013	8:22				X			
SO-17360-042313-DR-005	SB223-13	soil	10	12	04/23/2013	8:30				X			
SO-17360-042313-DR-006	SB224-13	soil	0	2	04/23/2013	9:00				X			
SO-17360-042313-DR-007	SB224-13	soil	2	4	04/23/2013	9:02				X			
SO-17360-042313-DR-008	SB224-13	soil	4	6	04/23/2013	9:05				X			
SO-17360-042313-DR-009	SB224-13	soil	6	8	04/23/2013	9:07				X			
SO-17360-042313-DR-010	SB224-13	soil	8	10	04/23/2013	9:10				X			
SO-17360-042313-DR-011	SB224-13	soil	10	12	04/23/2013	9:15				X			
SO-17360-042313-DR-012	SB225-13	soil	0	2	04/23/2013	10:00				X			
SO-17360-042313-DR-013	SB225-13	soil	2	4	04/23/2013	10:02				X			
SO-17360-042313-DR-014	SB225-13	soil	4	6	04/23/2013	10:05				X			
SO-17360-042313-DR-015	SB225-13	soil	6	8	04/23/2013	10:07				X			
SO-17360-042313-DR-016	SB225-13	soil	6	8	04/23/2013	10:10				X		Field Duplicate (SB225-13)	
SO-17360-042313-DR-017	SB225-13	soil	8	10	04/23/2013	10:12				X			
SO-17360-042313-DR-018	SB225-13	soil	10	12	04/23/2013	10:15				X			
SO-17360-042313-DR-019	SB226-13	soil	0	2	04/23/2013	10:58				X			
SO-17360-042313-DR-020	SB226-13	soil	2	4	04/23/2013	11:00				X			
SO-17360-042313-DR-021	SB226-13	soil	4	6	04/23/2013	11:02				X			

TABLE 1

**SAMPLE COLLECTION AND ANALYSIS SUMMARY
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

								Analysis/Parameters						
Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	VOCs	SVOCs	PAHs	PCB	Metals Hex Cr / Tri Cr	Comments		
ALS SDG Number: 13041049 (continued)														
SO-17360-042313-DR-022	SB226-13	soil	6	8	04/23/2013	11:05				X		MS/MSD		
SO-17360-042313-DR-023	SB226-13	soil	8	10	04/23/2013	11:07				X				
SO-17360-042313-DR-024	SB226-13	soil	10	12	04/23/2013	11:10				X				
SO-17360-042313-DR-025	SB227-13	soil	0	2	04/23/2013	11:42				X				
SO-17360-042313-DR-026	SB227-13	soil	2	4	04/23/2013	11:45				X				
SO-17360-042313-DR-027	SB227-13	soil	4	6	04/23/2013	11:47				X				
SO-17360-042313-DR-028	SB227-13	soil	6	8	04/23/2013	11:50				X				
SO-17360-042313-DR-029	SB227-13	soil	8	10	04/23/2013	11:52				X				
SO-17360-042313-DR-030	SB227-13	soil	10	12	04/23/2013	11:55				X				
SO-17360-042313-DR-031	SB228-13	soil	0	2	04/23/2013	13:20				X				
SO-17360-042313-DR-032	SB228-13	soil	2	4	04/23/2013	13:22				X				
SO-17360-042313-DR-033	SB228-13	soil	4	6	04/23/2013	13:25				X				
SO-17360-042313-DR-034	SB228-13	soil	6	8	04/23/2013	13:30				X				
SO-17360-042313-DR-035	SB228-13	soil	8	10	04/23/2013	13:32				X				
SO-17360-042313-DR-036	SB228-13	soil	10	12	04/23/2013	13:37				X				
SO-17360-042313-DR-037	SB228-13	soil	10	12	04/23/2013	13:40				X	Field Duplicate (SB228-13)			
SO-17360-042313-DR-038	SB229-13	soil	6	8	04/23/2013	14:22				X				
SO-17360-042313-DR-039	SB229-13	soil	8	10	04/23/2013	14:25				X				
SO-17360-042313-DR-040	SB229-13	soil	10	12	04/23/2013	14:30				X				
SO-17360-042313-DR-041	SB230-13	soil	6	8	04/23/2013	15:10				X	MS/MSD			
SO-17360-042313-DR-042	SB230-13	soil	10	12	04/23/2013	15:15				X				

TABLE 1

**SAMPLE COLLECTION AND ANALYSIS SUMMARY
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

							Analysis/Parameters						
Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	VOCs	SVOCs	PAHs	PCB	Metals Hex Cr / Tri Cr	Comments	
ALS SDG Number: 13041049 (continued)													
SO-17360-042313-DR-043	SB222-13	soil	0	2	04/23/2013	15:50			X				
SO-17360-042313-DR-044	SB222-13	soil	10	12	04/23/2013	16:00			X				
SO-17360-042413-DR-057	SB241-13	soil	0	2	04/24/2013	11:00	X		X	X	X		
SO-17360-042413-DR-058	SB241-13	soil	2	4	04/24/2013	11:02	X		X	X	X		
SO-17360-042413-DR-059	SB241-13	soil	4	6	04/24/2013	11:05	X		X	X	X		
SO-17360-042413-DR-060	SB241-13	soil	6	8	04/24/2013	11:07	X		X	X	X		
SO-17360-042413-DR-061	SB241-13	soil	8	10	04/24/2013	11:10	X		X	X	X		
SO-17360-042413-DR-062	SB242-13	soil	0	2	04/24/2013	11:30	X		X	X	X		
SO-17360-042413-DR-063	SB242-13	soil	2	4	04/24/2013	11:32	X		X	X	X		
SO-17360-042413-DR-064	SB242-13	soil	2	4	04/24/2013	11:35	X		X	X	X	Field Duplicate (SB242-13)	
SO-17360-042413-DR-065	SB242-13	soil	4	6	04/24/2013	11:37	X		X	X	X		
SO-17360-042413-DR-066	SB242-13	soil	6	8	04/24/2013	11:40	X		X	X	X		
SO-17360-042413-DR-067	SB242-13	soil	8	10	04/24/2013	11:45	X		X	X	X		
SO-17360-042413-DR-068	SB243-13	soil	0	2	04/24/2013	12:05	X		X	X	X		
SO-17360-042413-DR-069	SB243-13	soil	2	4	04/24/2013	12:07	X		X	X	X		
SO-17360-042413-DR-070	SB243-13	soil	4	6	04/24/2013	12:10	X		X	X	X	MS/MSD	
SO-17360-042413-DR-071	SB243-13	soil	6	8	04/24/2013	12:12	X		X	X	X		
SO-17360-042413-DR-072	SB243-13	soil	8	10	04/24/2013	12:15	X		X	X	X		
SO-17360-042413-DR-073	SB244-13	soil	0	2	04/24/2013	12:30	X		X	X	X		
SO-17360-042413-DR-074	SB244-13	soil	2	4	04/24/2013	12:32	X		X	X	X		
SO-17360-042413-DR-075	SB244-13	soil	2	4	04/24/2013	12:35	X		X	X	X	Field Duplicate (SB244-13)	

TABLE 1

SAMPLE COLLECTION AND ANALYSIS SUMMARY
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013

							Analysis/Parameters						
Sample Identification	Location	Matrix	Initial Sample Depth (ft. bgs)	Final Sample Depth (ft. bgs)	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	VOCs	SVOCs	PAHs	PCB	Metals Hex Cr / Tri Cr	Comments	
ALS SDG Number: 13041049 (continued)													
SO-17360-042413-DR-076	SB244-13	soil	4	6	04/24/2013	12:45	X	X	X	X			
SO-17360-042413-DR-077	SB244-13	soil	6	8	04/24/2013	12:47	X	X	X	X			
SO-17360-042413-DR-078	SB244-13	soil	8	10	04/24/2013	12:50	X	X	X	X			
SO-17360-042413-DR-079	SB245-13	soil	0	2	04/24/2013	13:05	X	X	X	X		MS/MSD	
SO-17360-042413-DR-080	SB245-13	soil	2	4	04/24/2013	13:07	X	X	X	X			
SO-17360-042413-DR-081	SB245-13	soil	4	6	04/24/2013	13:10	X	X	X	X			
SO-17360-042413-DR-082	SB245-13	soil	6	8	04/24/2013	13:12	X	X	X	X			
SO-17360-042413-DR-083	SB245-13	soil	8	10	04/24/13	13:15	X	X	X	X			
Trip Blank	Trip Blank	soil	---	---	04/22/2013	---	X					Trip Blank	

Notes:

ft. bgs - Feet below ground surface.

VOC - Volatile Organic Compounds

SVOC - Semi-volatile Organic Compounds

PAH - Polynuclear Aromatic Hydrocarbons

PCB - Polychlorinated Biphenyls

Hex Cr - Hexavalent Chromium

Tri Cr - Trivalent Chromium

MS - Matrix Spike

MSD - Matrix Spike Duplicate

TABLE 2

**ANALYTICAL METHODS AND HOLDING TIME CRITERIA
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

<i>Parameter</i>	<i>Method</i>	<i>Matrix</i>	<i>Holding Time</i>	
			<i>Collection to Extraction (Days)</i>	<i>Collection or Extraction to Analysis (Days)</i>
TCL VOC	SW-846 8260	Water	-	14
	SW-846 8260B	Soil	-	14
TCL SVOC	SW-846 8270C	Water	7	40
	SW-846 8270C	Soil	14	40
TCL PCB	SW-846 8082	Soil	14	40
TAL Metals	SW-846 6020	Water/Soil	-	180
Mercury	SW-846 7470A/7471A	Water	-	28
Hexavalent Chromium	SW-846 7196	Soil	30	24 hours
Trivalent Chromium	SW-846 7196	Soil	30	24 hours

Notes:

SW-846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, Third Edition, 1986, with subsequent revisions.

PCB - Polychlorinated biphenyls

TAL - Target Analyte List

TCL - Target Compound List

SVOC - Semi-volatile organic compound

VOC - Volatile organic compound

TABLE 3

**QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

<i>Parameter</i>	<i>Analyte</i>	<i>Analysis Date</i>	<i>Blank Result *</i>	<i>Sample ID</i>	<i>Original Result</i>	<i>Qualified Result</i>	<i>Units</i>
Metals	Thallium	04/27/13	0.0307	GW-17322-040708-CB-004	0.14 J	0.67 U	mg/kg
					0.042 J	0.66 U	mg/kg
					0.042 J	0.43 U	mg/kg
					0.11 J	0.43 U	mg/kg
					0.064 J	0.42 U	mg/kg
Metals	Antimony	04/25/13	0.0004578	GW-17360-042513-DR-086	0.00011 J	0.0050 U	mg/L
				GW-17360-042513-DR-085	0.00012 J	0.0050 U	mg/L
Metals	Copper	05/02/13	0.1862	SO-17360-042413-DR-071	3.9	3.9 U	mg/kg
				SO-17360-042413-DR-083	2.8	2.8 U	mg/kg
Metals	Mercury	04/30/13	0.00125	SO-17360-042413-DR-059	0.0047 J	0.036 U	mg/kg
				SO-17360-042413-DR-060	0.0052 J	0.040 U	mg/kg
				SO-17360-042413-DR-058	0.0047 J	0.037 U	mg/kg
Metals	Molybdenum	05/02/13	0.1296	SO-17360-042413-DR-069	0.74 J	1.9 U	mg/kg
				SO-17360-042413-DR-070	1.9 J	2.1 U	mg/kg
				SO-17360-042413-DR-071	0.54 J	1.8 U	mg/kg
				SO-17360-042413-DR-072	1.3 J	1.8 U	mg/kg
				SO-17360-042413-DR-078	0.47 J	1.8 U	mg/kg
				SO-17360-042413-DR-079	0.42 J	2.0 U	mg/kg
				SO-17360-042413-DR-080	1.0 J	2.0 U	mg/kg
				SO-17360-042413-DR-081	1.1 J	2.1 U	mg/kg
				SO-17360-042413-DR-082	0.48 J	2.0 U	mg/kg
				SO-17360-042413-DR-083	0.35 J	2.1 U	mg/kg

TABLE 3

**QUALIFIED SAMPLE RESULTS DUE TO ANALYTE CONCENTRATIONS IN THE METHOD BLANKS
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

<i>Parameter</i>	<i>Analyte</i>	<i>Analysis Date</i>	<i>Blank Result *</i>	<i>Sample ID</i>	<i>Original Result</i>	<i>Qualified Result</i>	<i>Units</i>
Metals	Selenium	04/29/13	0.0008103	GW-17360-042513-DR-086	0.0033 J	0.0050 U	mg/L
				GW-17360-042513-DR-085	0.0034 J	0.0050 U	mg/L
Metals	Selenium	05/01/13	0.0529	SO-17360-042213-DR-001	0.24 J	0.40 U	mg/kg
				SO-17360-042213-DR-002	0.22 J	0.40 U	mg/kg
				SO-17360-042413-DR-057	0.25 J	0.43 U	mg/kg
				SO-17360-042413-DR-059	0.13 J	0.39 U	mg/kg
				SO-17360-042413-DR-060	0.086 J	0.40 U	mg/kg
				SO-17360-042413-DR-061	0.18 J	0.40 U	mg/kg
				SO-17360-042413-DR-058	0.17 J	0.36 U	mg/kg

Notes:

* - Blank result adjusted for sample factors where applicable.

U - Not detected at the associated reporting limit.

J - Estimated concentration.

TABLE 4

**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

<i>Parameter</i>	<i>Sample ID</i>	<i>Analyte</i>	<i>MS</i>	<i>MSD</i>	<i>RPD</i>	<i>Control Limits</i>		<i>Qualified Result</i>	<i>Units</i>
			<i>% Recovery</i>	<i>% Recovery</i>	<i>(percent)</i>	<i>% Recovery</i>	<i>RPD</i>		
Metals	SO-17360-042213-DR-002	Barium	138	142	0.613	75-125	25	13.0 J	mg/kg
	SO-17360-042413-DR-057							110.0 J	mg/kg
	SO-17360-042413-DR-060							14.0 J	mg/kg
	SO-17360-042413-DR-061							26.0 J	mg/kg
	SO-17360-042213-DR-001							22.0 J	mg/kg
	SO-17360-042413-DR-058							150.0 J	mg/kg
	SO-17360-042413-DR-059							100.0 J	mg/kg
	SO-17360-042413-DR-064							400.0 J	mg/kg
	SO-17360-042413-DR-062							52.0 J	mg/kg
	SO-17360-042413-DR-063							560.0 J	mg/kg
	SO-17360-042413-DR-065							340.0 J	mg/kg
Metals	SO-17360-042213-DR-002	Manganese	198	376	25.6	75-125	25	31.0 J	mg/kg
	SO-17360-042413-DR-057							140.0 J	mg/kg
	SO-17360-042413-DR-060							58.0 J	mg/kg
	SO-17360-042413-DR-061							61.0 J	mg/kg
	SO-17360-042213-DR-001							94.0 J	mg/kg
	SO-17360-042413-DR-058							2300.0 J	mg/kg
	SO-17360-042413-DR-059							400.0 J	mg/kg
	SO-17360-042413-DR-064							7300.0 J	mg/kg
	SO-17360-042413-DR-062							150.0 J	mg/kg
	SO-17360-042413-DR-063							3900.0 J	mg/kg
	SO-17360-042413-DR-065							3800.0 J	mg/kg

TABLE 4

**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

<i>Parameter</i>	<i>Sample ID</i>	<i>Analyte</i>	<i>MS % Recovery</i>	<i>MSD % Recovery</i>	<i>RPD (percent)</i>	<i>Control Limits</i>		<i>Qualified Result</i>	<i>Units</i>
						<i>% Recovery</i>	<i>RPD</i>		
Metals	SO-17360-042213-DR-001	Zinc	137	144	1.37	75-125	25	16.0 J	mg/kg
	SO-17360-042213-DR-002							9.9 J	mg/kg
	SO-17360-042413-DR-057							42.0 J	mg/kg
	SO-17360-042413-DR-059							140.0 J	mg/kg
	SO-17360-042413-DR-060							9.7 J	mg/kg
	SO-17360-042413-DR-061							9.7 J	mg/kg
	SO-17360-042413-DR-058							190.0 J	mg/kg
	SO-17360-042413-DR-064							850.0 J	mg/kg
	SO-17360-042413-DR-062							29.0 J	mg/kg
	SO-17360-042413-DR-063							1400.0 J	mg/kg
	SO-17360-042413-DR-065							770.0 J	mg/kg
Metals	SO-17360-042413-DR-067	Chromium	95.9	159	28.7	75-125	25	7.0 J	mg/kg
	SO-17360-042413-DR-068							10.0 J	mg/kg
	SO-17360-042413-DR-069							8.3 J	mg/kg
	SO-17360-042413-DR-066							1300.0 J	mg/kg
	SO-17360-042413-DR-070							10.0 J	mg/kg
	SO-17360-042413-DR-071							4.9 J	mg/kg
	SO-17360-042413-DR-072							9.5 J	mg/kg
	SO-17360-042413-DR-073							120.0 J	mg/kg
	SO-17360-042413-DR-074							1300.0 J	mg/kg
	SO-17360-042413-DR-075							1200.0 J	mg/kg
	SO-17360-042413-DR-076							500.0 J	mg/kg
	SO-17360-042413-DR-077							69.0 J	mg/kg
	SO-17360-042413-DR-078							5.5 J	mg/kg
	SO-17360-042413-DR-079							8.3 J	mg/kg
	SO-17360-042413-DR-080							7.9 J	mg/kg
	SO-17360-042413-DR-081							7.3 J	mg/kg
	SO-17360-042413-DR-082							4.3 J	mg/kg
	SO-17360-042413-DR-083							3.9 J	mg/kg

TABLE 4

**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

<i>Parameter</i>	<i>Sample ID</i>	<i>Analyte</i>	<i>MS</i>	<i>MSD</i>	<i>RPD</i>	<i>Control Limits</i>		<i>Qualified Result</i>	<i>Units</i>
			<i>% Recovery</i>	<i>% Recovery</i>	<i>(percent)</i>	<i>% Recovery</i>	<i>RPD</i>		
Metals	SO-17360-042413-DR-067	Copper	111	346	57.9	75-125	25	4.9 J	mg/kg
	SO-17360-042413-DR-068							17.0 J	mg/kg
	SO-17360-042413-DR-069							17.0 J	mg/kg
	SO-17360-042413-DR-066							2700.0 J	mg/kg
	SO-17360-042413-DR-070							17.0 J	mg/kg
	SO-17360-042413-DR-072							4.9 J	mg/kg
	SO-17360-042413-DR-073							270.0 J	mg/kg
	SO-17360-042413-DR-074							3300.0 J	mg/kg
	SO-17360-042413-DR-075							2300.0 J	mg/kg
	SO-17360-042413-DR-076							120.0 J	mg/kg
	SO-17360-042413-DR-077							99.0 J	mg/kg
	SO-17360-042413-DR-078							4.7 J	mg/kg
	SO-17360-042413-DR-079							5.1 J	mg/kg
	SO-17360-042413-DR-080							15.0 J	mg/kg
	SO-17360-042413-DR-081							15.0 J	mg/kg
	SO-17360-042413-DR-082							8.1 J	mg/kg
Metals	SO-17360-042413-DR-067	Lead	123	547	71.5	75-125	25	11.0 J	mg/kg
	SO-17360-042413-DR-068							64.0 J	mg/kg
	SO-17360-042413-DR-069							25.0 J	mg/kg
	SO-17360-042413-DR-066							3300.0 J	mg/kg
	SO-17360-042413-DR-070							23.0 J	mg/kg
	SO-17360-042413-DR-071							2.6 J	mg/kg
	SO-17360-042413-DR-072							3.1 J	mg/kg
	SO-17360-042413-DR-073							580.0 J	mg/kg
	SO-17360-042413-DR-074							8500.0 J	mg/kg
	SO-17360-042413-DR-075							4700.0 J	mg/kg
	SO-17360-042413-DR-076							680.0 J	mg/kg
	SO-17360-042413-DR-077							170.0 J	mg/kg

TABLE 4

**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

<i>Parameter</i>	<i>Sample ID</i>	<i>Analyte</i>	<i>MS % Recovery</i>	<i>MSD % Recovery</i>	<i>RPD (percent)</i>	<i>Control Limits</i>		<i>Qualified Result</i>	<i>Units</i>
						<i>% Recovery</i>	<i>RPD</i>		
Metals (continued)	SO-17360-042413-DR-078	Lead	123	547	71.5	75-125	25	5.7 J	mg/kg
	SO-17360-042413-DR-079							7.3 J	mg/kg
	SO-17360-042413-DR-080							22.0 J	mg/kg
	SO-17360-042413-DR-081							18.0 J	mg/kg
	SO-17360-042413-DR-082							7.4 J	mg/kg
	SO-17360-042413-DR-083							4.7 J	mg/kg
Metals	SO-17360-042413-DR-067	Nickel	120	207	37.8	75-125	25	7.8 J	mg/kg
	SO-17360-042413-DR-068							6.8 J	mg/kg
	SO-17360-042413-DR-069							9.2 J	mg/kg
	SO-17360-042413-DR-066							1500.0 J	mg/kg
	SO-17360-042413-DR-070							7.7 J	mg/kg
	SO-17360-042413-DR-071							3.9 J	mg/kg
	SO-17360-042413-DR-072							5.6 J	mg/kg
	SO-17360-042413-DR-073							170.0 J	mg/kg
	SO-17360-042413-DR-074							1700.0 J	mg/kg
	SO-17360-042413-DR-075							1200.0 J	mg/kg
	SO-17360-042413-DR-076							400.0 J	mg/kg
	SO-17360-042413-DR-077							68.0 J	mg/kg
	SO-17360-042413-DR-078							4.3 J	mg/kg
	SO-17360-042413-DR-079							5.6 J	mg/kg
	SO-17360-042413-DR-080							7.8 J	mg/kg
	SO-17360-042413-DR-081							7.5 J	mg/kg
	SO-17360-042413-DR-082							6.0 J	mg/kg
	SO-17360-042413-DR-083							3.2 J	mg/kg

TABLE 4

**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

<i>Parameter</i>	<i>Sample ID</i>	<i>Analyte</i>	<i>MS</i>	<i>MSD</i>	<i>RPD</i>	<i>Control Limits</i>		<i>Qualified Result</i>	<i>Units</i>
			<i>% Recovery</i>	<i>% Recovery</i>	<i>(percent)</i>	<i>% Recovery</i>	<i>RPD</i>		
Metals	SO-17360-042413-DR-067	Vanadium	97.6	165	30.8	75-125	25	6.7 J	mg/kg
	SO-17360-042413-DR-068							9.9 J	mg/kg
	SO-17360-042413-DR-069							11.0 J	mg/kg
	SO-17360-042413-DR-070							9.4 J	mg/kg
	SO-17360-042413-DR-071							7.5 J	mg/kg
	SO-17360-042413-DR-072							10.0 J	mg/kg
	SO-17360-042413-DR-073							15.0 J	mg/kg
	SO-17360-042413-DR-074							46.0 J	mg/kg
	SO-17360-042413-DR-075							34.0 J	mg/kg
	SO-17360-042413-DR-076							9.4 J	mg/kg
	SO-17360-042413-DR-077							16.0 J	mg/kg
	SO-17360-042413-DR-078							8.0 J	mg/kg
	SO-17360-042413-DR-079							10.0 J	mg/kg
	SO-17360-042413-DR-080							12.0 J	mg/kg
	SO-17360-042413-DR-081							11.0 J	mg/kg
	SO-17360-042413-DR-082							7.3 J	mg/kg
	SO-17360-042413-DR-083							6.6 J	mg/kg
Metals	SO-17360-042413-DR-067	Zinc	254	487	38.5	75-125	25	75.0 J	mg/kg
	SO-17360-042413-DR-068							22.0 J	mg/kg
	SO-17360-042413-DR-069							31.0 J	mg/kg
	SO-17360-042413-DR-066							4600.0 J	mg/kg
	SO-17360-042413-DR-070							24.0 J	mg/kg
	SO-17360-042413-DR-071							10.0 J	mg/kg
	SO-17360-042413-DR-072							12.0 J	mg/kg
	SO-17360-042413-DR-073							240.0 J	mg/kg
	SO-17360-042413-DR-074							2800.0 J	mg/kg
	SO-17360-042413-DR-075							2100.0 J	mg/kg
	SO-17360-042413-DR-076							180.0 J	mg/kg
	SO-17360-042413-DR-077							190.0 J	mg/kg

TABLE 4

**QUALIFIED SAMPLE RESULTS DUE TO OUTLYING MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

<i>Parameter</i>	<i>Sample ID</i>	<i>Analyte</i>	<i>MS</i>	<i>MSD</i>	<i>RPD</i>	<i>Control Limits</i>		<i>Qualified Result</i>	<i>Units</i>
			<i>% Recovery</i>	<i>% Recovery</i>	<i>(percent)</i>	<i>% Recovery</i>	<i>RPD</i>		
Metals (continued)	SO-17360-042413-DR-078	Zinc	254	487	38.5	75-125	25	12.0 J	mg/kg
	SO-17360-042413-DR-079							17.0 J	mg/kg
	SO-17360-042413-DR-080							29.0 J	mg/kg
	SO-17360-042413-DR-081							28.0 J	mg/kg
	SO-17360-042413-DR-082							13.0 J	mg/kg
	SO-17360-042413-DR-083							12.0 J	mg/kg

Notes:

MS - Matrix spike.

MSD - Matrix spike duplicate.

RPD - Relative percent difference.

J - Estimated concentration.

TABLE 5

**QUALIFIED SAMPLE DATA DUE TO VARIABILITY IN FIELD DUPLICATE RESULTS
SITE-WIDE AND BULK UNLOAD AREA INVESTIGATIONS
FORMER GRAND RAPIDS METAL PLANT
WYOMING, MICHIGAN
APRIL 2013**

<i>Parameter</i>	<i>Analyte</i>	<i>RPD/Diff</i>	<i>Sample ID</i>	<i>Qualified Result</i>	<i>Field Duplicate Sample ID</i>	<i>Qualified Result</i>	<i>Units</i>
Metals	Antimony	RPD 167	SO-17360-042413-DR-075	51 J	SO-17360-042413-DR-076	4.6 J	mg/kg
	Arsenic	RPD 156		24 J		3 J	mg/kg
	Cadmium	RPD 167		20 J		1.8 J	mg/kg
	Cobalt	RPD 150		120 J		17 J	mg/kg
	Copper	RPD 180		2300 J		120 J	mg/kg
	Iron	RPD 141		140000 J		24000 J	mg/kg
	Lead	RPD 150		4700 J		680 J	mg/kg
	Molybdenum	RPD 142		430 J		72 J	mg/kg
	Nickel	RPD 100		1200 J		400 J	mg/kg
	Selenium	Diff 0.51		0.93 J		0.42 J	mg/kg
	Silver	RPD 167		10 J		0.91 J	mg/kg
	Vanadium	RPD 113		34 J		9.4 J	mg/kg
	Zinc	RPD 168		2100 J		180 J	mg/kg

Notes:

Diff - Difference (i.e. >1X RL for waters or >2XRL for soils.)

RPD - Relative percent difference.

J - Estimated concentration.